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MANITOBA PUBLIC UTILITIES BOARD

Re: 2008/'09 GENERAL RATE APPLICATION
MANITOBA HYDRO

Before Board Panel:

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

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
March 26th, 2008
Pages 1502 to 1724

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1 --- Upon commencing at 9:08 a.m.

2

3 THE CHAIRPERSON: Okay, welcome back,
4 everyone. We have something to say about the issue that
5 arose yesterday, but, Ms. Ramage, do you have anymore
6 undertakings in the form of exhibits to file?

7 MS. PATTI RAMAGE: Yes, Mr. Chair. I
8 believe Ms. Fernandes has distributed around the room,
9 Manitoba Hydro Undertaking 29 which we suggest be marked
10 as Exhibit MH-42.

11

12 --- EXHIBIT NO. MH-42: Response to Undertaking 29

13

14 MS. PATTI RAMAGE: Also the response to
15 Undertaking 19 which we suggest be marked as Exhibit 43.

16

17 --- EXHIBIT NO. MH-43: Response to Undertaking 19

18

19 MS. PATTI RAMAGE: And Undertaking 28-A
20 and B which we suggest be marked as Exhibit 44.

21

22 --- EXHIBIT NO. MH-44: Response to Undertakings 29-A
23 and 29-B

24

25 THE CHAIRPERSON: Very good. We have

1 them. Well Ladies and Gentlemen, Manitoba Hydro raised
2 objections related to Mr. Anderson's questions about
3 capital cost and environmental processes for the
4 overhauling and upgrading of the Kelsey generating
5 station. Manitoba Hydro questioned the relevance of his
6 questions.

7 Mr. Anderson has advised these questions
8 are to test the accuracy of forecast expenditures
9 included in Manitoba Hydro's capital expenditure forecast
10 and for no other collateral or tangential purpose.

11 The Board has a number of observations and
12 comments on this topic. First, the Board can see the
13 relevance of Mr. Anderson's questions, as they seek to
14 explore the capital cost of one (1) project as reflective
15 of other projects. The Board has heard of major
16 increases in other Manitoba Hydro capital expenditures,
17 but those have tended to be major capital expenditures.
18 For example, Tab 18 of Board counsel's book of documents,
19 Exhibit PUB-12, contains major project construction cost
20 increases for such projects as Wuskwatim generating
21 station, transmission, Bipole 3, and Conawapa.

22 Mr. Anderson is testing the capital cost
23 and related environmental costs and processes for Kelsey
24 generating station, which is a smaller, yet costly
25 project with total costs forecast at 183.9 million of

1 which 113.9 million is yet to be incurred.

2 The overall and upgrade of Kelsey is
3 listed in the 2007/'08 to 2017/'18 capital expenditures
4 included on Tab 17, page 3, of the Board's counsel book
5 of documents. Looking into the Kelsey project further,
6 in Appendix 26 of Manitoba Hydro's application in the
7 consolidated capital expenditure forecast CAF-07-1 the
8 capital costs have increased 18.4 million. Because
9 capital costs are eventually paid through rates, for
10 finance cost and depreciation expense, there's relevance
11 to this General Rate Application.

12 Having found most of Mr. Anderson's
13 questions relevant, the Board also sees counsel for
14 Coalition and Manitoba Hydro and Board counsel trying to
15 assist Mr. Anderson in explaining and relating the
16 relevance of his questions to the Board.

17 Perhaps, Mr. Anderson, you have
18 inadvertently caused yourself a disservice. Advance
19 notice of your specific areas of questions may have
20 assisted Manitoba Hydro in having someone better versed
21 in the subject areas present perhaps to be sworn in as
22 Mr. Hamlin was for greenhouse gas issues.

23 Additionally, Mr. Anderson, the record of
24 this proceeding indicates MKO only advanced second round
25 Information Requests even though it was approved as an

1 Intervenor in Order 136/07 which followed the October
2 15th, 2007 pre-hearing conference. Perhaps had MKO been
3 able to -- and focused its issues to two (2) rounds of
4 Information Requests which were available, we would not
5 be left to rely on this panel's best understandings. The
6 questions could have been answered in advance.

7 Additionally, in thinking out loud as to
8 ways to continuously improve our regulatory processes,
9 perhaps a more focused intervention request should have
10 been developed for the pre-hearing conference stage
11 because it would have assisted all parties.

12 Finally, Mr. Anderson, it would appear
13 that you have involvements with Manitoba Hydro on matters
14 separate and distinct from Manitoba Hydro's General Rate
15 Application to this Board. You pointed out on your being
16 copied on behalf of MKO with Exhibit MKO Number 4,
17 whereby Manitoba Hydro copied you with its request for
18 permission to deviate from its interim licence on
19 Churchill River Diversion.

20 Ms. Ramage raised a concern that you may
21 be seeking information in this PUB process for the
22 purpose of using it elsewhere. The Board accepts your
23 word that you will not do so. The context of this rate
24 proceeding may be very different from other proceedings
25 and it would be unfair to Manitoba Hydro for anyone to

1 try and transpose testimony intended for a group rate
2 hearing for some other purpose or in some other forum.

3 That said, Mr. Anderson, if there ever
4 comes any issue that you think needs exploring for a rate
5 issue before the PUB, but that issue also arises
6 elsewhere, the Board would expect you to disclose such
7 possible dual processes to both Manitoba Hydro and the
8 Board to seek the Board's permission to proceed on such
9 issues within the GRA application.

10 Back to the matters at hand. The Board
11 will continue to expect Manitoba Hydro witnesses to
12 provide complete and detailed responses, and where they
13 cannot, to undertake to obtain an answer for Mr.
14 Anderson.

15 So, let's proceed with the foregoing Board
16 ruling to guide all parties as we continue. So, thank
17 you.

18 Mr. Anderson, if you want to continue with
19 your cross-examination?

20 MR. MICHAEL ANDERSON: I do, Mr. Chair.
21 Thank you very much. And I appreciate the Board's
22 consideration and ruling on this matter.

23 It's inevitable that when a participant in
24 the proceedings before the Board is also knowledgeable of
25 multiple other matters that the -- the circumstances

1 arise that you've referred to, and certainly I'd
2 undertake to advise the Board of any matters similar to
3 that.

4 I have just such a matter perhaps to raise
5 in that -- in that light. I've discussed it briefly with
6 Ms. Ramage.

7 But we had produced a series of questions,
8 further to the Board's suggestion last night, which I had
9 circulated to Ms. Ramage aft -- after the close of
10 proceedings. And I'd like to circulate those questions
11 now if I might, Mr. Chair.

12 THE CHAIRPERSON: Mr. Gaudreau...?

13 MR. MICHAEL ANDERSON: And if I could ask
14 the kind assistance of Mr. Gaudreau to circulate to the
15 Board first as they go through the room today I would be
16 grateful. Thank you.

17

18 (BRIEF PAUSE)

19

20 MR. MICHAEL ANDERSON: And while I chat
21 while the first document is being distributed if I might,
22 Mr. Chair, you'll note that there's a -- a third question
23 that hadn't been raised in respect of the impacts of
24 water regime modification. I had talked about our
25 augmented flow and about the impacts on Opaskwayak Cree

1 Nation.

2 The third that I had intended to raise but
3 had not gotten to yesterday, further to the Board's
4 suggestion to defer and develop written questions, deals
5 with modifications of the flows on the Churchill River
6 arising from Saskatchewan Power Corporation's operation
7 to the Island Falls Dam and the control structure at
8 White Sand.

9 I have another exhibit that I had wanted
10 to file. Provenance of this is a letter from Ruth
11 Kristjanson of Manitoba Hydro to myself so it falls into
12 the category that you described.

13 I can indicate for the record, as I
14 distribute this, that the information in order to assess
15 related impacts on the Manitoba Hydro system that Ms.
16 Kristjanson refers to is exactly the type of financial
17 and mitigation cost analysis that we've been discussing
18 yesterday. It is not a claims related matter in respect
19 of Hydro.

20 THE CHAIRPERSON: Mr. Gaudreau...?

21

22 (BRIEF PAUSE)

23

24 MR. MICHAEL ANDERSON: If I recall the
25 distinction between the materials presented yesterday,

1 this would be MKO Exhibit 4.

2

3 The classification as I recall is that
4 documents that were within Hydro's control -- oh sorry,
5 7, yeah. Thank you very much, Mr. Chair.

6 THE CHAIRPERSON: MKO-7.

7 MR. MICHAEL ANDERSON: The 4th of the
8 additional, so MKO-7. Thank you.

9

10 --- EXHIBIT NO. MKO-7: A letter from Ruth
11 Kristjanson of Manitoba Hydro
12 to Michael Anderson

13

14 THE CHAIRPERSON: Okay, everyone seems to
15 have it, Mr. Anderson.

16 MR. MICHAEL ANDERSON: And then the
17 further document that I have, which the -- the Board is
18 kindly making copies of, as my machine suffered a
19 malfunction on this -- early this morning on my way here,
20 and I'm grateful for that, Mr. Gaudreau.

21 I'll provide you the cover sheet of the
22 document now which Ms. Ramage has advised me Hydro's
23 prepared to take under advisement for the moment until
24 they review it. But it's the report prepared by Manitoba
25 Hydro in response to the query of Ms. Kristjanson. The

1 initial report in any case.

2 The copy that I'm having -- that is being
3 reproduced also includes a printout of the properties
4 page of the document, so it's author and the date of
5 production is noted.

6 THE CHAIRPERSON: So, we'll wait until we
7 have the rest of it.

8 MR. MICHAEL ANDERSON: Yes, I just wanted
9 to circulate it to indicate. I'll deal with the MKO-7 at
10 the present time.

11 MS. PATTI RAMAGE: Mr. Chair, if I could
12 just jump in and --

13 THE CHAIRPERSON: Please, Ms. Ramage.

14 MS. PATTI RAMAGE: Manitoba Hydro's just
15 simply not in a position to comment either way on these
16 documents because our panel members haven't seen them
17 before and I don't know what they relate to. So I think
18 this is a wait-and-see.

19 THE CHAIRPERSON: So we'll give you a
20 chance to reflect on that and then if necessary we can
21 let Mr. Anderson complete this segment of his cross-
22 examination later.

23 MR. MICHAEL ANDERSON: That would be
24 acceptable and thank you, Mr. Chair. And that was
25 certainly my content -- intent. I'm content that

1 Question 3 frames the queries that would essentially be
2 arising from the letter, MKO-7, and then if that could be
3 taken under consideration as part of it. But that was
4 the background document for Question 3.

5 THE CHAIRPERSON: Sounds reasonable.

6

7 MANITOBA HYDRO REVENUE REQUIREMENT AND DEMAND SIDE

8 MANAGEMENT PANEL RESUMED:

9 VINCE WARDEN, Resumed

10 WILLY DERKSEN, Resumed

11 IAN PAGE, Resumed

12 HAROLD SURMINSKI, Resumed

13 LLOYD KUCZEK, Resumed

14

15 CONTINUED CROSS-EXAMINATION BY MR. MICHAEL ANDERSON:

16 MR. MICHAEL ANDERSON: Thank you. The
17 one (1) item that I would like to clarify in respect to
18 the letter which I believe could be referred to is please
19 -- could Manitoba Hydro please advise who the signature
20 of the letter is and what Ms. Kristjanson's current
21 position at Manitoba Hydro is.

22 MR. VINCE WARDEN: Yes, I can do that,
23 Mr. Anderson. The signatory to this letter and -- dated
24 2004, June 3rd, 2004, was Ruth Kristjanson, who at that
25 time was the Division Manager of Aboriginal Relations.

1 Ms. Kristjanson is now the Vice President
2 of Corporate Relations for Manitoba Hydro.

3 MR. MICHAEL ANDERSON: And in Ms.
4 Kristjanson's current capacity, does Ms. Kristjanson
5 still address matters related to Manitoba Hydro's
6 relations with Aboriginal communities?

7 MR. VINCE WARDEN: She does. The -- her
8 former position as Division Manager is on that now
9 reports directly to her.

10 MR. MICHAEL ANDERSON: Thank you, Mr.
11 Warden. So I look forward to Manitoba Hydro's response
12 to Question 3.

13 I had also on the questions that I just
14 provided, which reflect the discussion yesterday, on
15 Questions 1 and 2, with the additional question that
16 would have been raised with Exhibit MKO-7, I had wanted
17 to just clarify with Mr. Surminski on the undertaking
18 regarding energy and reservoir storage, that there were
19 two (2) undertakings that I had requested and I've
20 captured both of them here.

21 And I just wanted to confirm with Mr.
22 Surminski that these are the undertakings as he recalls.

23 MR. HAROLD SURMINSKI: I would like you
24 to clarify when the tables that you're referring to in
25 your Information Request had a series of up to fifteen

1 (15) or more reservoirs. Are you requesting that the
2 storage for each of those reservoirs be provided at these
3 various time periods?

4 MR. MICHAEL ANDERSON: As of the current
5 information, yes. They -- essentially the identical
6 information that appears in the schedule -- the table at
7 MKO/Manitoba Hydro Round 2 Number 3(b), which information
8 was originally provided as of November 12th of 2007,
9 that's what appears in the table currently. So I'm
10 requesting that the information as of today or yesterday,
11 the current information available also be added or
12 provided.

13 MR. HAROLD SURMINSKI: So it's only the
14 current information, because there is also requests for
15 2005 and '06 points in time.

16 What do you expect from -- for responses
17 in -- in those dates?

18 MR. MICHAEL ANDERSON: In respect to the
19 earlier dates, I had made one (1) request. there was a
20 helpful discussion regarding an MK -- a Manitoba Hydro --
21 an additional Manitoba Hydro exhibit, and I didn't make
22 reference to that exhibit in noticing this question, and
23 that was the energy and storage graph that was prepared,
24 to simply add a line to it.

25 Sorry. Going back on your question, Mr.

1 Surminski -- thank you -- the first request was to
2 provide the current information for the table as it
3 appears at MKO/Manitoba Hydro 2-3(b). The second was to
4 provide the -- an identical table with two (2) columns,
5 one (1) for November 12th 2005, and March 31st, 2006,
6 showing the detailed energy and storage by reservoir for
7 that period.

8 MR. HAROLD SURMINSKI: That's the one I'm
9 trying to clarify. Is that --

10 MR. MICHAEL ANDERSON: Thank you very
11 much.

12 MR. HAROLD SURMINSKI: -- also required
13 by reservoir?

14 MR. MICHAEL ANDERSON: Yes, please. That
15 was our discussion yesterday, and I appreciate that. The
16 third request was to add the line to Manitoba Hydro
17 Exhibit 17 at page 2 that shows the curve for system
18 energy and reservoir storage for 2005/'06.

19 MR. HAROLD SURMINSKI: Yes, but just to
20 inform you that it will take some digging to go back in
21 time and obtain information for November 12, 2005 and
22 March 31st of 2006 for each of those reservoirs. I don't
23 know how readily available that is.

24 MR. MICHAEL ANDERSON: Well, if -- if the
25 information is available, for example, as of November of

1 --2005 -- some convenient date for that same time bracket
2 -- that would be convenient, just so that the tables can
3 be compared to each other.

4 MR. HAROLD SURMINSKI: Yes, we will have
5 to find out what we have available.

6 MR. MICHAEL ANDERSON: Thank you, Mr.
7 Surminski.

8 MR. ROBERT MAYER: Mr. Anderson, I think
9 your document's arrived.

10 MR. MICHAEL ANDERSON: Thank you, Mr.
11 Vice-Chair. And thank you to the Board for accommodating
12 my equipment malfunction this morning.

13

14 (BRIEF PAUSE)

15

16 MR. MICHAEL ANDERSON: I can distribute
17 these at the -- at the break, if you like, or I could do
18 them right now, if that's convenient. I've noticed,
19 however, that these aren't stapled, so perhaps we should
20 distribute them when my --

21 THE CHAIRPERSON: Why don't you take them
22 away then and staple them and we'll do them as Mr.
23 Anderson suggests.

24 MR. MICHAEL ANDERSON: Mr. -- Mr.
25 Williams has decided to -- has offered to assist me in

1 this.

2 MS. PATTI RAMAGE: If I could just jump
3 in again, because it just occurred to me that we were
4 looking for Mr. Surminski to make a correction to a -- an
5 answer he provided to Mr. Williams yesterday. And
6 perhaps before we get -- Mr. Williams gets going, I could
7 ask Mr. Surminski to dress -- to address that.

8 THE CHAIRPERSON: We've lost Mr. Williams
9 assisting Mr. Anderson.

10 MR. HAROLD SURMINSKI: I believe it was
11 to Mr. Anderson. Yes.

12 MS. PATTI RAMAGE: It's too early for me.

13

14 MR. HAROLD SURMINSKI: Yes, it was in the
15 discussion of the Kelsey -- energy and I, off the top of
16 my head, indicated it was in the order of 200 gigawatt
17 hours -- the average energy that could be captured.

18 It is, in fact, 350 gigawatt hours per
19 year, and it's in our submission that we had. I knew it
20 was somewhere in our submission. It was in our Tab 8,
21 page 8.

22

23 CONTINUED BY MR. MICHAEL ANDERSON:

24 MR. MICHAEL ANDERSON: Thank you, Mr.
25 Surminski. Actually, on -- that was very much

1 appreciated, because that was my first clean-up item for
2 today, realizing that I had asked you the question and
3 you'd left it for me to respond.

4 So I appreciate that you provided the
5 information that I had requested and had made that
6 correction. Thank you.

7 MR. HAROLD SURMINSKI: Thank you.

8

9 (BRIEF PAUSE)

10

11 MR. MICHAEL ANDERSON: The -- at the end
12 of the day yesterday, the -- other area that I had wanted
13 to examine -- we had just begun to talk about the -- I
14 had drawn your attention to the province-wide low income
15 program, and we had just begun to touch on that when the
16 proceedings closed for the day, if I recall correctly.

17

18 (BRIEF PAUSE)

19

20 MR. MICHAEL ANDERSON: And I had brought
21 your attention to -- two (2) documents: one (1) was
22 PUB/Manitoba Hydro Round 2 Number 16(a), and the other
23 one is at Tab -- found at Tab 40 of Mr. Peters' book of
24 documents, Public Utilities Board/Manitoba Hydro-1
25 Question 34(a).

1 (BRIEF PAUSE)

2

3 MR. MICHAEL ANDERSON: Do you have those
4 documents?

5 MR. HAROLD SURMINSKI: Yes, they're both
6 in the book of documents that Mr. Peters provided. The
7 other one's in Tab 37, just for everybody's convenience.

8 MR. MICHAEL ANDERSON: Thank you very
9 much.

10

11 (BRIEF PAUSE)

12

13 MR. MICHAEL ANDERSON: In looking first
14 at what I've been assisted in identifying as Tab 37, the
15 -- I know that there was some general discussion with Mr.
16 Williams regarding the identification of the -- in the
17 summary of -- of forty-six hundred (4,600) lower-income
18 households over the next three and a half (3 1/2) years
19 ending 2010/2011.

20 And just for my benefit could you please
21 explain how this target number of households was
22 determined?

23 MR. LLOYD KUCZEK: It was a high-level
24 estimate that my staff came up with based on discussions
25 with other entities offering low-income programs. And so

1 they had to establish some targets for what we thought we
2 could achieve and these were considered aggressive
3 targets for ourselves to work towards.

4 MR. MICHAEL ANDERSON: And in ident --
5 doing the high-level estimate what information was
6 examined to arrive at the -- the quantification of four
7 thousand six hundred (4,600) lower income households?
8 What was the scope of the information that was
9 considered?

10 MR. LLOYD KUCZEK: There was very little.
11 This a high-level estimate of how many homes we thought
12 we can get to participate in this program. We didn't
13 spend a lot of time on -- on the estimate itself.

14 Our position was there was lots of
15 opportunity out there, based on the high-level assessment
16 that we even did of the market opportunities there. And
17 our focus was on getting the program designed, launched,
18 and established in the target that we thought was a
19 higher-end target for ourselves to work towards.

20 MR. MICHAEL ANDERSON: Do the -- any --
21 how many of the four thousand six hundred (4,600)
22 households that you've estimated as your target would be
23 on Indian reserves and in particular the First Nations
24 communities in northern Manitoba?

25 MR. LLOYD KUCZEK: When we came up with

1 the estimate we did not break it down into how many we
2 would target in First Nations or rural northern Winnipeg,
3 anything like that. We just came up with a high-level
4 estimate.

5 MR. MICHAEL ANDERSON: Does this target
6 include First Nation homes on reserve?

7 MR. LLOYD KUCZEK: Yes.

8 MR. MICHAEL ANDERSON: Do you have any
9 estimate -- I realize you've already answered indicating
10 that there wasn't any desegregation of on or off reserve,
11 but as a high-level estimate for my benefit approximately
12 how many of these might be targeted for your programs on
13 reserve?

14 MR. LLOYD KUCZEK: Well, that really
15 depends on how well or how successful we'll be working
16 with the First Nation communities to get them to
17 participate in the program.

18 We've -- and I think you're probably
19 looking for some information along these lines -- we're
20 working with some community groups within Winnipeg here
21 that we've talked about. There's one (1) in Brandon. We
22 have plans to go to Thompson to see if we can establish a
23 community-based group up there. And in -- in -- we
24 mentioned the Island Lake tribal council or the Island
25 Lake pilot project. We're still pursuing that through a
department within the Government.

1 And then we're pursuing directly ourselves
2 now some initiatives by having discussions with some
3 First Nations themselves and I can let you know that
4 we've talked to Swan Lake First Nation, Peguis -- we're
5 actually working with MKO and -- to see what we can do
6 through that organization to help us. We've talked to
7 Cross Lake, Pukatawagan, Fox Lake, and we'll be talking
8 to more as we move forward.

9 MR. MICHAEL ANDERSON: Thank you. And
10 just as -- in generalities and for the overall scope the
11 discussions for example with Cross Lake, Pukatawagan, or
12 the Mathias Colomb Cree Nation and Fox Lake what are the
13 discussions that you're having with them? How are you
14 seeking their assistance?

15 MR. LLOYD KUCZEK: The discussion is --
16 it's -- you know we just launched the program, but it's
17 high-level discussions -- initial discussions I guess
18 would be a better way of describing it. We're discussing
19 how we can actually move forward, what would work for
20 them, inform -- providing them with information, in terms
21 of what we can do. And so for most of them I think at
22 this point we've had one (1) or two (2) meetings and so
23 it's just really at the initial stages.

24 MR. MICHAEL ANDERSON: The essence is
25 that you're providing information to them about what

1 program possibilities there are?

2 MR. LLOYD KUCZEK: Yeah. And we're --
3 we're actually doing more than that. We're -- we're
4 telling them that -- informing them about the -- what the
5 initiatives are that we're looking at, what they can do
6 to help. For example, one (1) of the communities, and I
7 forget which one it is, the next step is for them to come
8 back and provide us with I think it's twenty (20) homes.
9 I think the plan was to maybe do a hundred and twenty
10 (120) or even more, but start with twenty (20).

11 We're suggesting let's start small and
12 then we would proceed to the next step. So, we're kind
13 of taking it step by step. And the next step, of course,
14 would be do the audits, and then at that point we would -
15 - and we could even do it earlier with some of the
16 organizations.

17 But we would develop a plan as we move
18 forward. So we're trying to get them comfortable with
19 the process by doing a few homes to start with, and then
20 the idea of being let's -- let's do them all. All that
21 fit into the category.

22 MR. MICHAEL ANDERSON: And other than the
23 Island Lake communities that -- which you described, are
24 -- are there any program delivery activities going on
25 within the thirty (30) northern First Nations that MKO is

1 affiliated with?

2 I can assist you in identifying them if
3 you require.

4 MR. LLOYD KUCZEK: Yes, I never think in
5 terms of which ones are within MKO or not. But we -- we
6 are working with MKO, the organization itself. We've
7 met, I believe it's twice now with Chief Ross and a
8 consultant that they have hired by the name of Marv
9 Tiller to see how they can help us proceed.

10 MR. MICHAEL ANDERSON: But I was -- I was
11 meaning in terms of actual delivery of the programs. Is
12 there any program activity in terms of delivery of the
13 initiatives that you've identified at Tab 40, in the MKO
14 communities, or are they all at the pilot stage or dis --
15 pre-pilot discussion stage?

16 MR. LLOYD KUCZEK: Oh, yeah we just
17 launched a program in December of '07, so if we're
18 referring to the low -- lower income program, clearly it
19 would just be at the initial stages at this point.

20 There are some initiatives going on -- and
21 I -- I don't have the information with me today -- with
22 some First Nation communities participating in our Power
23 Smart programs outside of the lower income program.

24 MR. MICHAEL ANDERSON: Thank you. At
25 page 4 of Tab 37, you describe the -- have a couple of

1 bullets that describe the home audit program. And my
2 interest is in the second bullet that identifies that for
3 rental properties the landlord will be required to pay
4 the customer's portion of the home audit cost.

5 Do you have that?

6 MR. LLOYD KUCZEK: Yes.

7 MR. MICHAEL ANDERSON: Could you please
8 indicate whether, in the case of a First Nation, the
9 expectation is that the First Nation would pay the
10 equivalent of the landlord portion of any home audit cost
11 for a building -- a property that the First Nation
12 administers?

13 MR. LLOYD KUCZEK: We're working through
14 that right now. On the First Nations it's somewhat
15 different. There's a few issues on the First Nations.
16 One of the issues is where the benefits are going to flow
17 and so we're hitting some hurdles with some First Nations
18 there.

19 And if the benefits flowed directly to the
20 lower income individual, we're -- we're leaning towards
21 the First Nation community not paying for those audits.

22 We do have some situations where -- the --
23 where INAC's paying the energy bills, and so if any
24 measures were implemented there, the benefits would
25 actually flow to INAC and not the First Nation community

1 or the lower income individuals.

2

3

(BRIEF PAUSE)

4

5 MR. MICHAEL ANDERSON: What is the -- I'm
6 curious, and Ms. Ramage knows that I have a question that
7 I'll be raising about this -- but what's the source of
8 information that Indian and Northern Affairs Canada is
9 paying the bills on reserve? What's the source of
10 Hydro's understanding to that effect?

11 MR. LLOYD KUCZEK: My staff know more
12 than I know about this, but I believe we're getting our
13 information -- we're -- we're -- I -- I couldn't say.
14 I'm not -- I'm not sure. I know the individual who talks
15 to the First Nation communities. We have some
16 information. We've met with INAC ourselves so I -- I
17 couldn't say exactly where she gets her information from.

18 MR. MICHAEL ANDERSON: The one (1)
19 question then that would be assis -- helpful to me in
20 your role as manager of the program is: Is it your
21 understanding that Indian and Northern Affairs Canada
22 directly pays hydro bills on reserve?

23 MR. LLOYD KUCZEK: I don't know if they
24 pay directly, but I think they pay the amount -- the
25 amount that closes re -- directly -- no, I'm not an

1 expert in that area so I couldn't say.

2

3

(BRIEF PAUSE)

4

5 MR. MICHAEL ANDERSON: I would ask that
6 someone that was present, Mr. -- Mr. Warden, if you
7 might, just for the record, indicate that your
8 recollection of MKO's witness by subpoena in the diesel
9 rate proceedings, you'll recall Mr. Fred Mills, who at
10 the time was manager of Funding Services for Indian and
11 Northern Affairs Canada, had prov -- testified, provided
12 evidence that Indian and Northern Affairs Canada does not
13 pay the bills, nor are they a named customer of Manitoba
14 Hydro's in any of the communities in respect of First
15 Nations facilities.

16 Is that your recollection, Mr. Warden?

17 MR. VINCE WARDEN: Yes, Mr. Anderson, I
18 can confirm that.

19 MR. MICHAEL ANDERSON: Thank you, Mr.
20 Warden.

21 MR. LLOYD KUCZEK: And just on then the
22 issue that I was pointing out was not -- not directly
23 related to who's paying the bills but who would realize
24 the benefits. And so I'm not sure of the process, but
25 what I was informed is there's situations where the --

1 the benefits would directly impact the dollars flowing
2 out of INAC, and I didn't ask where those dollars were
3 flowing.

4

5 (BRIEF PAUSE)

6

7 MR. MICHAEL ANDERSON: And just to follow
8 this and in -- in the case where there's an -- an
9 understanding, at least at the present time on the part
10 of Manitoba Hydro, that the benefits are flowing to
11 Indian and Northern Affairs Canada, how would the
12 arrangements with the community for the delivery of these
13 program -- for the payment of the home audit costs, which
14 is what gave rise to this series of questions, how would
15 you treat them differently in -- in that case where the
16 benefits were perceived as flowing to INAC?

17 MR. LLOYD KUCZEK: In that case, the
18 participants wouldn't be eligible to participate under
19 this program. So the answer to your direct question: it
20 doesn't apply in that case then. The program doesn't
21 apply.

22 MR. MICHAEL ANDERSON: And when you say
23 "the program doesn't apply," again for my benefit, could
24 you describe what the program is.

25 MR. LLOYD KUCZEK: The pro -- the purpose

1 of the program is to encourage individuals that fall into
2 the criteria that we have described as lower income, to
3 encourage them to participate in our Power Smart programs
4 that we currently have -- currently offer customers.

5 THE CHAIRPERSON: Mr. Kuczek, and
6 speaking of that, that those that would be eligible, if I
7 recall from another exhibit, it was some seventy thousand
8 (70,000) --

9 MR. LLOYD KUCZEK: Yes. And I think we--

10 THE CHAIRPERSON: -- unidentified --

11 MR. LLOYD KUCZEK: -- and I think we
12 established that it's likely higher than that. It was
13 based -- on that survey that we did -- excluded some
14 customers that don't receive their bills directly and
15 tenants.

16 THE CHAIRPERSON: And, presumably, there
17 would be more joining the list and leaving the list each
18 year.

19 MR. LLOYD KUCZEK: Yes.

20 THE CHAIRPERSON: Your plan of forty-six
21 hundred (4,600) over three and a half (3 1/2) years works
22 out to a little over a hundred (100) a month, at that
23 rate it would take some sixty (60) some years.

24 What's the constraint on the number that's
25 done each year? Is it resources, or personnel, or...?

1 MR. LLOYD KUCZEK: Well, we're learning
2 as we go, but in discussions from other people that have
3 experience in this pro -- with these sort of programs,
4 the -- the barrier tends to be getting participants to
5 participate in the program as opposed to the Utility of
6 the resources put at it.

7 So, again we're such -- at such an early
8 stage at this point, we -- we don't know how successful
9 we're going to be in terms of getting those numbers. If
10 we can increase them, certainly we're going to. We don't
11 know how many customers have already participated in our
12 existing Power Smart programs because we didn't track
13 them that are in this category, so that's an unknown.

14 Our objective is -- is to move forward,
15 and try to move forward in an aggressive fashion, and
16 then try to get as many to participate as we can in that
17 program.

18 THE CHAIRPERSON: How many personnel in
19 Hydro are -- are dedicated to this task?

20 MR. LLOYD KUCZEK: That's a tough
21 question too, because we seem to be putting more and more
22 resources at it, and some resources aren't assigned
23 specifically to this program, but are working on the
24 program. And there's a number that have been providing
25 assistance even on the engineering side.

1 But we have, I believe, full time three
2 (3) or four (4), and the manager that's been responsible
3 for this as well is working probably 70 to 80 percent of
4 her time supporting this program. And there's a number
5 of individuals that have put in a fair amount of time as
6 well.

7 So as we move forward we'll see how that
8 -- including -- my secretary's actually part time helping
9 out now too, so we'll -- we'll see how the demands go.

10 We -- we don't know how demanding it's
11 going to be as we move along, because part of it's going
12 to be dependent on the community -- communities themselves,
13 and how self sufficient they could become over time. We
14 found with one (1) of the community based organizations
15 that we're working with, we have to spend a -- an
16 enormous amount of hours assisting that organization
17 whereas another organization is very self-sufficient.
18 They did require some help initially with some technical
19 matters, training and -- training and whatnot, but after
20 that, it was more administrative. So it's working very
21 well for us.

22 THE CHAIRPERSON: We'll stop and go back
23 to Mr. Anderson, but my final question on that -- so you
24 see this basically as a testing mode right now?

25 MR. LLOYD KUCZEK: I -- I view it that

1 way, yes.

2 THE CHAIRPERSON: Thank you.

3 Mr. Anderson...?

4 MS. SUSAN PROVEN: Before we go to Mr.
5 Anderson, I'd just like to ask about level of
6 responsibility that's left with individuals in this
7 process. Because I remember reading in that West
8 Broadway study that was done -- it was quite a thick
9 study -- that it appeared that when you left a lot of
10 responsibility with individuals, that that -- there were
11 barriers there, because some people just couldn't work
12 their way through getting all the quotes.

13 And -- and I'm just wondering if Hydro
14 ever thinks about how much responsibility should be left
15 with the individuals -- the people who actually live in
16 the homes.

17 Is that a -- is that a problem?

18 MR. LLOYD KUCZEK: Oh, we think it will
19 be and I even -- you know, to answer to the question
20 about how many resources, I even put some of my time into
21 this. And, in fact, last night I was reading an email
22 message from our contact centre, and I had suggested what
23 they do when they get the -- they put a process in place,
24 and one (1) of the questions they asked people when they
25 phone is, Is it okay for us to phone you back?

1 And so what she sent me was a spreadsheet
2 showing how they have set this up and the questions they
3 were asking the customers, including whether or not we
4 can phone them back.

5 But we -- our intent is to phone them
6 back, if we don't hear from them within a certain period
7 of time, and try to help them through the process.

8 So we are conscious of that, and we'll see
9 what we can do.

10 MS. SUSAN PROVEN: Thank you.

11

12 CONTINUED BY MR. MICHAEL ANDERSON:

13 MR. MICHAEL ANDERSON: And, again, I thank
14 -- I thank the Board for asking so many of my questions
15 this morning, because that's of interest.

16 I'm -- I'm grateful to see that it's of
17 great interest to the Board as well.

18 The other question I have, using your
19 information on the scope of the program, does Manitoba
20 Hydro, at the current time, have an initiative to
21 correctly or comprehensively identify the potential
22 number of lower-income households that would meet your
23 program criteria, as described at Tab 37; to identify the
24 total number of households in Manitoba who would meet
25 your criteria?

1 MR. LLOYD KUCZEK: At this point, we're
2 putting our resources towards just trying to get the
3 program implemented and so, no. We may, at some point,
4 revisit that, but we didn't see that as a priority at
5 this point given that we're forty-six hundred (4,600)
6 relative to some much larger number as pointed out by the
7 Chair.

8 MR. MICHAEL ANDERSON: I was going -- the
9 -- the Chair's questions regarding the implementation
10 horizon that is evidenced by the numbers in staff
11 committed, I appreciate.

12 My question also is: In your discussions
13 with MKO and with other First Nations, is part of that
14 effort to accurately identify the total number of
15 potential program recipients?

16 MR. LLOYD KUCZEK: It will be as we move
17 forward. I mean, the ideal would be to sit down with the
18 community and for the community to work with us and
19 provide us with that information and come up with a -- a
20 plan to retrofit all the homes that fall within that
21 category.

22 We've actually even gone beyond that with
23 one of the communities that we're sitting down with, and
24 we're talking about opportunities outside this program to
25 see if we could do anything on the commercial side as

1 well.

2 So, with that community, we brought our --
3 our commercial specialist to the table, as well, to help
4 out.

5 MR. MICHAEL ANDERSON: And, similarly, to
6 the question on determining the number of target
7 households, the household income thresholds, identified
8 at page 2 of Tab 37, were derived how?

9 MR. LLOYD KUCZEK: We started with the
10 pilot with Centennial -- the Centennial neighbourhood,
11 and we looked at a couple of different options.

12 One (1) is referred to as "HIL --
13 Household Income Levels," I believe it's called, and
14 that's being used for the RRAP program. And, so, we
15 considered using that, and I believe we started using
16 that with Centennial and then, after consulting with some
17 people in Centennial, we decided to go to LICO.

18 And I think the numbers that we have in
19 LICO even have slight modifications to what the -- the
20 numbers are for a few of the categories because of some
21 input we received from one of the community groups
22 suggesting there was some error -- not errors but some
23 issues there in terms of the numbers being too low.

24 So if anything, we adjusted the numbers up
25 -- upwards as opposed to downwards. And then we added 25

1 percent onto the LICO numbers as well and that was based
2 on market research that we did with other organizations
3 offering the program and not all of them do that but some
4 do.

5 And it was also strongly suggested by a
6 local community group that we do that as well.

7 MR. MICHAEL ANDERSON: And -- and just
8 for the -- for the assistance of the record, you referred
9 to two (2) acronyms. Could you please identify their
10 full name -- of the two (2) programs you referred to?

11 MR. LLOYD KUCZEK: And this would have to
12 be subject to check because -- LICO is Low Income Cut Off
13 levels, I believe. It's a -- it's established, I
14 believe, by Stats Canada and that's subject to check too.

15 MR. MICHAEL ANDERSON: And the RRAP
16 program?

17 MR. LLOYD KUCZEK: I don't see anybody
18 here that could help me with that. I'm sure that
19 somebody in this room that knows the -- what that stands
20 for but I don't.

21 MR. ROBERT MAYER: I didn't -- I didn't
22 even know that was still available. It's been years
23 since I've heard that acronym.

24 MR. LLOYD KUCZEK: Oh, it's still
25 available. We -- we've met with Manitoba Housing and --

1 not Manitoba Housing -- CMHC, and they -- I believe they
2 run the program in Manitoba.

3

4 CONTINUED BY MR. MICHAEL ANDERSON:

5 MR. MICHAEL ANDERSON: So then, just
6 briefly to conclude then, the Low Income Cut Off levels
7 that been identified by Statistics Canada, a community
8 group indicated was too low, they were adjusted upward
9 and Manitoba Hydro added 25 percent to that? Is that
10 correct?

11 MR. LLOYD KUCZEK: It was recommended by
12 certain people that we should go with the 25 percent
13 higher level than that. I know a number of people
14 suggested that, and we agreed with that.

15 MR. MICHAEL ANDERSON: And these people
16 represent whom, specifically or generally?

17 MR. LLOYD KUCZEK: One (1) individual was
18 -- I know for sure, was -- because I was at a meeting --
19 was with the Centennial Group. We -- my staff, in doing
20 their market research and I couldn't provide you with the
21 information here, but there was some -- some of her --
22 the people that she consulted with across Canada
23 suggested doing that as well.

24 And again, it -- it falls into the -- the
25 challenges of trying to get participants to participate,

1 and -- and I think the -- the idea is that the levels are
2 on the lower side and -- and consumers that are in the
3 group just above that have the same hurdles and won't be
4 participating either without similar assistance.

5 MR. MICHAEL ANDERSON: And did the focus
6 group or the market research include First Nations?

7 MR. LLOYD KUCZEK: When we did our
8 consulting, we did various consulting, but we did
9 actually hire a First Nation individual to help us and --
10 in that regard and provided those -- us with input in
11 terms of what we should be doing, not just with low
12 income but just overall Power Smart initiatives,
13 encouraging Power Smart initiatives in the First Nation
14 communities.

15 So we used that input to assist us.

16 MR. MICHAEL ANDERSON: And just so that I
17 understand, was -- as part of the market research that
18 was done, consulting across Canada, were First Nations
19 included in the focus groups for that research?

20 MR. LLOYD KUCZEK: We didn't have focus
21 group sessions per se for our market research.

22 MR. MICHAEL ANDERSON: But included in
23 the market research as -- as -- included in those persons
24 who were consulted with during your national research,
25 were First Nations included?

1 MR. LLOYD KUCZEK: I'm not certain of
2 that.

3 MR. MICHAEL ANDERSON: So then my final
4 question on the household income thresholds is in your
5 discussions with organizations such as MKO and individual
6 First Nations in the north, would you also be exploring
7 with them whether the household income thresholds are
8 relevant to the MKO region generally or to First Nations
9 specifically?

10 MR. LLOYD KUCZEK: Our discussions so far
11 haven't focused on the income levels being an issue. It
12 -- the impression I get is that isn't going to be a
13 barrier.

14 But the -- most of the discussions was
15 more along the lines of how they could move forward and
16 participate in the program.

17
18 (BRIEF PAUSE)

19
20 MR. MICHAEL ANDERSON: Turning to Tab 40,
21 if you would please, and page 2 of Tab 40, the line item,
22 or the reference to the oil and propane heated
23 residential homes initiative, could you please for my
24 benefit describe what that program is.

25 MR. LLOYD KUCZEK: These funds are used

1 to pay for any comparable Power Smart incentive that a
2 home heated by these fuel sources, other than natural gas
3 and electricity, would be eligible for if they had been
4 heated by electricity or natural gas.

5 So our Power Smart programs are targeted
6 towards reducing natural gas consumption and electricity
7 consumption. And so if you were heating by oil or
8 propane and you wanted to put insulation in you weren't
9 eligible. So, this -- this -- these dollars -- these
10 funds would be used for providing comparable incentives
11 for those individual homes.

12 MR. ROBERT MAYER: I note, with interest,
13 you don't have wood listed.

14 MR. LLOYD KUCZEK: We didn't write wood
15 into the -- the descriptive term, but wood would apply in
16 a similar manner.

17 MR. ROBERT MAYER: Thank you.

18

19 CONTINUED BY MR. MICHAEL ANDERSON:

20 MR. MICHAEL ANDERSON: And once again I
21 change -- I thank the -- the Board for -- there was a
22 question I was going to ask about eligibility.

23 I noticed the -- the key focus on this is
24 at the addition of insulation, is that correct -- to
25 these buildings that are heated by these alternate fuel

1 sources?

2 MR. LLOYD KUCZEK: That's the obvious and
3 one (1) of the most beneficial opportunities available,
4 but no that's -- it's all Power Smart programs in the
5 resident -- residential sector, so -- but insulation is
6 the -- the big one.

7 MR. MICHAEL ANDERSON: All right. I had
8 -- that's what I had wanted to clarify. So the -- the
9 program is targeted at -- for all -- allows the
10 eligibility -- intended to allow eligibility for all
11 Power Smart programs for homes heated by oil, propane,
12 and wood.

13 Is that correct?

14 MR. LLOYD KUCZEK: Yes. If they weren't
15 eligible otherwise, yes.

16 MR. MICHAEL ANDERSON: And in terms of
17 the location of those homes that would be eligible
18 where's -- what is Manitoba Hydro's current understanding
19 of the geographic location of these homes?

20 MR. LLOYD KUCZEK: Within Manitoba.

21 MR. MICHAEL ANDERSON: And having heard
22 that, is there an estimate of the number of homes that
23 this program is being targeted at?

24 MR. LLOYD KUCZEK: No, the estimate was
25 developed based on what -- again a high level estimate

1 what we thought we would get for participation from these
2 homes within this category.

3 MR. MICHAEL ANDERSON: And the high level
4 estimate is...?

5 MR. LLOYD KUCZEK: It was -- I don't have
6 that information with me.

7 MR. MICHAEL ANDERSON: Could you please
8 undertake to provide the high level estimate for the
9 number of eligible households for the oil, propane, and
10 wood heated residential homes program?

11

12 (BRIEF PAUSE)

13

14 MR. LLOYD KUCZEK: I'll provide you with
15 that information.

16

17 --- UNDERTAKING NO. 52: Manitoba Hydro to provide MKO
18 the high level estimate for
19 the number of eligible
20 households for the oil,
21 propane, and wood heated
22 residential homes program

23

24 CONTINUED BY MR. MICHAEL ANDERSON:

25 MR. MICHAEL ANDERSON: Thank you, I'm

1 something. What we can do there, we're not sure, but
2 it's -- it's on our list.

3 MR. MICHAEL ANDERSON: So, my question
4 was: Is there -- is it currently being targeted at the
5 diesel communities, given that the --

6 MR. LLOYD KUCZEK: Are we back to the
7 oil/propane one?

8 MR. MICHAEL ANDERSON: Yes.

9 MR. LLOYD KUCZEK: We don't have a
10 specific marketing plan for this program. These funds
11 were just -- just established to address individuals
12 wanting to participate in the program.

13 What we do is, we have an overall program
14 that -- or a marketing effort that promotes our programs,
15 and so the concept being that if any individuals phone us
16 up and want to participate in these programs and aren't
17 eligible, they would now be eligible and we wouldn't tell
18 them that.

19 So, do we have any marketing efforts
20 specifically established for the diesel communities
21 today? Our energy service coordinators meet with all
22 communities -- and I couldn't tell you how often.

23 I'm not sure when they're planning to go
24 to the diesel communities, but I know that my staff, with
25 -- working on the Lower Income Program, are planning to

1 talk to the energy service advisor located in Thompson,
2 about planning some meetings to these communities. And I
3 suspect that this will be discussed along with all
4 opportunities up there; not just the lower income, but,
5 as well, the commercial opportunities.

6 MR. ROBERT MAYER: Mr. Kuczek, by
7 definition, if the people in the four (4) diesel
8 communities are abiding by the rules and not using
9 electricity for space heat, they, by definition, all fall
10 within that program, don't they?

11 MR. LLOYD KUCZEK: Correct.

12 MR. ROBERT MAYER: Thank you.

13

14 CONTINUED BY MR. MICHAEL ANDERSON:

15 MR. MICHAEL ANDERSON: And that was -- I
16 thank the Vice-Chair for that one, because you are aware
17 that there is a prohibition in the rate schedule against
18 the use of electricity for domestic electric heat?

19 MR. LLOYD KUCZEK: Yes. We also suspect
20 most of them will be eligible through the Lower Income
21 Program.

22 MR. MICHAEL ANDERSON: Well, going back -
23 - on that point, going back to the question of
24 eligibility, if I understood correctly, at the present
25 time its -- Hydro has determine that Band-administered

1 homes are not eligible for the Low Income Program.

2 Is that correct?

3 MR. LLOYD KUCZEK: We're working -- we've
4 had a few meetings with INAC and we're also working with
5 the First Nation communities that we're meeting with to -
6 - to see how we could make things work within those
7 communities, so that we can still get these measures
8 implemented in the homes.

9 I couldn't give you specific details right
10 now, because we're still working through how we can make
11 this happen.

12 MR. MICHAEL ANDERSON: So just to go back
13 to the Vice-Chair's question and the -- and -- and mine:
14 At the present time Band-administered homes, including in
15 the diesel communities, are not eligible for the Low
16 Income Program?

17 MR. LLOYD KUCZEK: At a high level you're
18 eligible for the program if you fit the lower income
19 criteria, and the benefits flow to the lower income
20 individuals.

21 So, where it's Band-administered, there's
22 some issues about where the benefits would flow and we
23 need to work through that.

24 MR. MICHAEL ANDERSON: So the answer is,
25 no, it's not currently available to Band-administered

1 homes in the diesel communities?

2 MR. LLOYD KUCZEK: I -- I have a hard
3 time being that strong about it, because we're trying to
4 figure out a process -- for them to be eligible. So,
5 it's a question of figuring out if the benefits can flow
6 to the lower-income individuals. They are eligible, so -
7 - but it's not quite as clean in those situations.

8 MR. ROBERT MAYER: Mr. Kuczek, I think we
9 understand that you have answered three (3) or four (4)
10 questions now that basically tell us that this is a work
11 in progress.

12 MR. LLOYD KUCZEK: That's correct.

13

14 CONTINUED BY MR. MICHAEL ANDERSON:

15 MR. MICHAEL ANDERSON: I guess I -- I
16 have that. Thank you.

17 Just as a final follow-up question on
18 that, in terms of the Power Smart initiatives that would
19 be available, for example, under this program, oil and
20 propane heat in residential homes, is ordinary
21 maintenance of furnaces, tuning of furnaces, replacement
22 of filters, and so forth, captured within the programs
23 offered by Manitoba Hydro?

24 MR. LLOYD KUCZEK: No.

25 MR. MICHAEL ANDERSON: And my question

1 then was then also specific to the diesel communities and
2 that includes the diesel communities?

3 MR. LLOYD KUCZEK: It includes everyone,
4 yes.

5 MR. MICHAEL ANDERSON: All right, thank
6 you. I had been asked by Chief Napoakesik of the
7 Shamattawa First Nation on March 11th to try to confirm
8 the status of the operational units of the generating
9 station at Shamattawa.

10 I -- I understand -- how many operational
11 unit -- how many generating units are installed at the
12 generating station in Shamattawa -- diesel generators?

13 And then how many are currently operating?

14 MR. VINCE WARDEN: We think it's three
15 (3) units, Mr. Anderson. That's subject to confirmation
16 though.

17 MR. MICHAEL ANDERSON: And -- and --
18 thank you very much. And for that the -- the undertaking
19 I would request would be of the status of the operation
20 of those generators from March 1st to currently please.

21 MR. VINCE WARDEN: Can you just confirm
22 what you mean by "status"?

23 MR. MICHAEL ANDERSON: It's my
24 understanding that two (2) of the three (3) generators
25 were out of service for an extended period of time, and I

1 had wanted to confirm that.

2 THE CHAIRPERSON: I can't -- we're having
3 difficulty relating this to the General Rate Application.
4 I don't understand why you want to have the information.

5 Can Manitoba Hydro just provide it
6 offline?

7 MR. MICHAEL ANDERSON: I'd be satisfied
8 to have that as long it's open for me to refer to it in
9 my summation, Mr. Chair.

10 THE CHAIRPERSON: Of course, yeah.

11 MR. VINCE WARDEN: We can do that.

12 MR. MICHAEL ANDERSON: Thank you, Mr.
13 Warden.

14 MR. ROBERT MAYER: Since we're having a
15 look at this diesel community stuff, is anybody going to
16 give us an update on when we might see this signed
17 agreement we've been hearing about for years?

18 MR. VINCE WARDEN: I can give you a very
19 brief update. We have been attempting for -- for years
20 as you say, to get this agreement signed.

21 It was, we were informed, imminent before
22 the problems arose at INAC and the Winnipeg Regional
23 Office. We have however been in contact with officials
24 from INAC who have assured us that the payments will be
25 made as scheduled and that the agreement is back on track

1 towards a signature.

2 So we're very hopeful that early -- very
3 early in the new year -- new fiscal year we will have a
4 signed agreement.

5 MR. ROBERT MAYER: Thank you.

6 MR. MICHAEL ANDERSON: And subject to the
7 receipt and review -- oh, I had one (1) document to
8 circulate.

9 THE CHAIRPERSON: Mr. Gaudreau.

10 MR. MICHAEL ANDERSON: We have a problem.
11 We'll have to do it at the break. I understand that it's
12 apparently -- some of the pages got into -- were
13 inadvertently interleaved. And so we'll sort that out.

14 But having said that, subject to review of
15 the -- the undertakings requested and the other
16 information outstanding, those are my questions, Mr.
17 Chair, for the morning.

18 THE CHAIRPERSON: Thank you, Mr.
19 Anderson, and then you -- you'll still have an
20 opportunity when the other things come back.

21 MR. MICHAEL ANDERSON: Thank you. And,
22 Mr. Chair, and when the -- we'll sort out the other
23 documents. I apologize for that and then circulate that
24 as well.

25 THE CHAIRPERSON: Okay, Mr. Peters do you

1 want to remind us what our next step is?

2 MR. BOB PETERS: Mr. Chairman, the next
3 step, I suggest the Board follow, would be for parties to
4 ask questions of this panel related to any undertakings
5 and exhibits that have been filed during the course of
6 the testimony of this panel.

7 That will then, I believe, conclude the
8 evidentiary testimony of the panel, and they can be
9 discharged.

10 THE CHAIRPERSON: Ms. Ramage can have a
11 re-direct at that point?

12 MR. BOB PETERS: Certainly. Manitoba
13 Hydro has -- has certainly done a lot of work to get the
14 undertakings provided currently and perhaps as it suits
15 the Board, I'll start the questions of this panel either
16 now or after the morning break.

17 THE CHAIRPERSON: Well, why don't we have
18 the break now? That will give an opportunity to have
19 this last exhibit sorted out.

20 MR. BOB PETERS: Certainly.

21 THE CHAIRPERSON: And everybody will at
22 least have that material on hand. So we'll break now and
23 we'll come back in fifteen (15) minutes.

24

25 --- Upon recessing at 10:09 a.m.

1 --- Upon resuming at 10:31 a.m.

2

3 THE CHAIRPERSON: Okay. Welcome back.

4 Mr. Peters.

5 MR. BOB PETERS: Mr. Chairman, there was
6 a few matters that were going to be attended at the break
7 -- Mr. Anderson and some documents. Secondly, I believe,
8 Ms. Ramage would like her witnesses to orally address a
9 couple of undertakings and maybe that could precede my
10 questions.

11 THE CHAIRPERSON: Mr. Anderson...?

12 MR. MICHAEL ANDERSON: As to the
13 documents, Mr. Peters, Mr. Chair, we're -- your staff are
14 kindly helping --

15 THE CHAIRPERSON: Almost there, okay.

16 MR. MICHAEL ANDERSON: -- to sort that
17 out. We're almost there, thank you.

18 THE CHAIRPERSON: Okay. Ms. Ramage...?

19 MS. PATTI RAMAGE: Okay. I would just
20 ask Mr. Warden; there are four (4) undertakings that he
21 is going to address right now, so I would turn the mic
22 over to Mr. Warden.

23 MR. VINCE WARDEN: Yes, thank you. Two
24 (2) -- two (2) of the undertakings are related. That's
25 Undertaking Number 4 and Undertaking Number 9, both

1 related to the release of financial statements.

2 The first being the financial statements
3 of Manitoba Hydro. The second being the financial
4 statements of Wuskwatim Power Limited Partnership. And
5 the question was what would be the earliest date that
6 those financial statements could be released to -- to the
7 Board, and the earliest that we can confirm that they
8 would be available would be approximately the second week
9 of June.

10 THE CHAIRPERSON: That's for both sets,
11 Mr. Warden?

12 MR. VINCE WARDEN: Yes.

13 THE CHAIRPERSON: Thank you.

14 MR. VINCE WARDEN: The next undertaking I
15 was going to speak to was Undertaking Number 47,
16 transcript reference page 1235, one thousand two hundred
17 and thirty-five. Question was placed by Mr. Williams
18 with respect to providing a Board minute referencing
19 Manitoba Hydro's floating rate debt policy.

20 After quite extensive research, it turns
21 out there is no specific Board minute that refer -- that
22 approves that policy. However, I have had discussions
23 with Mr. Brennan, who, in his capacity as Vice President
24 of Finance before he became President, remembers this
25 going back many, many years and if anything, in his

1 discussions with the Board over those years, the Board
2 was of the view that the 30 percent limit was very
3 aggressive and would prefer that Manitoba Hydro maintain
4 its floating rate at below that level.

5 Hence the establishment of a target level
6 that we've been adhering to for several years in the
7 range of 25 -- 15 to 25 percent floating rate net of our
8 debt portfolio with the current rate -- current floating
9 rate portion being 20 percent.

10 The last -- excuse me -- the last
11 undertaking I was going to speak to was Undertaking
12 Number 49 taken yesterday. And this was undertaken by --
13 from Mr. Anderson. The question was whether to -- was to
14 confirm whether the Canadian Electrical Association Award
15 for Environmental Stewardship in recognition of the
16 utilities partnership with NCM to reduce environmental
17 impacts of the Wuskwatim Project was co-awarded to NCM.

18 I have confirmed that no, the intention of
19 the -- of the award by the Canadian Electrical
20 Association is to recognize utilities.

21 So, while Manitoba Hydro very much
22 appreciated the fact that NCM was a partner in the -- in
23 allowing us to attain that award, the award was award --
24 awarded solely to Manitoba Hydro. Thank you.

25 THE CHAIRPERSON: Thank you, Mr. Warden.

1

2 RE-CROSS-EXAMINATION BY MR. BOB PETERS:

3 MR. BOB PETERS: Mr. Chairman, I'll try
4 to keep this staccato with the help of the witnesses. I
5 want to talk about six (6) of the exhibits that have been
6 filed related to the Wuskwatim generating -- generating
7 station as well as the Wuskwatim Power Limited
8 Partnership.

9 Starting with in the pile of exhibits
10 Manitoba Hydro Exhibit Number 9, Mr. Page, Mr. Derksen,
11 this is the unaudited interim financial statements from
12 Wuskwatim Power Limited Partnership.

13

14 (BRIEF PAUSE)

15

16 MR. BOB PETERS: You have it, Mr.
17 Derksen?

18 MR. WILLY DERKSEN: Yes, we do, sir.

19 MR. BOB PETERS: And included in the
20 financial statements was a statement of partners capital.

21 MR. WILLY DERKSEN: Yes.

22 MR. BOB PETERS: Third page in, number 2.
23 And just so the Board is clear the intention is, in this
24 arrangement with NCN and its limited partner holding
25 company, TPC, to have a seventy-five/twenty-five (75:25)

1 debt/equity capital structure, correct?

2 MR. WILLY DERKSEN: Yes, that's seventy-
3 five/twenty-five (75:25) based upon the ownership in the
4 electrical generation asset.

5 MR. BOB PETERS: All right. And you were
6 clear in -- in it's only the generating station that's
7 going to be part of that capital structure and -- and
8 part of the limited partnerships assets?

9 MR. WILLY DERKSEN: Yes, that's correct.
10 The contributions towards the transmission asset are 100
11 percent debt funded.

12 MR. BOB PETERS: All right. We'll come
13 to that. If the project costs for the generating station
14 increase, so then does the dollar amount of the equity
15 required by the two (2) limited partners, correct?

16 MR. WILLY DERKSEN: Yes.

17 MR. BOB PETERS: And it was reported --
18 and Mr. Warden probably knew of this before others --
19 that there's a new tender out for Wuskwatim, or about to
20 go out for Wuskwatim, in the next couple of weeks.

21 Is that -- is that correct?

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: And the media reports on
24 it indicate that rather than one (1) large contract, it's
25 going to be split into two (2) contracts in an effort to

1 get some -- some contractors to bid on the work.

2 MR. VINCE WARDEN: Yes, they won't be
3 equally divided, but there'll be two (2) contracts: one
4 (1) a smaller one (1) and -- and another one (1) that's
5 much larger.

6 MR. BOB PETERS: I hope I didn't suggest
7 they were going to be equal in size, but, in any event,
8 it's possible then that as a result of this contracting
9 the capital costs for Wuskwatim will yet increase further
10 than they have already.

11 MR. VINCE WARDEN: Well, that isn't the
12 expectation, no. We think by splitting the contracts as
13 we're doing that the costs will be -- would be lower than
14 they would otherwise be. So we're looking at some
15 favourable bids on these contracts.

16 MR. BOB PETERS: Your expectation is the
17 bids will be favourable. You don't yet have them.

18 MR. VINCE WARDEN: That's correct.

19 MR. BOB PETERS: In the statement of
20 partners capital -- well, when you say "favourable," is
21 there any dollar amount you can indicate as to what would
22 be a -- a lower amount than what's presently on the
23 record of these proceedings as the capital cost?

24 MR. VINCE WARDEN: No, we -- we simply
25 believe that the amount that we have included in the

1 capital expenditure forecast for Wuskwatim is adequate
2 and will not be necessary to revise upwards. It's --
3 we're satisfied that that amount is a good solid estimate
4 of what the costs of that generating station will be.

5 MR. BOB PETERS: And that was \$1.24
6 billion? Have I got that right?

7 MR. VINCE WARDEN: Yes.

8 MR. BOB PETERS: And that's the
9 generating station only that Mr. Derksen talked to me
10 about. It doesn't include the transmission.

11 MR. VINCE WARDEN: That's correct.

12 MR. BOB PETERS: Mr. Derksen, has T --
13 TPC put up \$21.9 million of its one-third (1/3) share of
14 the equity, as shown on the statement of partners
15 capital?

16 MR. WILLY DERKSEN: Yes, it has.

17 MR. BOB PETERS: How much of that was
18 cash and how much of that was debt?

19 MR. WILLY DERKSEN: I understand that 1
20 million of it was cash that they provided, and the rest
21 of it was through borrowings from Manitoba Hydro.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: In looking at the

1 interest rate from note 8 on page 6 of Manitoba Hydro
2 Exhibit Number 9, can you tell the Board whether there is
3 more than one (1) interest rate that applies to the WPLP
4 debt?

5

6 (BRIEF PAUSE)

7

8 MR. WILLY DERKSEN: This is the debt
9 incurred by WPLP that you're referring to, Mr. Peters?

10 MR. BOB PETERS: Well, yes, and the debt
11 that's incurred by the Wuskwatim Power Limited
12 Partnership, or WPLP, is all coming from Manitoba Hydro.

13 MR. WILLY DERKSEN: Yes. And there is
14 more than one (1) rate on that debt. There is a variable
15 rate on -- the initial components, and then as the debt
16 becomes fixed, there's a fixed rate on those debt issues
17 that pertain to that -- to that facility.

18 MR. BOB PETERS: Am I correct that the
19 debt starts off as a non-revolving credit facility, or if
20 not then it would be a revolving credit facility, but
21 both would be at Manitoba Hydro -- Hydro's short-term
22 debt rate of 3.8 percent, plus the 1 percent provincial
23 debt guarantee fee?

24 MR. IAN PAGE: Mr. Peters, all advances
25 are initially done at the short-term rate. And when --

1 when the advance has reached a total of \$200 million,
2 that entire \$200 million block is assigned an effective
3 long-term rate that would be appropriate for that -- that
4 point in time.

5 And then the -- then the floating balance
6 is reset to zero, and then that build-up starts again.

7 MR. BOB PETERS: All right. That short-
8 term debt rate, Mr. Page, is 3.8 percent?

9 MR. IAN PAGE: That appears to be what --
10 that appears to be what's -- what's -- what it was as of
11 January 31st, 2008.

12 MR. BOB PETERS: And that 3.8 percent
13 debt rate also attracts an additional 1 percent
14 provincial debt guarantee fee?

15 MR. IAN PAGE: Yes.

16 MR. BOB PETERS: For a total of 4.8
17 percent?

18 MR. IAN PAGE: Yes.

19 MR. BOB PETERS: And when you convert --
20 when -- when your short-term facility gets up to 200
21 million, you then roll it into a fixed long-term rate?

22 MR. IAN PAGE: Yes.

23 MR. BOB PETERS: And can you tell the
24 Board what is the expected interest rate on that long-
25 term debt once -- once it's converted over?

1 MR. IAN PAGE: I understand we're
2 expecting it to be about 7 percent, including the 1
3 percent guarantee fee.

4 MR. BOB PETERS: So, it's 6 percent plus
5 1 percent for the provincial debt guarantee fee?

6 MR. IAN PAGE: Yes.

7 MR. BOB PETERS: Thank you for the
8 clarification.

9 I want to turn to the interest rate on the
10 interconnection credit facility. First of all, who owns
11 the interconnection facility in the Wuskwatim Project?

12 MR. IAN PAGE: Manitoba Hydro owns the
13 interconnection -- facilities.

14 MR. BOB PETERS: Who is responsible for
15 the interest charges on the interconnection facility, Mr.
16 Page?

17 MR. IAN PAGE: Manitoba Hydro bills --
18 bills out actually monthly in advance of the construction
19 -- each month's construction to the Wuskwatim
20 Partnership. And the Wuskwatim Partnership has to make
21 the payments and so it -- it then has to finance those.

22 MR. BOB PETERS: And when you say it has
23 to finance them you mean WPLP has to finance them?

24 MR. IAN PAGE: Yes.

25 MR. BOB PETERS: And the way they finance

1 them is they borrow it back -- they borrow it from
2 Manitoba Hydro?

3 MR. IAN PAGE: Yes, they do.

4 MR. BOB PETERS: And the rate they borrow
5 at Manitoba Hydro will be determined, as you've told me
6 previously, initially at the short-term debt rate and
7 that will then be converted over to a -- a higher debt
8 rate?

9 MR. IAN PAGE: Yes, but for the
10 interconnection credit facility, instead of it being a
11 \$200 million build-up of the short-term, they'll bill
12 them at 40 million.

13 MR. BOB PETERS: Thank you for that
14 clarification. And after the 40 million it converts over
15 to a long-term debt rate?

16 MR. IAN PAGE: Yes.

17 MR. BOB PETERS: And that's still going
18 to be approximately 6 percent plus the 1 percent debt
19 guarantee fee for a 7 percent long-term debt.

20 MR. IAN PAGE: Yes.

21 MR. BOB PETERS: That long-term debt is
22 based on a thirty (30) year term?

23 MR. IAN PAGE: Yes, we use a thirty (30)
24 year -- what -- it's a projected thirty (30) year rate
25 for Manitoba -- or, sorry, not projected, an estimate of

1 what Manitoba Hydro's thirty (30) year money would cost
2 on that day that the conversion was made.

3 MR. BOB PETERS: Am I correct -- and
4 maybe Mr. Surminski wants to help us here -- but the
5 interconnection facility is different from the
6 transmission assets to ship Wuskwatim output to the grid
7 system?

8 MR. IAN PAGE: No, they're one and the
9 same. It -- it's all of the incremental facilities
10 required to connect Wuskwatim to the -- to the grid.

11 MR. BOB PETERS: And those transmission
12 facilities are going to cost approximately \$320 million?

13 MR. IAN PAGE: That number sounds
14 correct.

15 MR. BOB PETERS: Mr. Page, that -- that
16 thirty (30) year projection on the date of conversion,
17 how is that determined?

18 MR. IAN PAGE: Manitoba Hydro gets
19 estimates -- well we -- we know the Government of Canada
20 rate of that day and we will get -- get three (3)
21 different estimates of what the prov -- provincial spread
22 would be between Manitoba and the Government of Canada, a
23 long term debt rate, and we take the midpoint of those,
24 and that's -- and that's the -- the rate. And then to
25 that the guarantee fee is added.

1 MR. BOB PETERS: I'm understanding the --
2 the answer you've given, Mr. Page, is that it -- it's
3 been a fixed rate for that, going out?

4 MR. IAN PAGE: Yes, for -- for that --
5 for that block of money and then -- but there will be a
6 series of those fixed rates over -- over time.

7 MR. BOB PETERS: Okay, understood. And
8 that's because every time you hit \$40 million, you're
9 going to tie it into a new long term debt.

10 MR. IAN PAGE: Yes.

11 MR. BOB PETERS: But the thirty (30) rate
12 is an expected fixed rate and it is in fact going to be
13 fixed for the purpose of this agreement?

14 MR. IAN PAGE: Yes. It's fixed.

15 MR. BOB PETERS: Thank you. All right.
16 Then if the Board understands that interconnection
17 facility also is the same as the transmission assets,
18 those are all owned by Manitoba Hydro.

19 MR. IAN PAGE: Yes, they are.

20 MR. BOB PETERS: And again, the -- the
21 interest is the responsibility of WPLP?

22 MR. IAN PAGE: Yes.

23 MR. BOB PETERS: Who's responsible for
24 the depreciation on the transmission assets?

25 MR. IAN PAGE: From Manitoba Hydro's

1 perspective, essentially they -- they have -- that plant
2 has been built at no cost, because it's got a customer
3 contribution equal to the -- to the capital cost. So
4 Manitoba Hydro doesn't see any depreciation.

5 What -- the partnership is seeing since
6 it's -- it's a -- it doesn't actually have depreciation
7 either, because it -- it doesn't have the asset. There's
8 a -- there's an amortization of the -- of the loan with -
9 - and it's done on a blended basis of interest and
10 principal. So, effectively that gives the -- that
11 transfers the depreciation to the partnership, but there
12 actually isn't a true depreciation.

13 MR. BOB PETERS: I'm looking at a new
14 exhibit, Mr. Page, and I want to follow-up on that last
15 answer with you, and that's Manitoba Hydro Exhibit 13,
16 where you provided the projected operating statement for
17 the Wuskwatim Power Limited Partnership.

18 MR. IAN PAGE: Yes, I have that.

19 MR. BOB PETERS: And, you've answered the
20 question because when -- when the Board looks at this,
21 they're not going to find depreciation expense anywhere
22 on that schedule, correct?

23 MR. IAN PAGE: Only for the generating
24 station.

25 MR. BOB PETERS: Thank you. Any --

1 there'll be no depreciation for the transmission assets
2 shown?

3 MR. IAN PAGE: No, there wouldn't.

4 MR. BOB PETERS: But you're suggesting
5 that that depreciation is offset by a blended payment of
6 principal and interest made by WPLP back to Manitoba
7 Hydro?

8 MR. IAN PAGE: Yes. It -- it's like a
9 home mortgage payment. You've got a combination of
10 principal and interest and that -- that one (1) charge is
11 what the -- is what the partnership sees on an annual
12 basis, that expense, which is a combination of the two
13 (2).

14 MR. BOB PETERS: And where will -- where
15 will the repayment of principal be -- be shown on Exhibit
16 Manitoba Hydro-13?

17

18 (BRIEF PAUSE)

19

20 MR. IAN PAGE: The interest portion of it
21 is included in finance expense. If you -- if you're to
22 look at the cash flow statement, you'd see the -- the
23 remainder.

24 MR. BOB PETERS: All right. You're ahead
25 of me, Mr. Page. I'm looking at the -- at the operating

1 statement on page 204 and I'm also looking at the cash
2 flow statement on page 4 of 4 of Exhibit 13.

3 Can you just walk me through where again
4 I'm going to find the repayment of the principal, and --
5 and now the interest?

6 MR. IAN PAGE: The -- the -- the interest
7 portion is going to be under -- under expenses. You see
8 there's interest on long-term debt and interest on short-
9 term debt, so the -- you'll see -- see -- you'll see the
10 transition interest will be including in -- or sorry --
11 sorry, further down you'll see interest obligation under
12 IOA, that's the interest portion. And the principal
13 portion...

14

(BRIEF PAUSE)

15

16
17 MR. IAN PAGE: The -- the principal
18 repayment, that portion is -- is included on the cash
19 flow statement, and we're just checking whether it's
20 actually under financing activities or investing
21 activities.

22 MR. BOB PETERS: Mr. Page, while you're
23 contemplating that, I had understood that this -- the
24 amount of the debt to pay for the transmission facilities
25 was going to be due at a maturity approximately fifty

1 (50) years out.

2 MR. IAN PAGE: Yes. So the loan is
3 amortized over fifty (50) years, so that's how you
4 determine the -- the blending of the principal and
5 interest.

6 MR. BOB PETERS: All right. But -- and I
7 was going to go use your mortgage example, but I'll stay
8 away from that for a moment. Is there going to be
9 anything left owing in fifty (50) years, or is it going
10 to be paid in full in fifty (50) years?

11 MR. IAN PAGE: The intent is for it to be
12 paid in full.

13

14 (BRIEF PAUSE)

15

16 MR. BOB PETERS: Mr. Page, to keep us
17 moving, it might be best if you could provide the Board
18 with that amortization schedule of those payments that
19 you talked about, and break it out from the cash flow
20 statements, so the Board can --

21 MR. IAN PAGE: Sure, we can get that. I
22 understand -- I've been advised it -- it's in financing
23 activities, but we can get you the details of that.

24 MR. BOB PETERS: Okay, that would be
25 appreciated. Thank you.

1 --- UNDERTAKING NO. 53: Manitoba Hydro to provide
2 Board with amortization
3 schedule of the payments
4 spoken about and break it out
5 from the cash flow statements
6

7 CONTINUED BY MR. BOB PETERS:

8 MR. BOB PETERS: While we're on Manitoba
9 Hydro Exhibit 13, the Board is correct in -- in now
10 assuming that 100 percent of the output from Wuskwatim is
11 sold at an average price of six point nine (6.9) cents a
12 kilowatt hour?

13

14 (BRIEF PAUSE)

15

16 MR. IAN PAGE: The price will vary per --
17 per year, because it's based on the -- the average export
18 price that Manitoba Hydro realizes in that year.

19 MR. BOB PETERS: And -- and I simply just
20 took -- okay, in the first year of -- in the first year
21 of full production, then, I had just done a calculation
22 based on the gigawatt output less 10 percent, and divided
23 that by the \$94 million of net revenue.

24 MR. IAN PAGE: Actually there's another 3
25 percent that's been deducted already for the marketing

1 fee. So if you're working what the average price was,
2 you'd have to add back that 3 percent.

3 MR. BOB PETERS: That 3 percent marketing
4 risk fee -- risk fee is on gross revenue, Mr. Page?

5 MR. IAN PAGE: It's deducted -- out of
6 the part -- power purchase agreement. It's a -- a charge
7 that's assessed there so the -- the revenue line that --
8 that you see there is -- has -- is already reflective of
9 the three (3) -- 3 percent being deducted.

10 MR. BOB PETERS: Yeah. And I just
11 checked my notes, and I -- I actually didn't deduct it
12 when I did the calculation, the six point nine (6.9)
13 cents a kilowatt hour, but I've got your point.

14 Your point is you can do it on a gross
15 basis or on a net basis?

16 MR. IAN PAGE: Yes.

17 MR. BOB PETERS: And the -- whatever
18 calculation the Board looks at, it assumes Manitoba
19 Hydro's forecast of foreign exchange rate, correct?

20 MR. IAN PAGE: Yes, it does.

21 MR. BOB PETERS: And we've reviewed that
22 previously in your -- in your evidence?

23 MR. IAN PAGE: Yes.

24 MR. BOB PETERS: If the foreign exchange
25 rate stays close to parity, then the six point nine (6.9)

1 cent per kilowatt hour that I calculated would be lower
2 than -- would -- would be lower, correct?

3 MR. IAN PAGE: Yes, it would.

4 MR. BOB PETERS: And order of magnitude
5 and if my numbers are correct, it's probably closer to
6 six point one (6.1) cent -- six point one (6.1) cent for
7 at least that first year.

8 MR. IAN PAGE: That -- that looks about
9 right, and that's assuming that the US price stays the
10 same as well.

11 MR. BOB PETERS: Understood. The
12 marketing risk fee is paid by the partnership to Manitoba
13 Hydro for Manitoba Hydro marketing the power?

14 MR. IAN PAGE: It's -- it's a -- it's a
15 fee that's there to compensate Manitoba Hydro for the
16 risks it takes in marketing the power. It's not actually
17 a charge to market the power, because Manitoba Hydro is
18 not selling the Wuskwatim power directly. Wuskwatim
19 power would be part of the overall system power that
20 Manitoba Hydro would be selling.

21 What the -- it's -- it's to compensate for
22 things like Manitoba Hydro may not have transmission
23 available when the generating station's available. So
24 we'd -- there's be a -- a risk there. There's also risks
25 that Manitoba Hydro is taking this the -- the dependable

1 energy and -- and going to sell it on a firm basis, but
2 it may or may not be able to find a -- a customer for
3 that exact amount of power on a firm basis. So there's -
4 - some of it may be end up being as sold as opportunity.
5 So there's compensation on -- on some days. So there's
6 compensation for those types of things.

7 MR. BOB PETERS: And it's not a -- a
8 marketing cost because you're not streaming the power
9 from Wuskwatim to a specific export customer.

10 MR. IAN PAGE: That's correct.

11 MR. BOB PETERS: You're putting it on the
12 grid, and the grid will decide what its capabilities are
13 for exporting it on any given day.

14 MR. IAN PAGE: Yes, the marketing people
15 know it's there, but they're -- they're not selling
16 Wuskwatim power.

17 MR. BOB PETERS: Mr. Page, you confused
18 me from earlier testimony - maybe it was you and Mr.
19 Warden together - you had suggested to the Board that
20 there was a special overhead rate for the Wuskwatim Power
21 Limited Partnership compared to Manitoba Hydro's overhead
22 rate.

23 Have I got that correct?

24 MR. IAN PAGE: That's -- that's for the
25 construction of the generating station. There is a

1 special overhead rate. Part of Manitoba Hydro's overhead
2 rate reflects facilities and computer systems and the
3 Wuskwatim campsite has its own facility that it's paying
4 for -- it has its own computer system.

5 So it's not being assessed a portion of
6 the -- of the -- those facilities that are -- that it's
7 not using -- Sorry, assessed a portion of the -- of the
8 general facilities of -- and the rest of the system say
9 Manitoba Hydro's head office that it's not use -- using
10 directly.

11 MR. BOB PETERS: But then it has an
12 incremental amount for its own computer systems and
13 infrastructure set up in the Wuskwatim area?

14 MR. IAN PAGE: Yes, that -- that's part
15 of the capital cost.

16 MR. BOB PETERS: Is it only computer
17 systems that its not including in the overheads?

18 MR. IAN PAGE: Facilities and computer
19 systems.

20 MR. BOB PETERS: All right, help me with
21 facilities. I understand the computers, but what's
22 facilities? Is this --

23 MR. IAN PAGE: Well, facilities would be
24 a -- a portion of head off -- a portion of head -- head
25 office costs are built into general overhead rates. All

1 of the facilities that Manitoba Hydro has are -- are --
2 work their way into the overhead rates, but the -- the
3 camp has its own infrastructure. It's got its own
4 buildings, its own accommodations so -- so it -- those
5 are part of its capital costs directly. So it's -- it's
6 not paying a piece of other peoples buildings.

7 MR. BOB PETERS: Well, Mr. -- Mr. Page,
8 maybe to bring some levity here, does Mr. Warden have an
9 office up at Wuskwatim, or when he -- I'm just wondering
10 how does -- how do head office decisions from Winnipeg
11 made relative to Wuskwatim not get allocated the
12 overheads that are incurred in Winnipeg?

13 MR. IAN PAGE: The -- the camp -- the --
14 there's Man -- Manitoba Hydro has management on site, and
15 those manage -- and those people have accommodations and
16 office space on site, and those charges are -- are direct
17 costs to the project. Charging them a portion of general
18 overhead would -- would essentially capture that -- that
19 managers office back at head office as well. So there
20 would be a doubling up of charges.

21 MR. BOB PETERS: Is that same
22 differentiation in overhead rates, Mr. Page, done for
23 other major -- major capital construction projects?

24 MR. IAN PAGE: That's the only one (1)
25 that we're -- we -- that right now that has that rate.

1 balance sheet on page 3 of 4 -- just before I leave that,
2 Mr. Page, I didn't quantify the -- the overheads, and I
3 know they come down to pennies and fractions of pennies,
4 but what is the differential in overhead rates for what's
5 being charged at Wuskwatim compared to what would be the
6 fully-loaded overhead rate?

7 MR. WILLY DERKSEN: I believe there's a 7
8 percent differential. Our current overhead rate is 29
9 percent. That's applied to projects other than
10 Wuskwatim, and they're being charged the 22 percent rate.
11 And that rate, as -- as Mr. Page represented, is intended
12 to exclude the facilities in Winnipeg and the computer
13 systems that are not being used in that project.

14 MR. BOB PETERS: I want to turn to the
15 balance sheet that's found at Manitoba Hydro Exhibit 13,
16 which is the projected balance sheet for Wuskwatim Power
17 Limited Partnership.

18 There's a number on this page, Mr. Derksen
19 and Mr. Page, called "Other Assets" -- the "Other Asset"
20 line. Is that a transmission line? Is that what it
21 should be?

22

23

(BRIEF PAUSE)

24

25

MR. IAN PAGE: It consists of a deferred

1 asset for the -- for the transmission -- essentially, the
2 other side of the transmission liability. And it also
3 includes a sinking fund.

4 MR. BOB PETERS: Is that transmission
5 asset being depreciated anywhere on any of Manitoba
6 Hydro's or affiliate's records?

7

8 (BRIEF PAUSE)

9

10 MR. IAN PAGE: The -- the transmission
11 facilities are -- are depreciated by Manitoba Hydro, but
12 there is also -- coincident with that, there'll be an
13 amortization of the customer contribution.

14 MR. BOB PETERS: That doesn't fully
15 offset it, at least not for the first fifty (50) years,
16 does it?

17 MR. IAN PAGE: The -- the intent is that
18 it should.

19 MR. WILLY DERKSEN: Mr. Peters, on
20 Manitoba Hydro's books, if it spent \$300 million on this
21 -- on this interconnection asset, it would receive a
22 contribution of \$300 million from the WPLP, and both of
23 those amounts would be depreciated at the -- at the rate
24 for that type of facility and over fifty (50) years, as
25 Mr. Page has represented.

1 So, the depreciation calculated on the
2 asset would be offset by the -- we would call it
3 amortization of that contribution, so the net on Manitoba
4 Hydro statements would, in fact, be a zero cost.

5 But on the Wusk -- WPLP statement itself,
6 the amortization of those costs would be where the costs
7 would incur on an -- on an income statement.

8 THE CHAIRPERSON: On the consolidated
9 books, you look through it, don't you?

10 MR. WILLY DERKSEN: Both on WPLP itself
11 and on the consolidated books, there would be a -- the
12 cost associated with the depreciation of that facility.

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: You may have left me in
16 the dust here, Mr. Derksen.

17 But I was trying to find out why Manitoba
18 Hydro's transmission asset is showing up on WPLP's
19 balance sheet.

20 And -- and for Mr. Page he's telling me
21 it's a deferred charge so in essence it's not a
22 depreciation or amortization in that sense.

23 MR. WILLY DERKSEN: It -- it does show up
24 on both Manitoba Hydro's books but as I said, it's offset
25 completely by a contribution from WPLP and the

1 amortization of that deferred charged on WPLP is a
2 surrogate if you like, for the depreciation expense.

3 MR. BOB PETERS: Does it completely
4 offset in each of the fifty (50) years? Is that the
5 intention?

6 MR. IAN PAGE: It's certainly the
7 intention.

8 MR. BOB PETERS: But you're not confident
9 that in each and every year the -- the WPLP charge
10 offsets the Manitoba Hydro cost?

11 MR. IAN PAGE: The -- the two (2) should
12 be one (1) and the same. Interest may not be a perfect
13 offset.

14 MR. BOB PETERS: But over fifty (50)
15 years it will be?

16 MR. IAN PAGE: Yes.

17 MR. BOB PETERS: A fifty (50) year
18 customer contribution term is unprecedented for the
19 Utility, is that correct?

20 MR. IAN PAGE: Well typically what
21 Manitoba Hydro asked for a customer contribution it
22 expects a lump sum cheque and -- and it's up to the -- up
23 to the contributor how -- how they treat that on their
24 own financial statements.

25 MR. BOB PETERS: And so this project is

1 different in that respect?

2 MR. IAN PAGE: It's different is that we
3 have -- we have an interest in both sides of the
4 transaction. From -- from the transmission and
5 distribution perspective, how -- how the accounting
6 happens of the -- of the customer contributions is -- is
7 of no interest to them.

8 They receive their -- their payment. It's
9 a customer contribution, it offsets their assets and
10 they're happy. Manitoba Hydro, because we have an
11 interest on now -- on the WPLP side, now -- then we -- we
12 have an interest there and seeing how that is accounted
13 for and that's where the -- it's only there that the
14 fifty (50) year matters.

15 And how the accounting treatment is --
16 becomes an issue. The accounting treatment from the T&D
17 said -- like I said is -- is irrelevant.

18 MR. BOB PETERS: Mr. Page, you've told
19 the Board that seventy-five/twenty-five (75:25) is an
20 important ratio for the WPLP, would it be correct that
21 the other liabilities shown on the balance sheet do not
22 form part of the debt ratio for WPLP?

23 MR. IAN PAGE: Yes, we use the same
24 formula that we use for Manitoba Hydro.

25 MR. BOB PETERS: I'm sorry, are you

1 saying it is included or it is not included?

2 MR. IAN PAGE: It -- it's excluded. We
3 use the same formula that we do for Manitoba Hydro's. We
4 look at net long term debt over the sum of net long term
5 debt plus equity.

6 Sorry, just to clarify. From that we --
7 we exclude the interconnection and operating agreement
8 debt when we do that calculation.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: Maybe I was parsing
13 words then but it does show up as long term debt in the
14 financial statements for WPLP.

15 MR. IAN PAGE: The -- which are you
16 referring to?

17 MR. BOB PETERS: Manitoba Hydro Exhibit
18 Number 9. The interim unaudited financial statements.
19 The interconnection credit facility shows up as long term
20 debt.

21 MR. IAN PAGE: Yes, it does. And -- but
22 it's excluded in the calculation of the ratio because the
23 ratio is -- is -- is intended -- it's for the capital
24 structure of the generating station.

25 And the partnership -- and the debt for

1 the partnership while it's -- it is debt, it's -- it's
2 recovered through an annual charge so that -- that annual
3 expense is -- is -- would eventually find its way through
4 the debt/equity ratio in the future.

5 MR. BOB PETERS: Why over the long term
6 does the equity seem to decline in this project?

7 MR. IAN PAGE: With the -- the asset
8 depreciates over time so the -- as the asset side
9 depreciates, the liability side -- or the balance sheet
10 has to depreciate as well.

11 MR. BOB PETERS: Is the --

12 MR. IAN PAGE: And that's done through
13 essentially a series of refunds of customer -- of -- of
14 return of capital.

15 MR. BOB PETERS: Why wouldn't Manitoba
16 Hydro or WPLP restate the debt/equity ratio including
17 this amount as debt.

18 MR. IAN PAGE: The agreement we have that
19 -- that is to be specifically excluded from the
20 debt/equity ratio.

21 MR. BOB PETERS: Is the negative net
22 income included in the debt ratio calculation?

23 MR. IAN PAGE: It reduces -- it reduces
24 the retained earnings.

25 MR. BOB PETERS: So it's included in the

1 calculation for the years that it's --

2 MR. IAN PAGE: It's included as -- as it
3 affects retained earnings.

4

5 (BRIEF PAUSE)

6

7 MR. BOB PETERS: Mr. Page, the -- the
8 "Other Liabilities" line, that's the -- that's the full
9 amount that was not included in the -- the debt ratio
10 calculation? Or was part of that included in the debt
11 ratio calculation?

12 MR. IAN PAGE: None of it's included in
13 the debt ratio.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: Just to remind the
18 Board, Mr. Page, the significance of the debt/equity
19 ratio for the WPLP is that it's important for capital
20 contributions, so the parties know how much they have to
21 each contribute, correct?

22 MR. IAN PAGE: Yes.

23 MR. BOB PETERS: And in addition to that,
24 once the 75/25 is met, then there's no restrictions on
25 the paying out of -- or the ability to pay out dividends

1 if there are any.

2 MR. IAN PAGE: The -- the agreement
3 limits -- restricts dividends, so there's -- no
4 distributions can be made if the debt ratio is in excess
5 of 75 percent. I believe no distributions can also be
6 made if there's a net loss in there, even if the debt
7 ratio is meeting the target and beyond that, it would be
8 up to the discretion of the Board of the WPLP which --
9 what amount they want to distribute in any one year.

10 There is also provision for setting up
11 special reserves if they wanted to, for -- for future
12 capital expenditures, if there was -- to -- to avoid
13 having to make cust -- future capital contributions.

14 MR. BOB PETERS: It's also important for
15 determining whether there may be cash calls.

16 MR. IAN PAGE: Yes.

17 MR. BOB PETERS: And I might come to it,
18 later, Mr. Page, if I remember, but you're saying you
19 can't pay out dividends on -- if there's not a 75/25
20 debt/equity ratio achieved, isn't correct from the point
21 of view that there can be advances made on the dividends
22 even when the capital structure is below 25 percent
23 equity?

24 MR. IAN PAGE: There is a minimum
25 dividend loan that is available to NCN on their request

1 that can be made. And the intent of that was to
2 recognize that by the community have -- investing in this
3 cash or taking cash away from other activity is that they
4 may need in the -- in the community, and this is to
5 provide a -- a -- sort of a -- a minimum threshold level
6 of cash flow back to the -- to the community. But that
7 has to be repaid out of future distributions.

8

9

(BRIEF PAUSE)

10

11 MR. BOB PETERS: Can you quantify, at
12 this time, Mr. Page, what the maximum amount is of that -
13 - that advance on dividends that can be requested?

14 MR. IAN PAGE: It's based on the long-
15 term debt rate of the day for Manitoba Hydro less 2 1/2
16 percent. So a safe interest rate is sort of 7 1/2
17 percent, and the most they could get would be a 5 percent
18 draw. And then it's -- it has be repaid with interest.

19 And there's an -- a -- a markup on the
20 interest rate as well, so it -- it's not obvious that NCN
21 may choose to take that dist -- that advance in any one
22 year.

23 MR. BOB PETERS: And it's based on a
24 percentage of their contributed --

25 MR. IAN PAGE: Sorry?

1 MR. BOB PETERS: No, let's make sure
2 we're clear for the Board. While you've given me the
3 formula of long term debt minus 2 1/2 percent to be
4 repaid with interest -- interest including a premium --
5 it's to -- it's based also on the maximum amount of cash
6 contributed by TPC?

7 MR. IAN PAGE: Yes, sorry, yeah, that --
8 that formula was 5 percent of the -- of the actual cash
9 invested by -- by NCN or TPC, I guess is their investment
10 vehicle.

11 MR. BOB PETERS: And in terms of actual
12 cash invested, does that mean money that's been put up by
13 TPC through and -- and NCN or does it include any amount
14 borrowed from Manitoba Hydro?

15 MR. IAN PAGE: No, it's strictly on their
16 cash.

17 MR. BOB PETERS: And at this point in
18 time that's \$1 million?

19 MR. IAN PAGE: It's 1 million to date,
20 and they -- the balance is due on -- on final closing
21 which is the first in service of the -- of the generating
22 station.

23 MR. BOB PETERS: 2012?

24 MR. IAN PAGE: Around there, yes.

25 MR. BOB PETERS: I think we fight over

1 that every time, but I -- I did find Mr. Warden's
2 transcript reference that the expectation right now is
3 May of 2012 as we sit here today for the in service of
4 the first units of Wuskwatim?

5 MR. VINCE WARDEN: Yes, that's correct.

6 MR. BOB PETERS: We won't fight anymore.
7 But I'm also hearing, Mr. Page, that -- that TPC could
8 finance all of their equity component through Manitoba
9 Hydro?

10 MR. IAN PAGE: There's a formula which
11 limits how much money Hydro will -- will loan. It's
12 based on a certain amount of dollars put forward by -- by
13 TPC, and Manitoba Hydro providing a -- a loan based on a
14 -- a multiple of that.

15 And so there's the \$1 million initial
16 payment, and then Manitoba Hydro advances all of the
17 balance until final closing when, at that point, TPC or
18 NCN will determine the exact percentage ownership that
19 they -- that they wish to take, and that's when their --
20 their amount is -- is due and payable.

21 MR. BOB PETERS: All right, but assuming
22 full contributions into the project then by TPC, how much
23 can they take in a year by way of an advance on the
24 dividends?

25 MR. IAN PAGE: If -- if they put in -- I

1 think the capital costs we're looking at now -- I think
2 their -- their contribution is about 34 million, so it
3 would be 5 percent of that, so 1.7 million.

4 MR. BOB PETERS: One point seven (1.7)
5 million per year to be repaid with interest and interest
6 will include a premium.

7 MR. IAN PAGE: Yes.

8 MR. BOB PETERS: And there's no fixed
9 amount? It'd be 1.7 million per year for every year?

10 MR. IAN PAGE: Well, it's based on the
11 difference, what the distribution would have been. So if
12 they had been entitled to a 1.5 million distribution,
13 then the limit on this -- this advance would be the --
14 the difference between that 1.5 and the 1.7.

15 MR. BOB PETERS: Well, I was assuming
16 that the equity, the capital structure had not yet been
17 achieved, but they were coming for advances.

18 MR. IAN PAGE: Yes, but it's also
19 available say in a drought year when you -- we could be
20 at the 75/25.

21 MR. BOB PETERS: Can -- can the limited
22 partner, TPC, request advances on dividends before the in
23 service date?

24 MR. IAN PAGE: No.

25 MR. BOB PETERS: Turning to the book of

1 documents, Exhibit -- I'm sorry, not the book of
2 documents -- the Exhibits Number 19 also relates to
3 Wuskwatim. Manitoba Hydro Exhibit 19 is the Undertaking
4 13, and this was one (1) where I think Ms. McCaffrey beat
5 me to it.

6 I just want to touch on a few points that
7 I -- I don't want to repeat what her questioning was, but
8 what you tried to show the Board in this calculation was
9 a comparison between the -- between the costs on a per
10 kilowatt hour basis comp -- for the existing generation
11 compared to what Wuskwatim may look like, correct?

12 MR. IAN PAGE: Yes, recognizing that
13 there is a -- a time gap between the two (2).

14 MR. BOB PETERS: And the time gap is that
15 the Wuskwatim figures are inflated?

16 MR. IAN PAGE: They're in -- in the
17 actual dollars of 2012/'13, whereas the other, I believe,
18 are 2006/'07 or '07/'08. I have to check on that one.

19 MR. BOB PETERS: The Wuskwatim numbers
20 are inflated from today's numbers?

21 MR. IAN PAGE: Yes.

22 MR. BOB PETERS: In terms of the
23 operating costs under the -- the "Prospective Cost of
24 Service" column, '08, can you indicate to the Board
25 what's included in those operating costs?

1 Does that include DSM costs?

2 MR. IAN PAGE: DSM would be under
3 depreciation and interest.

4 MR. BOB PETERS: What about the Uniform
5 Rates Legislation impact?

6 Where would that be included on those
7 lines?

8 MR. IAN PAGE: It doesn't affect the cost
9 of generation, so it wouldn't show up.

10 MR. BOB PETERS: You just use it, then,
11 as a revenue offset deduction.

12 MR. IAN PAGE: It's just a -- a factor
13 that we incorporate in calculation of the revenue.

14 MR. BOB PETERS: And what about the
15 Affordable Energy Fund? Is that reflected in any way in
16 any of the costs under existing generation?

17

18 (BRIEF PAUSE)

19

20 MR. IAN PAGE: To the extent that the
21 fund is drawn down, it would be an amortization, so you'd
22 see it in depreciation expense.

23

24 (BRIEF PAUSE)

25

1 MR. BOB PETERS: As a result, then, of
2 your discussions, is there any revisions or corrections
3 to that last answer?

4 MR. IAN PAGE: No.

5 MR. BOB PETERS: No -- thank you. Let's
6 turn to the Wuskwatim columns, and before we look at
7 what's there, let's look at what's not there.

8 And has Manitoba Hydro included the loans
9 that it makes to TPC for its equity in any of those
10 calculations under the Wuskwatim numbers?

11

12 (BRIEF PAUSE)

13

14 MR. IAN PAGE: You're asking about the --
15 which -- which interest again?

16 MR. BOB PETERS: Well, I want to look to
17 the column under Wuskwatim, and I want to find out what
18 costs may not be included in the -- in the generation
19 side of the -- the equation.

20 And I'm wondering if included in there --
21 in the finance expense or somewhere -- are the loans that
22 TPC has to repay to Manitoba Hydro for the equity portion
23 of the TPC Limited Partnership's interest?

24 MR. IAN PAGE: No. No, that's -- that's
25 a charge to TPC and -- and, ultimately, to NCN. So it --

1 it doesn't -- it's not reflected on here.

2

3 (BRIEF PAUSE)

4

5 MR. BOB PETERS: What capital cost was
6 used then to come up with the generation finance expense
7 under Wuskwatim?

8

9 (BRIEF PAUSE)

10

11 MR. IAN PAGE: It's the 1.236 million
12 figure from the -- Exhibit 13.

13 MR. BOB PETERS: And for the
14 depreciation, again, on what capital amount? Same
15 amount?

16 MR. IAN PAGE: The same amount, but it
17 would also -- included in that would be the amortization
18 of the -- the principal portion of the IOA advance.

19 MR. BOB PETERS: What interest rate was -
20 - was used under Finance Expense?

21 MR. IAN PAGE: Our -- it's the same
22 interest rate that we've forecast through the IFF, which,
23 I believe, is about seven point four (7.4) or seven point
24 four five (7.45), inclusive of the guarantee fee.

25 Sorry, that's on the -- on the long-term

1 debt. During the -- during the construction, as we
2 talked about before, there's a series of short-term
3 advances, so those would be at various interest rates
4 until they're termed-out on -- on final closing. So
5 everything's in long-term debt by -- by final closing.

6 MR. BOB PETERS: Mr. Page, turning to the
7 operating costs -- operating costs under the Wuskwatim
8 column, the transcript reference one thousand three
9 hundred and thirty-four (1,334), you indicated to the
10 effect that the incremental operating costs only are
11 being charged to Wuskwatim.

12 Do you recall saying that?

13 MR. IAN PAGE: Yes.

14 MR. BOB PETERS: And when you say "only
15 the incremental operating costs are being charged on the
16 Wuskwatim Project," what did you mean by that?

17 MR. IAN PAGE: What I mean is if there's
18 -- however many employees are required at the site,
19 those employees would be required at -- that -- that
20 would be the charge and for their equipment that they use
21 and the supplies that they consume.

22 MR. BOB PETERS: But you didn't include
23 any control centre costs.

24 MR. IAN PAGE: No, there wouldn't be
25 anything like that, other than through -- as they come

1 through general overhead rates.

2

3

(BRIEF PAUSE)

4

5 MR. BOB PETERS: On the finance expense,
6 Mr. Page, and I appreciate we're maybe working in real-
7 time on this, but the calculation based on the capital
8 costs you've given don't seem to work out.

9 I wonder if you could provide that
10 calculation to -- to show us how you come up with that?

11 MR. IAN PAGE: Yes, we can provide that.

12 MR. BOB PETERS: All right. And you may
13 as well do it also for depreciation, and we'll see if
14 we've got those calculations correct.

15 And if you also have the breakdown of
16 OM&A, that'll short-circuit some questions on -- on that.

17 On the transmission, bottom half of the
18 ledger, can you just confirm the capital amount used for
19 the finance expense calculation?

20 MR. IAN PAGE: That's 320 million.

21 MR. BOB PETERS: All right. It probably
22 would be best, as well, that you just provide us with the
23 -- with the calculation of that Wuskwatim column and that
24 will --

25 MR. IAN PAGE: Sure, we'll -- we'll do

1 the -- that whole column for you.

2 MR. BOB PETERS: All right. Thank you
3 for that.

4

5 --- UNDERTAKING NO. 54: Manitoba Hydro to provide
6 Board calculations for all
7 items under the Wuskwatim
8 column in MH-19

9

10 CONTINUED BY MR. BOB PETERS:

11 MR. BOB PETERS: I want to turn to
12 Manitoba Hydro's Exhibit 20 and look at the calculation -
13 - again, I think my colleague beat me to that one.

14 Mr. Surminski, this one (1) you might be
15 able to help the Board on.

16 In the -- in the book of documents that
17 you've reviewed with me previously at Tab 12, there was -
18 - some calculations of export prices, and one of the
19 columns that I'd identified is just coded as EPE-269 from
20 the National Energy Board.

21 Do you recall our discussion on that?

22 MR. HAROLD SURMINSKI: Yes, and in fact I
23 have it in front of me.

24 MR. BOB PETERS: How do you reconcile to
25 the Board an off-peak price of six point four (6.4) cents

1 as shown on Hydro Exhibit 20 for Wuskwatim Power,
2 compared to the prices shown in the book of documents,
3 Tab 12, under the EPC -- EPE column 269?

4

5 (BRIEF PAUSE)

6

7 MR. HAROLD SURMINSKI: First of all,
8 these are historic prices based on 2007. What we're
9 using in -- in the Wuskwatim is 2012, and we are using
10 forecasted prices out in the future. 2007 prices were
11 based on specific flow conditions, specific export sales.
12 As I indicated earlier, some of the long term sales will
13 be terminating.

14 So it's a completely different view of the
15 total export picture that we're forecasting in 2012,
16 versus a historic estimate of 2007 for several months
17 that are shown here.

18 MR. BOB PETERS: So whatever happened
19 historically in -- in September of '07, would essentially
20 have to -- those prices would have to double by the time
21 you got to 2012 to make your forecast accurate, correct?

22 MR. HAROLD SURMINSKI: Yes, if you're
23 averaging -- if you're looking at the average of these
24 particular prices under this EPE-269.

25 MR. BOB PETERS: And you used an exchange

1 rate in your calculation of it, was it a dollar seventeen
2 (\$1.17) US?

3 MR. HAROLD SURMINSKI: Yeah, we think
4 it's more in the area of one thirteen (1.13) in that time
5 period. One fourteen (1.14) in the long term for -- for
6 Wuskwatim, based on last year's -- the 2007 estimate.

7 But it varied -- it was lower in the early
8 years, and -- and climbed up to one one four (1.14) in the
9 long term.

10 MR. BOB PETERS: Still keeping with the
11 Wuskwatim theme; at Manitoba Hydro's Exhibit Number 39,
12 this was an undertaking also on -- on the impacts of
13 foreign exchange and -- maybe you can explain to the
14 Board, without going through specifics of this answer,
15 how the foreign exchange being close to parity would
16 impact the economic feasibility of Wuskwatim.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Maybe I can start --
21 start over, Mr. Surminski. You do tell the Board that if
22 a Canadian dollar was at par with the US dollar, then the
23 forecast of export prices would be 17 percent lower when
24 you were back at the CEC hearing.

25 MR. HAROLD SURMINSKI: Yes. What we are

1 searching for is -- is further information that we have
2 filed in -- in a later undertaking, that's the
3 undertaking on the IRR and the -- the value of Wuskwatim.

4 MR. BOB PETERS: That'll be your Exhibit
5 43, and we'll come to that I promise you. And -- and
6 that's your Exhibit 43, your Undertaking 19 and 32.

7 MR. HAROLD SURMINSKI: Yes, that is the
8 one I'm referring to.

9 MR. BOB PETERS: But let's just stay with
10 the foreign exchange rate, and we'll -- we'll come to the
11 internal rate of return questions next.

12 You'd agree with me then that parity makes
13 -- negatively impacts the economics of the Wuskwatim
14 Project?

15 MR. HAROLD SURMINSKI: It reduces of the
16 value of Wuskwatim to Manitoba Hydro. I will -- I'll go
17 there.

18 MR. BOB PETERS: And how much it reduces
19 the value to Manitoba Hydro will depend on where the
20 actual foreign exchange rate settles out at the time
21 Manitoba Hydro has an opportunity to export some of the
22 Wuskwatim output?

23 MR. HAROLD SURMINSKI: Yes, I agree with
24 that.

25 MR. BOB PETERS: And in the meantime,

1 between now and 2012 you're using Manitoba Hydro's
2 forecasts of what that foreign exchange rate will be?

3 MR. HAROLD SURMINSKI: Yes, that's
4 correct.

5 MR. BOB PETERS: And the Board, I think
6 has heard from Mr. Page that that foreign exchange rate
7 forecast is probably in the process of being updated or
8 updated in the next few months.

9 MR. HAROLD SURMINSKI: Yes, that's
10 correct.

11 MR. BOB PETERS: It could have a
12 significant negative impact on the Wuskwatim Project.
13 Would that be fair?

14 MR. HAROLD SURMINSKI: Yes, that's fair.

15

16 (BRIEF PAUSE)

17

18 MR. BOB PETERS: Mr. Surminski, I
19 couldn't hold you back, you wanted to go to Exhibit 43
20 that was filed I think this morning.

21 Mr. Surminski, you and I have to be clear
22 at the outset, before we engage in this discussion, that
23 when I talk domestic load I'm referring to load used by
24 Manitobans.

25 Is that a fair way to -- to state domestic

1 load?

2 MR. HAROLD SURMINSKI: You can define it
3 that way, yes. We -- we define firm requirements to
4 include firm commitments, but you could separate out the
5 two (2) components and -- and call it domestic load for
6 Manitobans, and firm commitments that we have negotiated
7 in the past to have a total requirement -- a total
8 requirement for a firm energy.

9 MR. BOB PETERS: Well, I wanted to keep
10 it -- to keep it simple where "domestic load" was simply
11 for Manitoba customers and "export load" was for extra-
12 provincial customers, mostly in the United States, but
13 maybe some in Saskatchewan, some in Ontario.

14 Are you okay with that?

15 MR. HAROLD SURMINSKI: Yes.

16 MR. BOB PETERS: And -- and so just to be
17 clear again my definition of "domestic load" does not
18 include firm export commitments.

19 MR. HAROLD SURMINSKI: Yes.

20 MR. BOB PETERS: And back on Tab 15 of
21 the book of documents, that you reviewed with the Board
22 earlier, is a copy of the Power Resource Plan. And in
23 that Plan, can you indicate what contracted imports would
24 be available if there were no firm export contracts?

25

1 (BRIEF PAUSE)

2

3 MR. HAROLD SURMINSKI: We anticipate that
4 we would negotiate firm import contracts even if we did
5 not have export contract. That's an advantage of being
6 interconnected to a thermal system that has surplus
7 energy.

8 MR. BOB PETERS: Would you agree that if
9 those firm or those -- those contracted imports were
10 available, fully available, like you've indicated you'd
11 continue to negotiate them -- but there were no export
12 contracts, then Wuskwatim could be in service and not
13 needed until probably 2019/2020?

14 MR. HAROLD SURMINSKI: If your question
15 is that we could meet our commitments up to the year 2020
16 by imports, I say yes. But it's -- yes, the quantities
17 are relatively small, but there's no guarantees we could
18 do that. But we are fairly confident that we could do
19 that, yes.

20 MR. BOB PETERS: When we look at Manitoba
21 Hydro's response in Exhibit 43, would it be correct that
22 if the teacher was grading this, Manitoba Hydro would
23 give itself an incomplete for the answer, because you
24 didn't provide an internal rate of return, as requested?
25 Just didn't do that calculation.

1 MR. HAROLD SURMINSKI: I think I'll leave
2 that question to Mr. Warden.

3 MR. BOB PETERS: The principal. Well,
4 Mr. Warden, do you get a -- an incomplete, a -- an F or,
5 or do you get a -- a better grade?

6 MR. VINCE WARDEN: No, I think it's an A
7 plus actually. The -- the whole -- the fundamental
8 premise on which we -- this response was provided is that
9 Wuskwatim is no longer being advanced for export
10 purposes, because it is required for the domestic load.

11 And, so now, rather than it being a
12 commercial plant, being at a -- a merchant plant, it is
13 now a plant required for Manitoba. Therefore, the only
14 way to properly make the comparison, or to make -- to
15 insure ourselves that Wuskwatim is still the -- the low-
16 cost option in -- in terms of providing the Manitoba load
17 is to compare that to other alternatives, such as gas
18 combustion turbines, wind, or -- as you're pointing out
19 with -- with the Tab 15, imports is another alternative.

20 But I would -- I would certainly venture
21 to say although we haven't covered that often in this
22 response, that imports would be the highest -- probably
23 the highest-cost option for providing -- for serving the
24 Manitoba load in 2012.

25 MR. ROBERT MAYER: Mr. Warden, whose

1 definition of domestic load did you use when you came to
2 that conclusion? The -- Mr. Peter's definition of
3 domestic load or Mr. Surminski's definition of domestic
4 load, which included firm exports?

5 MR. VINCE WARDEN: Well, we can't -- the
6 firm exports -- we can define "domestic load" as being
7 only in Manitoba if we like, but we can't simply wish
8 those export contracts away. Those export contracts were
9 very beneficial during the early years of Limestone, and
10 they were very necessary to make that a viable plant.

11 We couldn't have brought Limestone on
12 without those export contracts, so we -- we certainly
13 can't ignore the firm load going forward.

14 MR. ROBERT MAYER: Mr. -- Mr. Warden, I -
15 - I'm not suggesting that you would, and I have no
16 quibble with export contracts. I was just asking whose
17 definition did you use when you arrived at the numbers,
18 because as I -- I thought I heard from the answers that
19 Mr. Peters got, that if you took those firm --
20 theoretically took those domestic -- those firm export
21 contracts out, and strictly dealt with a definition of
22 "domestic load", then, in fact, you wouldn't require
23 Wuskwatim for domestic load before -- or 2019.

24 MR. VINCE WARDEN: Yes, and I think that
25 is a theoretical exercise we can go through, but it's not

1 a practical one.

2 MR. ROBERT MAYER: I -- I also understand
3 that, but we were trying to compare what was said --
4 what's being said at this Hearing with what was being
5 said at the CEC hearing, and -- when we dealt with that
6 whole issue of rate of return or internal rate of return.
7 That's, as I recall, what generated this undertaking.

8 MR. IAN PAGE: Mr. Vice-Chair, maybe I
9 could just -- there seems to be a bit of a
10 misunderstanding. When -- at the time of the CEC
11 hearing, it was anticipated that -- that Wuskwatim was
12 going to be used for exports. There were -- firm exports
13 have already been made based on -- on projected
14 surpluses. What's happened in the last couple of years
15 with the domestic load is -- has gone up, it's used up
16 those surpluses.

17 So if we were -- today we may not have
18 made those -- those firm export sales, but several years
19 ago when we had this surplus and we were projecting a
20 surplus out in the future in -- out till 2019, we made
21 those export sales and now we're locked into them.

22 So, now we have to meet them as if they
23 were our domestic load.

24 MR. ROBERT MAYER: I understand that.
25 That's not -- wasn't the purpose of my question, but I

1 think I understand where we're at.

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: Well, just on that
5 point, Mr. Page, if we turn back to Manitoba Hydro's
6 Exhibit 27, this was an undertaking, Number 22, and it
7 listed all of the firm export -- sorry, all of the export
8 agreements, whether firm or diversity agreements, or how
9 -- as well as term sheets.

10

11 (BRIEF PAUSE)

12

13 MR. BOB PETERS: Mr. Page, this lists the
14 export agreements that you referred to the Vice-Chair,
15 and they're dated -- the ones that would have been
16 incurred subsequent to 2003 before the -- when the -- the
17 Clean Environment Commission looked at the Wuskwatim
18 project?

19 MR. IAN PAGE: Yes.

20 MR. BOB PETERS: And some of those
21 agreements are to replace expiring agreements and some of
22 them are, at this point in time, at best terms sheets for
23 future generation?

24 MR. IAN PAGE: I believe that's the case.

25 MR. BOB PETERS: Back to the question in

1 -- in Exhibit 43. And you know, Mr. Warden, perhaps, has
2 eloquently argued why the calculation shouldn't be done.
3 The fact of the matter is that the calculation could be
4 done if Manitoba Hydro used the capital costs it now
5 forecasts for Wuskwatim, and then uses the same
6 assumptions -- discount rate that was used back in 2003,
7 correct?

8 MR. IAN PAGE: If you're calculating IRR
9 you don't actually use the discount rate.

10 MR. BOB PETERS: Fair -- fair enough.
11 But you could calculate the internal rate of return as to
12 what would be expected if you changed the capital cost
13 assumption that was made back in 2003?

14 MR. IAN PAGE: You could go back to the
15 2003 situation and look at changing the dollars. But if
16 you're looking at the situation today, then just changing
17 the dollars doesn't capture everything, because now
18 you're looking at instead of advancing a plant for
19 export, you're now using it for -- to meet firm
20 requirements. So now what you have to add into the
21 calculation is what -- what would be the cost for the
22 alternative supply.

23 So it -- it greatly complicates the
24 question and it makes it very difficult to compare the
25 two (2) because you're -- because you're comparing an IRR

1 in one (1) situation with an IRR in a totally unrelated
2 situation.

3 MR. BOB PETERS: All right. We've --
4 we've got certainly the argument and the point you make,
5 and I'm not saying it's not a valid point like the Vice-
6 Chair had indicated. But if you were going to provide a
7 revised internal rate of return using the same hurdle
8 rates that were used before the Clean Environment
9 Commission, but based on what you now know as forecasts
10 for the project, where would that hurdle rate -- where
11 would that internal rate of return come out?

12 MR. IAN PAGE: If somehow the project was
13 still being advanced for exports, and not being required
14 for domestic use, then the IRR would come out lower than
15 it was back then.

16 But as -- if -- if -- several of us had
17 said that's not the situation so the IRR becomes a less
18 meaningful number. The -- for a start the -- the hurdle
19 rate that we use is different for a domestic use project
20 versus an export project.

21 MR. BOB PETERS: And that's explained I
22 think in your Exhibit 43, but if -- if you were going to
23 calculate that meaningless number, what would that
24 meaningless number be?

25 MR. IAN PAGE: It would be less than it

1 was. I -- I don't know --

2 MR. BOB PETERS: And you know -- I
3 appreciate maybe we're dancing around it. But I wonder
4 if you could provide the calculation, accepting we have
5 your positions in terms of what it is, or why it wouldn't
6 it be the appropriate one to do.

7 But if you could do it, that would be
8 helpful I think to the Board at this point in time.

9 MR. ROBERT MAYER: I think we have some
10 suggestion that it might not only be less but it might be
11 a negative number.

12 MR. HAROLD SURMINSKI: Negative relative
13 to what? Rate of return could be in the order of 6
14 percent which could be our cost to capital. But negative
15 --

16 MR. ROBERT MAYER: Well I -- we had this
17 discussion. At the time we tried to clarify what the
18 answer to that -- or what that undertaking was going to
19 involve. And it was going to give the Board an
20 opportunity, at least the way I understood it, to compare
21 what you said, or what Hydro said at the Clean
22 Environment Commission, on -- when it was doing needs and
23 justification portion of that hearing, as -- so that we
24 could look at what you said then and what the end result
25 is now.

1 And without that, what you now call a
2 fictitious calculation, it will be very hard for this
3 panel to compare what you said would happen back in the
4 Clean Environment Commission, at the Needs and
5 Justification Hearing, and what actually happened.

6 And I think that's important if on any
7 future needs and justification application, whether it's
8 heard by this panel, as there's some suggestion it might
9 be, or whether it's heard by the Clean Environment
10 Commission, or a joint panel. But the bottom line is we
11 need to know whether your predictions can be relied on,
12 and if they can't be we need to know why.

13 And so I think the number the number that
14 Mr. Peters has asked for is something we ought to have.

15 MR. VINCE WARDEN: Would I be able to
16 just clarify. We -- we could certainly put together a
17 calculation, assuming the Manitoba load has not
18 materialized the way it has. So we can just strip -- we
19 can use the same assumptions that were -- what -- that
20 were presented to the Clean Environment Commission, and
21 just redo that calculation, but based on current exchange
22 rates and current export prices. The reality it -- that
23 does not represent the reality as long as we're clear on
24 that that we absolutely need that plant to serve firm
25 requirements.

1 MR. ROBERT MAYER: I understand that.
2 That -- that's not my -- I don't think that's the reason
3 we're looking at this, and I'm sure -- they're not going
4 to -- it's not going to effect the -- your revenue
5 requirement.

6 But I -- I thought that was the
7 undertaking we originally got, and in addition to those
8 other things you added you got to -- I think we really
9 want to know not only the exchange rate problem, but the
10 significantly increased capital costs, and the effect
11 those capital costs have on what would have been the
12 internal rate of return.

13 MR. VINCE WARDEN: Yes.

14 THE CHAIRPERSON: Mr. Peters, why don't
15 you just --

16 MR. VINCE WARDEN: Well, we --

17 THE CHAIRPERSON: -- reintroduce your
18 question.

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: It was a -- a request to
22 have Manitoba Hydro, in essence, update Appendix C
23 Financial Data from the Clean Environment Commission
24 Report, but to take into account the fact, and we've
25 certainly heard the reasons why, the capital costs of the

1 Wuskwatim Project have increased.

2 And if the initial Appendix C Financial
3 Data was compiled using generation and transmission, then
4 I suggest it should be recalculated using the current
5 view of the costs of generation and transmission. And
6 that would -- that would provided the Board with a
7 revised internal rate of return, using the same hurdle
8 rates that were used before the Clean Environment
9 Commission.

10 It would also be beneficial if -- to -- to
11 make Mr. Page's point clear, if the incremental export
12 agreements, over and above the ones that are expiring,
13 can be identified in terms of the -- the amount of
14 exports taken on since then that are going to be served
15 out of firm power so that we have that.

16 If the -- if it helps the Board, Mr.
17 Chairman, the -- the financial data sheet that was
18 appended to the Clean Environment Commission, I would
19 just ask Mr. Page and Mr. Warden to review it and see if
20 -- if they could just do two (2) columns on that, based
21 on the 2003 scenario and the 2008 scenario that I put
22 forward.

23 THE CHAIRPERSON: And we understand
24 circumstances have changed. They could list what
25 circumstances have changed?

1 MR. BOB PETERS: Yes, and I -- I think we
2 should indicate on the record that Exhibit 43 does --
3 does ostensibly that. It makes it clear as to how the
4 project is now being viewed by the Corporation.

5 MR. VINCE WARDEN: Yes, we'll undertake
6 to do that.

7

8 --- UNDERTAKING NO. 55: Manitoba Hydro to determine
9 for Board if the initial
10 Appendix C Financial Data was
11 compiled using generation and
12 transmission. It should then
13 be recalculated using the
14 current view of the costs of
15 generation and transmission

16

17 MR. BOB PETERS: Mr. Chairman, I'm going
18 to leave Wuskwatim, and maybe this would be a time to
19 have a -- a lunch recess, and I'll -- I'll complete my
20 questions shortly after lunch. And then I believe there
21 might be a few from other counsel.

22 I also think that the document that Mr.
23 Anderson was mistakenly asking Mr. Williams to assist
24 with has now been corrected and it might be available for
25 distribution.

1 THE CHAIRPERSON: Mr. --

2 MR. BYRON WILLIAMS: Yes -- yes, Mr.
3 Chairman, I should never be allowed near a photocopier or
4 a stapler.

5 I have -- Mr. Anderson offers his regrets.
6 He had a flight to catch and so he's delegated, given my
7 fiasco with my last effort to assist him. This document
8 -- and my understanding is it was a document actually
9 produced by Manitoba Hydro, it's related to MKO-7, he
10 suggested it be marked as MKO-8.

11 THE CHAIRPERSON: Mr. Gaudreau...?

12 Before we put it in the exhibit list,
13 we'll give Ms. Ramage and the panel a chance to have a
14 look at it, and we'll take it up when we come back.

15 Ms. Ramage...?

16 MS. PATTI RAMAGE: Yes. And while Mr.
17 Williams is ably assisting Mr. Anderson, Ms. Fernandes is
18 also distributing the response to Manitoba Hydro
19 Undertaking 23, and I suggest that be marked as Exhibit
20 45.

21 THE CHAIRPERSON: Thank you.

22

23 --- EXHIBIT NO. MH-45: Response to Undertaking 23

24

25 MR. ROBERT MAYER: I'm waiting for

1 somebody to -- if Mr. Anderson's catching a flight, I'm
2 not going to be able to find much out about what he
3 intended to do with this document, but -- but I'm sure
4 Manitoba Hydro can tell me who controls Island Falls.

5 THE CHAIRPERSON: Anyway, we'll adjourn
6 for now at we'll be back at 1:15. Thank you.

7

8 --- Upon recessing at 11:57 a.m.

9 --- Upon resuming at 1:20 p.m.

10

11 THE CHAIRPERSON: Okay, folks let's see
12 if we can get back at it.

13

14 (BRIEF PAUSE)

15

16 THE CHAIRPERSON: Okay, Ms. Ramage,
17 you've got at least another exhibit here, by the looks of
18 it. This is the one (1) probably...

19 MS. PATTI RAMAGE: This would be Mr.
20 Anderson's document.

21 THE CHAIRPERSON: Oh, all right.

22 MR. BOB PETERS: Or may have been
23 something that I left in terms of an Information Request
24 in the CEC Schedule that I had referred to a little bit--

25 THE CHAIRPERSON: Right.

1 MR. BOB PETERS: But I think the last
2 matter, Mr. Chairman, was Mr. Williams was filling in
3 admirably for the temporarily departed Mr. Anderson. And
4 before Mr. Anderson left, he did provide I believe
5 everybody with a copy of the cover page of -- of the
6 hydraulic assessment of the effects to Manitoba Hydro of
7 adopting a modified water regime.

8 Mr. Chairman, far be it from me to suggest
9 where Mr. Anderson was going with this, because I don't
10 want to do any disservice to -- to his questioning. But
11 my recollection of it is, and I'll maybe turn to Ms.
12 Ramage, and also Mr. Williams, was that this document was
13 the precursor and the preference -- preface to his third
14 undertaking question related to the water flows that
15 would impact in the Pukatawagan area.

16 MR. BYRON WILLIAMS: That's -- and I'm
17 not sure that I'm -- this -- this task has been delegated
18 to me, but I believe that that's my understanding as
19 well, that it relates to question number 3 re -- and
20 that's about as much insight as I can offer.

21 THE CHAIRPERSON: Does Mr. Anderson, to
22 your knowledge, intend to pursue this using this exhibit?

23 MR. BYRON WILLIAMS: I know he did
24 express a -- a preference given that it is a -- a Hydro
25 prepared document that it be marked as an exhibit and I -

1 - I wasn't sure what his plans were beyond that.

2 MS. PATTI RAMAGE: The -- the one (1)
3 concern we have is, and not to contradict Mr. Williams,
4 there seems to be an assumption that it's a Hydro
5 document and it may well be, but there's no one (1) on
6 the panel who can identify it, and there's no Hydro logo
7 on it. So --

8 THE CHAIRPERSON: Well, let's set it
9 aside for now.

10 MS. PATTI RAMAGE: -- so we would like to
11 confirm that, first.

12 THE CHAIRPERSON: Yes, we'll set it aside
13 for now.

14 MR. BOB PETERS: Then we'll just take it
15 as another MKO exhibit --

16 THE CHAIRPERSON: E.

17 MR. BOB PETERS: -- for -- E for
18 identification, and in the interim, Manitoba Hydro can
19 determine whether it's something they can identify. And
20 I think Mr. Anderson's intent was to use it to assist the
21 Corporation in answering his third written undertaking
22 that he's provided.

23 MR. BYRON WILLIAMS: And -- and if I
24 could, Mr. Chairman, I could certainly make inquiries
25 with Mr. Anderson if -- if he wished to pursue it further

1 in -- in cross-examination or if it was merely to provide
2 guidance to that requested undertaking.

3 THE CHAIRPERSON: Thank you, Mr.
4 Williams. Okay, Mr. Peters, back to you.

5

6 --- EXHIBIT MKO-E FOR IDENTIFICATION:

7 Copy of the cover page of the hydraulic
8 assessment of the effects to Manitoba
9 Hydro of adopting a modified water regime.

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Yes, Mr. Chairman, I
13 want to -- I want to fly through the remaining
14 undertakings that the Corporation has provided to us.

15 MR. ROBERT MAYER: Is this the same
16 staccato thing we heard before?

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: And I'll start with
20 Manitoba Hydro Exhibit 11, if I could. It's a Bipole 3
21 question, and Mr. Surminski -- the loss of Bipoles 1 and
22 2 happened, I believe, in September of 1996 when a wind
23 incident toppled nineteen (19) towers just north of the
24 Dorsey Converter Stations just north of Winnipeg.

25 MR. HAROLD SURMINSKI: Yes, it was 1996,

1 fall, yes.

2 MR. BOB PETERS: And has Manitoba Hydro
3 quantified the financial impact of -- of that event from
4 the perspective of the -- from two (2) sides. One (1) is
5 the cost to repair the -- the damage, but the other cost
6 would be the additional costs incurred to meet the load
7 and the load commitments?

8 MR. VINCE WARDEN: We have tabulate --
9 tabulated that number, Mr. Peters. I don't have that
10 readily available. I can certainly get that for you.

11 MR. BOB PETERS: Thank you, Mr. Warden.
12 Would it be broken down into those two (2) components;
13 one (1) is just to repair the towers that fell, and the
14 second was to -- to compensate for the loss of
15 opportunity to ship the power down the Bipoles?

16 MR. VINCE WARDEN: I believe so, yes.

17 MR. BOB PETERS: All right. If you could
18 provide that to the Board, I think they would appreciate
19 that.

20

21 --- UNDERTAKING NO. 56: Manitoba Hydro to provide
22 Board the cost to repair the
23 damage to Bipoles 1 and 2 in
24 1996 and the cost to
25 compensate for the loss of

1 opportunity to ship the power
2 down the Bipoles
3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: You would agree with me,
6 Mr. Surminski, that if that incident had hap -- happened
7 in a time of year when Manitoba Hydro had those lines
8 totally loaded, the financial consequences could have
9 been much worse -- whatever number Mr. Warden has -- has
10 to provide?

11 MR. HAROLD SURMINSKI: Yes, I would agree
12 with that.

13 MR. ROBERT MAYER: And if it had of
14 happened somewhere else where you couldn't put a -- where
15 you couldn't bring your equipment in as quickly as you
16 did.

17 MR. HAROLD SURMINSKI: Yes, a remote area
18 in the north, in a swamp area, for example, could be much
19 more difficult to -- to repair.
20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: Now, in Hydro Exhibit
23 11, Mr. Surminski, you -- you indicate that the loss of
24 both Bipoles 1 and 2 would be a low probability event,
25 but it has happened and it may happen again in the

1 future, correct?

2 MR. HAROLD SURMINSKI: Yes. Very low
3 probability, high consequence.

4 MR. BOB PETERS: And if we assume an
5 eastside Bipole 3 has been constructed, in my
6 hypothetical example, would the Board be correct in
7 understanding that that Bipole 3 could bring down 3000
8 megawatts from the north in the event Bipoles 1 and 2
9 were out?

10 MR. HAROLD SURMINSKI: Yes, I believe
11 that's correct.

12 MR. BOB PETERS: Now, if we assume that
13 the Bipole 3 is located on the west side of the -- of the
14 two (2) lakes, then Bipole 3 could only bring 2000
15 megawatts down from the north to deliver to the Manitoba
16 load, again, assuming Bipoles 1 and 2 were not in
17 service.

18 MR. HAROLD SURMINSKI: Yes.

19 MR. BOB PETERS: So that's a thousand
20 megawatt loss by going to the west side, correct?

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

22 MR. BOB PETERS: In -- in terms a lawyer
23 would understand, can you explain the engineering
24 complications that result in only -- in the 1000 megawatt
25 loss; where you would have 3000 megawatt capabilities on

1 the east side if you only had Bipole 3 and no Bipole 1
2 and 2, but if you go to the west side, you somehow lose a
3 thousand megawatts.

4 Where do you lose that, Mr. Surminski?

5

6 (BRIEF PAUSE)

7

8 MR. ROBERT MAYER: Maybe it could be
9 clarified -- are we talking line losses here, or are we
10 talking you cannot put the pressure on that kind of a
11 line over that distance?

12

13 CONTINUED BY MR. BOB PETERS

14 MR. BOB PETERS: Mr. Surminski, you'll --
15 you'll answer that question for the Vice Chair, but this
16 is more than line losses we're talking here.

17 This is an additional 1000 megawatts of
18 restricted capability by routing down the west side
19 rather than the east side, correct?

20 MR. HAROLD SURMINSKI: Yes. And it's got
21 to do with the electrical characteristics. I am not an
22 electrical engineer or a transmission planning engineer,
23 and I really have difficulty in -- in explaining the
24 parallelling. It's relating -- related to the
25 parallelling of -- of transmission lines.

1 MR. BOB PETERS: All right, I'm going to
2 let you off the hook here, because you've -- you've made
3 me look better by that answer, and I thank you for that.

4 Suffice it to say, for the purposes of
5 this Board there are eng -- electrical engineering
6 reasons why the Bipole 3 can only be loaded with 2,000
7 megawatts if sited on the west side when Bipoles 1 and 2
8 aren't in service, compared to the three thousand (3,000)
9 that could be loaded with if it was on the east side?

10 MR. HAROLD SURMINSKI: Yes, that is the
11 case.

12 MR. BOB PETERS: All right. Well let's -
13 - let's leave it at that level.

14 That has a financial and an economic
15 impact as well on the Corporation, does it not, sir?

16 MR. HAROLD SURMINSKI: During this rare
17 event of an outage.

18 MR. BOB PETERS: All right. And -- and
19 again keeping it in my simplistic terms and using my
20 purple crayon and doing my math, I took a thousand
21 megawatts and said, well, that's -- that's close enough
22 to 8,000 gigawatt hours a year that could probably come
23 down from the north in terms of the energy.

24 Would you be okay with that?

25 MR. HAROLD SURMINSKI: That's close to

1 100 percent flow on that line at a thousand megawatts,
2 yes.

3 MR. BOB PETERS: Okay so -- so I'm in the
4 ballpark with that?

5 MR. HAROLD SURMINSKI: Yes. For a whole
6 year average full output of a thousand megawatts.

7 MR. BOB PETERS: That would be pretty
8 disastrous if it was a full year incident that kept
9 Bipoles 1 and 2 down, correct?

10 MR. HAROLD SURMINSKI: Yes, very
11 disastrous.

12 MR. BOB PETERS: But if it was only a
13 four (4) month outage, then there would probably be about
14 2,700 gigawatts less available.

15 And if that was replaced -- that 2,700
16 gigawatt hours was replaced from imports at, say, six (6)
17 cents then it would cost the Corporation another \$160
18 million of financial impact from going down the west side
19 as opposed to the east side; assuming, again, Bipoles 1
20 and 2 are out.

21 MR. HAROLD SURMINSKI: Yes, that sounds
22 correct.

23 MR. BOB PETERS: And those numbers aren't
24 new to you, Mr. Surminski, because you would know that
25 when you did your planning studies and the Corporation

1 examined their options in terms of where to site it,
2 correct?

3 MR. HAROLD SURMINSKI: That would be one
4 of the considerations, yes.

5 MR. BOB PETERS: Would you agree with me
6 that to meet the domestic load, Mr. Surminski, and
7 remember you and I have a -- a common definition now for
8 "domestic load" being the load used by Manitobans, if
9 Bipoles 1 and 2 are out and Bipole 3 is on the east side,
10 you could meet your Manitoba domestic load with no need
11 for imports or thermal generation.

12 Wouldn't that be correct?

13

14 (BRIEF PAUSE)

15

16 MR. HAROLD SURMINSKI: I think for -- for
17 most situations it may be excepting the highest peak of
18 the year where we have over 4,000 megawatts of demand
19 from domestic, that may be the case.

20 I haven't -- haven't totaled up the
21 generation other than what flows on the Bipoles or using,
22 say, two thousand (2,000) of the Bipoles plus all our
23 other generation. It probably would be close.

24 MR. BOB PETERS: All right. And you may
25 have to forego a couple of hundred gigawatt hours of

1 export sales under -- under the scenario that I put to
2 you.

3

4 (BRIEF PAUSE)

5

6 MR. HAROLD SURMINSKI: I would think it
7 would be significant foregoing of export sales.

8 MR. BOB PETERS: All right. In the
9 winter months would you agree that the firm export load
10 is probably on average 200 gigawatt hours per month?

11

12 (BRIEF PAUSE)

13

14 MR. HAROLD SURMINSKI: Are you deriving
15 that from one of our pieces of information?

16 MR. BOB PETERS: I was actually using
17 your load forecast and also your power resource plan and
18 did some high level averaging in the winter months.

19 MR. HAROLD SURMINSKI: Yes. That sounds
20 low but winter months are a period of reduced generation
21 so I would go with that, yes.

22 MR. BOB PETERS: So you generally agree
23 with me that you could meet the Manitoba required load if
24 Bipoles 1 and 2 are out with an east side Bipole 3
25 without the need for much import or thermal generation,

1 but you might not be able to -- to cover all the export
2 commitments that you would have?

3 MR. HAROLD SURMINSKI: Yes.

4 MR. BOB PETERS: And let's say now for
5 the same thing if that domestic load in Manitoba was
6 going to be met, but the Bipole was routed on the west
7 side, again assuming no Bipoles 1 and 2 in service, there
8 would be less available energy, and Manitoba Hydro would
9 have to import electricity in the winter to meet the
10 domestic load.

11 Wouldn't that also be true?

12 MR. HAROLD SURMINSKI: It would follow.
13 If we were close with the 3,000 megawatts on the east
14 side, and now we only have 2,000 megawatts going to west
15 side, we're short of a thousand megawatts, so that would
16 eat away into the surplus, or our ability to meet load,
17 or exports also, yes.

18 MR. BOB PETERS: And on a high level, if
19 it was 400 gigawatt hours per month that -- that you
20 needed to -- to import, and you had to import that four
21 hundred (400) or, sorry, that 400 gigawatt hours at ten
22 (10) cents a kilowatt hour, you're looking at \$40 million
23 a month of additional cost, correct?

24 MR. HAROLD SURMINSKI: Yes, that's
25 correct.

1 MR. BOB PETERS: And not only that, but
2 you would also be foregoing virtually all of your export
3 sales unless you could -- could honour them through
4 import mechanisms.

5 MR. HAROLD SURMINSKI: Yes.

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: So if we were looking
10 for 400 gigawatt hours a month at ten (10) cents a
11 kilowatt hour, and that led us to the \$40 million, and we
12 had a four (4) month incident, that'd be a \$160 million
13 again of a negative financial consequence by having a
14 west routed Bipole 3, assuming no Bipoles 1 and 2 in
15 service.

16 MR. HAROLD SURMINSKI: Yes, that would
17 follow under those assumptions.

18 MR. BOB PETERS: And when you turn that
19 \$160 million over to Mr. Page, and Mr. Derksen, and Mr.
20 Warden, that \$160 million of loss of net income in that
21 particular year, it's going to have a multiplied effect
22 by the time it flows through the retained earnings of the
23 Corporation, and that could end up costing a half a
24 billion dollars, from the incident I've described.

25 MR. IAN PAGE: It would get that big if

1 you chose not to have any change to the rate increases
2 and then you had interest compounding, but something that
3 large you may want to change your -- your rates.

4 MR. VINCE WARDEN: And just to be clear,
5 Mr. Peters, we are talking a cat -- catastrophic event
6 which, you know, we have a number of risks the
7 Corporation faces in that category that could have as
8 great an impact.

9 MR. BOB PETERS: And that catastrophic
10 event though has occurred in the past, has it not?

11 MR. VINCE WARDEN: Not that cost -- cost
12 anywhere near the -- the type of dollars that we're
13 referring to. We had an event that did not result in any
14 loss of -- interruption of power to Manitobans that --
15 so, no, we're not talking in the same order of magnitude
16 in terms of catastrophe.

17 MR. BOB PETERS: So while the --

18 MR. ROBERT MAYER: However, I think -- I
19 think we also have to understand, that -- and -- and
20 here's where I tend to understand Hydro's concern where
21 the question is going.

22 We have, in fact, had that risk
23 outstanding since Bipole 1 was built. Because once --
24 those two (2) lines being so close together has always
25 been a problem. There was always that possibility of

1 catastrophic damage, be it natural or human made, and --
2 and we -- some of us think we're damn lucky we didn't
3 have it any worse than that little -- little mess just
4 north of Winnipeg here.

5 MR. VINCE WARDEN: Yes, we do recognize
6 it as -- as one (1) of the most significant risks of the
7 Corporation.

8

9 CONTINUED BY MR. BOB PETERS:

10 MR. BOB PETERS: And so while it -- while
11 the catastrophe has happened, it hasn't happened for a
12 duration or the time of year or in a location which would
13 have compounded the financial losses the Corporation has,
14 in fact, suffered?

15 MR. VINCE WARDEN: Yes, I -- I -- Mr.
16 Peters, we didn't categorize that as a catastrophe
17 because we were able to keep the lights on in Manitoba,
18 power continued to flow with no interruption, and we were
19 able to restore power with -- considering the
20 circumstance, minimal incremental cost.

21 MR. BOB PETERS: Here's a memory tester,
22 Mr. Warden, did you come to the Board looking for a rate
23 increase as a result of those towers going down?

24 MR. VINCE WARDEN: No.

25 MR. BOB PETERS: Has Manitoba Hydro

1 compiled a comprehensive business case analysis on the
2 location of the -- the Bipole 3?

3 MR. VINCE WARDEN: Given that the east
4 side routing is -- is not available to us, we -- we did
5 consider the other options and came to the conclusion
6 that the western routing was the most favourable to us.

7 MR. BOB PETERS: And not to split words,
8 Mr. Warden, but did you have any other choice other than
9 a -- a west side if the east side option wasn't
10 available? I mean, could you have gone further east than
11 what you were planning or would you have gone down the --
12 the Interlake or would --

13 MR. VINCE WARDEN: The Interlake was --
14 was still an option. We've heard some discussion about
15 an under-the-lake line. Gas combustion turbines were
16 another option though. We could have built gas
17 combustion turbines in the south rather than build
18 another transmission line.

19 MR. BOB PETERS: But how does that get
20 the Conawapa power to -- to lower Manitoba?

21 MR. VINCE WARDEN: Well, it doesn't, but
22 it --

23 MR. HAROLD SURMINSKI: But it keeps the
24 lights on for a while.

25 MR. BOB PETERS: So, eventually, the

1 Bipole would be needed. If -- if there's -- I mean, if
2 there's going to be northern generation, the magnitude of
3 a Conawapa or a Keeyask, a Bipole 3 is going to be
4 needed.

5 MR. VINCE WARDEN: Yes, unless we're
6 looking very, very far into the future, in which case an
7 AC solution might be -- might be viable. But we didn't
8 look that far.

9 MR. BOB PETERS: And in terms of a -- a
10 cost benefit analysis or a business case for Bipole 3
11 routings, other than the eastside, is there one (1) of
12 those available, Mr. Warden?

13 MR. VINCE WARDEN: We have documentation
14 that supports the east -- sorry -- the westside routing.
15 Yes.

16 MR. BOB PETERS: But when you say
17 "supports it," not supporting it as a better economic
18 model than the eastside?

19 MR. VINCE WARDEN: No. No, we've made it
20 clear that the eastside is the most economic model.

21 MR. BOB PETERS: All right, and you've
22 shown that in -- in not only Tab 22 of the book of
23 documents I provided you -- it seems so long ago -- and
24 also in docu -- in Tab 18.

25 In Tab 18 -- just a point I want to make

1 sure that the Board is clear on is that in the capital
2 expenditure forecast for 2004, Manitoba Hydro was
3 assuming the Bipole would go on an eastside in their
4 capital plans. And I'm looking here at document Tab 18
5 which is a PUB/Manitoba Hydro Second Round-47.

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: And that's the last year
8 that the Corporation considered the eastside as the
9 solution for the -- for Bipole 3. And then in the next
10 capital expenditure forecast in '05, it had been moved
11 over to the westside.

12 MR. VINCE WARDEN: That's correct.

13 MR. ROBERT MAYER: Mr. Warden, you agreed
14 with Mr. Peters when he suggested to you that you've
15 determined that the eastside is the most economic, but
16 the westside is most beneficial.

17 I'm wondering -- understanding, or I think
18 I understand the reasons for the move. Are we really
19 talking it being most economic or the cheapest to build?

20 Because, if I understand correctly, Hydro
21 has concerns and I know the Province has some concerns,
22 that if we go down the eastside, firstly, it's going to
23 take forever to build because of the regulatory problems.
24 And we saw some of that with the amount of time it took
25 us to clear -- took the Wuskwatim Project to even clear

1 the regulatory pieces.

2 But, further, that there's a significant
3 possibility or probability that if we went through the
4 Boreal Forest, Minnesota would get a little miffed at us
5 and do even more than they appear to be doing on the
6 radio this morning about demanding reports on what we've
7 done in Cross Lake lately.

8 So, are we really talking about the east
9 side being more economic, or are we just sort of
10 admitting that it is cheaper to build and there'd be less
11 line loss. But, overall, can you really say it's more
12 economic?

13 MR. VINCE WARDEN: Mr. Mayer, I think the
14 points you raised are -- are valid, and we -- we based
15 our forecast based on the best information we had
16 available. But you're -- you could very well be right.
17 We could have ran into all kinds of obstacles had we
18 proceeded with the eastside.

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: Just to conclude on that
22 topic, Mr. Warden, you've acknowledged to me that the
23 economics of Bipole 3 would favour an eastside routing
24 over a westside or even a central routing, correct?

25 MR. VINCE WARDEN: Yes, given the

1 qualifications -- the valid qualifications that were just
2 raised by the Vice-Chair, yes.

3 MR. BOB PETERS: And those -- those
4 qualifications really came down to probably because of
5 opposition from environmentalists, a westside routing
6 would be preferred by the Board of Manitoba Hydro.

7 MR. VINCE WARDEN: Environmentalists, I
8 think, are -- are one (1) dimension. There are other
9 issues that could have been raised with a -- with an
10 eastside routing, as Mr. Mayer has described.

11 MR. BOB PETERS: All right. And just to
12 -- to maybe be a bit finer on that point, the Manitoba
13 Hydro's Board is also of the view, as you understand it,
14 that its relationship with major US customers would be
15 negatively impacted by an eastside routing, but not with
16 a -- not with a westside routing.

17 MR. VINCE WARDEN: I'm a little
18 uncomfortable speaking on behalf of the Board. I -- I
19 just know that the direction provided by the Board was
20 that we should pursue an alternative other than the east
21 side routing.

22 MR. BOB PETERS: All right. And -- and
23 that's a fair qualification. I apologize if it was -- it
24 wasn't meant to put you in a situation where you're
25 answering for someone else, Mr. Warden.

1 But it -- it is Manitoba Hydro's
2 understanding that one (1) of the reasons for favouring
3 the west side routing would be that it would not have the
4 same negative impact on its relationship with major US
5 customers, as would a west side routing.

6 MR. VINCE WARDEN: I think that is a
7 consideration, yes.

8 MR. BOB PETERS: Would there be anything
9 in writing that you can provide to the Board that would -
10 - would be able to crystallize that concern about
11 negatively impacting customer relations?

12

13 (BRIEF PAUSE)

14

15 MR. VINCE WARDEN: I'm not aware of -- of
16 such a document, Mr. Peters.

17 MR. BOB PETERS: Mr. Warden, one (1) of
18 the reasons that Manitoba Hydro has put forth the
19 requirement for Bipole 3 in advance of -- in advance of,
20 say, Conawapa or Keeyask is that it will enhance the
21 reliability of Manitoba Hydro's transmission network.

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: And, again, not trying
24 to -- to be an engineer on this, but in terms of
25 enhancing reliability would you, on behalf of the

1 Corporation, acknowledge that reliability is enhanced on
2 the east side because the route would be shorter, and
3 it's not along a common path with the other Bipoles in
4 the north, and there's even greater capacity if Bipoles 1
5 and 2 are out?

6 MR. VINCE WARDEN: Yes, I agree with
7 that.

8 MR. BOB PETERS: So while reliability
9 would be enhanced on the east side, there still will be
10 additional reliability on the west side but not to the
11 same extent?

12 MR. VINCE WARDEN: Yes.

13 MR. BOB PETERS: And you will acknowledge
14 that by routing on the west side, you may expose the
15 Bipole 3 to different types of risks that may not have
16 been present on the east side?

17 MR. VINCE WARDEN: Yes, I agree with that
18 as well.

19 MR. BOB PETERS: Mr. Warden, I think
20 earlier on in the discussions there was assistance from
21 your witnesses and counsel about external studies on
22 Bipole 3 routing on the east side versus the west side,
23 and from the Information Request process, and also from
24 the undertakings and -- and research from -- from your
25 staff there is a CEC Consulting report on the Manitoba

1 Hydro website that discusses the east side and west side
2 routing?

3 Are you -- you're aware of that?

4 MR. VINCE WARDEN: Yeah, I'm aware that
5 report exists, Mr. Peters.

6 MR. BOB PETERS: I may have misspoke. I
7 think it's CMC Consulting. I may have misspoke.

8 But in any event, you're aware that that
9 report was prepared but -- but that report was not a
10 report that was considered at the time the decision was
11 being made as to whether to go on the east side or the
12 west side, but it was done after the fact?

13 MR. VINCE WARDEN: Yes.

14 MR. BOB PETERS: Are you aware --

15 MR. ROBERT MAYER: Is this the report
16 produced by Mr. Farlinger?

17 MR. BOB PETERS: I'd have to check, sir.
18 I -- I know it --

19 MR. VINCE WARDEN: That's the one that
20 I'm assuming is the same report, yes.

21 MR. ROBERT MAYER: Thank you. I didn't
22 know it was called -- and I didn't know the CM
23 something...

24

25 CONTINUED BY MR. BOB PETERS:

1 MR. BOB PETERS: Ms. Ramage is ahead of
2 us all, and she has a paper copy. But I -- I believe it
3 is -- is it -- I'll ask Mr. Warden to confirm the name of
4 the consultant engaged, the -- the corporate name and --
5 and if there's any -- any author in particular.

6 MR. VINCE WARDEN: It's prepared by CMC
7 Consultants Incorporated, dated September 2007.

8 MR. BOB PETERS: Could you read the name
9 of the report just on the record, just so that we can
10 make sure that we reference it on the website correctly?

11 MR. VINCE WARDEN: Yes, the name is CMC
12 Consulting -- Consultants Incorporated, in association
13 with -- and the inside cover references "and associated
14 with H. W. Westdal Associates and Marr Consulting
15 Services."

16 MR. BOB PETERS: And the name of the
17 report itself?

18 MR. VINCE WARDEN: The name of the report
19 is "Bipole 3 Transmission Routing Study," subtitle
20 "Review of Environmental Considerations and Potential
21 Role of Environmental Organizations."

22 MR. BOB PETERS: All right. Thank you
23 for that.

24 I want to turn to home heating costs, and
25 perhaps Mr. Kuczek can assist us.

1 MR. ROBERT MAYER: Before you leave --
2 before you leave the Bipole, was -- firstly, was that
3 authored by Farlinger? The report I read had his name on
4 it somewhere.

5 MR. VINCE WARDEN: Thank you, Mr. Mayer.
6 I was actually looking for his name on here. I don't see
7 his name. I believe he is the principal of C&C
8 Consultants, but I would have to confirm.

9 MR. ROBERT MAYER: I have -- I have --
10 before we leave Bipole completely, it is my understanding
11 that if Hydro commits to build both Conawapa and Keeyask,
12 we will not only need Bipole 3, but we will need a fourth
13 Bipole.

14 Am I correct, or is that information
15 correct?

16 MR. HAROLD SURMINSKI: We do require
17 further transmission capability after Bipole 3. We are
18 investigating it to be AC -- additional AC transmission,
19 instead of an entire Bipole.

20 MR. ROBERT MAYER: I've been led to
21 believe -- okay, are we assuming then that the technology
22 is advanced to the point that you can transfer --
23 transmit AC power over that distance without crushing
24 losses?

25 MR. HAROLD SURMINSKI: Yes. We're --

1 we're transmitting from Kelsey. We're transmitting from
2 relatively the same area. The losses are -- are greater,
3 but if we only need 400 megawatts, and I think four (4)
4 to 600 megawatts is what we need additional, AC is a more
5 economic alternative.

6 MR. ROBERT MAYER: If you had to go to a
7 Bipole 4, would you need anymore converter stations?

8 MR. HAROLD SURMINSKI: Yes, I believe we
9 would, but I'm not a transmission planning person, again.

10 MR. ROBERT MAYER: I should stop asking
11 these kind of questions. Thank you very much.

12

13 (BRIEF PAUSE)

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: I want to turn, Mr.
17 Chairman, to the only coloured exhibit so far; Manitoba
18 Hydro Exhibit 12, and it's the home heating chart that,
19 Mr. Kuczek, came off your Internet -- or your Web page.

20 Is that correct?

21 MR. LLOYD KUCZEK: Correct.

22 MR. BOB PETERS: And just so the Board
23 has a context for this, sir, the top half of the page
24 with the predominantly red bar charts or bar graphs, it's
25 the "Space Heating Only for Homes."

1 MR. LLOYD KUCZEK: Correct.

2 MR. BOB PETERS: And does that then
3 assume that the basic monthly -- well, it's a space
4 heating and for natural gas, it includes a basic monthly
5 charge, but it doesn't for the electric company for the
6 electric heat?

7 MR. LLOYD KUCZEK: That's what I observed
8 as well.

9 MR. BOB PETERS: All right. And I just
10 wanted to make sure that -- that the Board knows they're
11 comparing the same type of fruit here -- the homes that
12 are being depicted in this bar chart are using different
13 energies for space heat.

14 MR. LLOYD KUCZEK: Correct.

15 MR. BOB PETERS: And if you heat your
16 home with natural gas, you also still will have
17 electricity needs for appliances and lighting and the
18 effects, correct?

19 MR. LLOYD KUCZEK: That's correct.

20 MR. BOB PETERS: Just the same as you
21 would if you had an all-electric home, you'd need
22 additional electricity for the lights and the appliances.

23 MR. LLOYD KUCZEK: Correct.

24 MR. BOB PETERS: But you assume that the
25 appliances balance out, so you don't show them in either

1 of these scenarios.

2 MR. LLOYD KUCZEK: Yeah, the purpose of
3 this was just to provide customers with a comparison for
4 the purpose of space heating and water heating.

5 MR. BOB PETERS: And I'm going to try to
6 give -- excuse me -- I'm going to try to give credit
7 where credit is due, Mr. Kuczek. I think you taught the
8 Board that a -- a residential customer of yours using
9 natural gas would use somewhere in about 10,000 kilowatt
10 hours a year for their electrical lights and appliances.

11 MR. LLOYD KUCZEK: Yes.

12 MR. BOB PETERS: If that customer was
13 using electricity for space heat, they would not only
14 have that 10,000 kilowatt hours a year, but they'd have
15 another 20,000 kilowatts a year, approximately, for the
16 space heat component, bringing their load up to about
17 30,000 kilowatt hours a year.

18 MR. LLOYD KUCZEK: Yeah, I -- I believe
19 our number is based on an average customer and using
20 actual billing, the number is closer to twenty-five
21 thousand (25,000) today.

22 MR. BOB PETERS: All right. Now let's go
23 -- let's -- let's use your number then. Twenty-five
24 thousand (25,000) for the all electric home, we'll call
25 that, and the home that heats with the geothermal option

1 listed here would fall somewhere between the ten thousand
2 (10,000) and the twenty-five thousand (25,000), correct?

3 MR. LLOYD KUCZEK: That's correct.

4 MR. BOB PETERS: And -- but it would be -
5 - it would be close to 21,000/22,000 kilowatt hours a
6 year. Would that be your rough estimate?

7 MR. LLOYD KUCZEK: Well, the typical home
8 in this example -- in this example is 1,200 square feet.
9 I personally own a home that's quite a bit bigger, and I
10 use 2,100 gigawatt hours, and I have a geothermal system.

11 So I would suggest the number would be
12 smaller than that, considerably, for a 1,200 square foot
13 home. So if I had to pick a number out of the air,
14 eighteen hundred (1800), seventeen hundred (1700), maybe
15 in that range.

16 MR. BOB PETERS: All right. I picked
17 your three hundred and eighty-five dollars (\$385) annual
18 heating bill shown on Manitoba Hydro Exhibit 12, and you
19 show that under the geothermal column, Mr. Kuczek.

20 MR. LLOYD KUCZEK: Yes.

21 MR. BOB PETERS: I assumed that was 6,650
22 kilowatt hours a year. Is that okay so far?

23 MR. LLOYD KUCZEK: I'll take that without
24 calculating, yes.

25 MR. BOB PETERS: And on top of that,

1 somebody has to heat the water, so I put in another 3,950
2 or 4,000 kilowatt hours a year for heating the water?

3 MR. LLOYD KUCZEK: That's in the range.

4 MR. BOB PETERS: And then turning the
5 lights on, the computer, the television, the appliances,
6 that was another 10,000 kilowatt hours a year, bringing
7 me up to about twenty-one thousand six hundred (21,600).

8 MR. LLOYD KUCZEK: Yeah, I think the ten
9 thousand (10,000) would be a little on the high side for
10 lights and again, it depends on the appliances and then
11 uses within a home.

12 But the average natural gas heated home
13 right now uses ten thousand five hundred (10,500) and the
14 20 percent, 25 percent of those have hot water within
15 them as well.

16 So if you took something off for that
17 you're probably down in the 8,000 gigawatt hour range for
18 -- I agreed to you with the ten thousand (10,000), but
19 this is the ballpark. It -- it would be lower than that.

20 MR. BOB PETERS: All right. I just want
21 to keep us -- let's just stay in the ballpark figure.

22 MS. SUSAN PROVEN: Just -- just what was
23 that geothermal? I heard you say eighteen hundred
24 (1800)? But was that eighteen thousand (18,000)?

25 MR. LLOYD KUCZEK: If I said eighteen

1 hundred (1800), it should have been eighteen thousand
2 (18,000).

3 MS. SUSAN PROVEN: Right.

4

5 CONTINUED BY MR. BOB PETERS:

6 MR. BOB PETERS: What you're showing the
7 Board in Exhibit 12, Mr. Kuczek, is that using mid-
8 efficiency gas or electric furnace or baseboards are
9 roughly -- roughly comparable in heating costs on an
10 annual basis?

11 MR. LLOYD KUCZEK: Correct.

12 MR. BOB PETERS: When we turn to the
13 geothermal, I calculated that 6650 kilowatt hours a year
14 at 5.79 cents but then I wondered, Mr. Kuczek, what
15 percentage of the peak space heating load is being
16 covered by that 6650 kilowatt hours a year?

17 MR. LLOYD KUCZEK: Well, all the peak is
18 covered by that energy. That's the energy you use to
19 heat your home and so, yes, you are extracting heat from
20 the ground, but that's -- you use the furnace to heat
21 your home whether it's zero degrees or minus thirty (30).

22 So the difference being when you move
23 towards minus thirty (30), you tend to use more -- more
24 electricity because you're using an electric backup
25 heater at that point, and you're also running your fan

1 and your compressor more as the temperature gets colder.

2 MR. BOB PETERS: All right. Let's just
3 make sure I understand this so the record is clear for
4 the Board that even though you have a geothermal heat
5 pump, you also need an electric backup unit?

6 MR. LLOYD KUCZEK: That -- most systems
7 are installed that way, yes. You can actually put a heat
8 pump system in and not have an electric furnace in, and
9 it still could heat your home provided you put a big
10 enough system in.

11 MR. BOB PETERS: But you'd be putting in
12 too much of a system because you wouldn't need that peak
13 all the time, correct?

14 MR. LLOYD KUCZEK: That wouldn't be the
15 most efficient or economic way of designing the system.
16 Most of them are designed and have backup electric heat
17 associated with them. In fact, that's how they are
18 naturally sold.

19 MR. BOB PETERS: So how much of the peak
20 space heating load is covered by the geothermal, and how
21 much of the peak space heating load is covered by the
22 electric backup in your Exhibit 12?

23 MR. LLOYD KUCZEK: I'm not sure what you
24 mean by peak though.

25 MR. BOB PETERS: All right. I'm not sure

1 what I mean either so let me -- let me help you out this
2 way. If -- if you were to draw the -- the curve of the
3 energy needed to -- to heat the house over the course of
4 the calendar year, it's going to peak on your graph
5 probably in January/February.

6 Do you agree with that?

7 MR. LLOYD KUCZEK: That's exactly what
8 happens.

9 MR. BOB PETERS: And -- and then if I
10 have that graph with the peak and I'm not sure it's a
11 bell curve, but it's a peak on there, how much of that
12 peak is covered by just the geothermal aspects of the
13 installation, and how much of that peak is needed to be
14 met through the backup -- backup electric space heating?

15 MR. LLOYD KUCZEK: I do know what you're
16 asking, and I don't know the answer to that question off
17 the top of my head, but I guess we can try to calculate
18 that.

19 But I think, what you're asking is how
20 much is produced just by the backup electric heater as
21 opposed to the system itself without the heater. Because
22 you're always using electricity, and as the temperature
23 goes from say zero outside and slowly cools, you -- you
24 start to use more and more electricity because your
25 compressor's running more often and longer, and so then

1 you eventually get to the point where it can't supply the
2 heat to keep your temperature at what your setting in the
3 house, and then the backup kicks in.

4 So at that point, you've got your backup
5 running at times and your -- the electric heat.

6 So the -- to calculate what you're asking,
7 one would have to put -- would monitor -- have to put a -
8 - would have to monitor what's running through a whole
9 year within the system to --

10 MR. BOB PETERS: You've never -- you've
11 never calculated that?

12 MR. LLOYD KUCZEK: I think my staff have.

13 MR. BOB PETERS: Well, if -- if you can
14 tell us what percentage of time the backup is running or
15 what energy the backup is using, we can do the
16 subtraction and as as you can you, but --

17 MR. LLOYD KUCZEK: Yeah, it's not that
18 straightforward. I'll give you a -- explain my house.
19 So in my house, when it's gets about minus twenty-five
20 (25), the backup has to start kicking in, but it'll work
21 -- it'll have to work more often than as the temperature
22 gets colder. But during the day even though it's minus
23 twenty-five (25), the backup doesn't necessarily run,
24 because I'm getting solar heat.

25 So I get a fair amount of solar heat

1 coming in through my sunroom and my windows. So, as soon
2 as the sun goes down, then my backup works more often.
3 If it's a cloudy day, my backup has to run more often.
4 So there's -- there's a number of issues that change.

5 MR. BOB PETERS: So that solar energy is
6 passive that you're talking about.

7 MR. LLOYD KUCZEK: That's passive.

8 MR. BOB PETERS: All right. But let's --
9 let's exclude that from -- from my question because I
10 don't want to get into who has bigger windows and which
11 way they face.

12 But you understand the point is to -- to
13 find out how much of this geothermal example is being
14 heated through the geothermal heat pump and how much is
15 from the backup electricity, and we'll maybe ask you to
16 provide an undertaking to answer that.

17 MR. LLOYD KUCZEK: Yeah, I'll have to do
18 that. And that'll depend -- we can only provide you
19 with a generic answer because it's going to vary from
20 house to house: depends how much the loop length is,
21 depends how big the system is, depends, you know, it gets
22 into that issue of the solar issue, it gets into how well
23 the home is insulated. There's a -- there's a very --
24 there's many factors, but what I can provide you with
25 probably is a range, I guess, a ballpark range. But it's

1 going to be very ballpark, I caution you there.

2 MR. BOB PETERS: I'll take that.

3

4 --- UNDERTAKING NO. 57: Manitoba Hydro to determine
5 for Board, in a ballpark
6 range, how much of the
7 geothermal example is being
8 heated through the geothermal
9 heat pump and how much is
10 from the backup electricity.
11 Also, determine what is the
12 design assumption percentage
13 of the peak for the home that
14 it's heating

15

16 CONTINUED BY MR. BOB PETERS:

17 MR. BOB PETERS: But if you can also
18 include in your answer to the undertaking, Mr. Kuczek,
19 what is the design assumption percentage of -- of the
20 peak for the -- for the home that it's heated -- heating,
21 because the -- the geothermal unit's going to have a
22 design maximum to it as well, right?

23 MR. LLOYD KUCZEK: Yes, there's a --
24 usually they're designed, I think there's a code that you
25 have to design too and it's providing -- designing to

1 provide 70 percent, if I'm not mistaken, but I'll confirm
2 that.

3 MR. BOB PETERS: All right, thank you. I
4 didn't mean to get bogged down on that, but -- but you
5 can confirm for the Board that that three-hundred and
6 eighty-five dollars (\$385) is it's not only just the
7 geothermal pump working, but it's also the backup heat as
8 well. It's all included in that example.

9 MR. LLOYD KUCZEK: Confirmed.

10 MR. BOB PETERS: All right.

11 MS. SUSAN PROVEN: Can I inter --

12 MR. BOB PETERS: Yes.

13 MS. SUSAN PROVEN: -- can I interject at
14 this point too. I was in my reading that you provided me
15 with there was some suggestion of geothermal as an add-on
16 or in other words working in conjunction with another
17 fuel source. How common would that be?

18 MR. LLOYD KUCZEK: Very rare. Most
19 systems use electric backup because it's the most
20 economic way to design the systems.

21 An electric heater is just an electric
22 heater so you could imagine just installing a sleeve of
23 these coils that go into a furnace. If you have to use
24 natural gas backup or anything like that, then you get
25 into having a -- again, you need a heater though -- the

1 entire cost of a natural gas furnace pretty well, so.

2 MS. SUSAN PROVEN: I wasn't -- I wasn't
3 thinking of natural gas, because of course there's no
4 natural gas where I live, and there's no natural gas
5 where Mr. Mayer lives.

6 I'm thinking of wood -- wood as a source
7 and in conjunction with geothermal, because you're
8 suggesting that the geothermal can only do so much. In
9 other words, at thirty (30) below it's not going to be
10 able to do the full -- you know, it can't draw that much
11 heat out of the soil. So I'm just --

12 MR. LLOYD KUCZEK: Actually it can.

13 MS. SUSAN PROVEN: Oh, it can?

14 MR. LLOYD KUCZEK: Yes. It's -- it
15 really depends on how you design your system and how well
16 it's built. What -- what it amounts to is they generally
17 don't design and install a geothermal system with that
18 kind of capacity because it's not economic.

19 It's cheaper to -- to put in shorter loop
20 lengths, which are the loops in the ground. And so you
21 put shorter loop lengths, reduce your cost -- because you
22 don't have to put the extra loops in and drill the holes
23 there -- and just install that backup heat.

24 But you can -- you could put a bigger
25 system in your house. They go by tons, actually. And

1 instead of a 4 tonne in my house you might put a 6 tonne
2 unit in. And instead of 800 feet of bore hole, like, you
3 might put in twelve (12) or sixteen (1600) hundred. And
4 that theoretically could heat your house -- not
5 theoretically. It could heat your house.

6 MR. ROBERT MAYER: Would that be
7 restricted by the size of the property you have?
8 Understanding that Ms. Proven, living in the country,
9 probably has a lot more space to dig the -- put this
10 stuff in the ground.

11 I have a very limited city lot. I take it
12 my lot would restrict how much I -- how big I could build
13 a geothermal system. And of course, I have to assume, I
14 take it, that I don't have a lot of bedrock immediately
15 underneath it.

16 MR. LLOYD KUCZEK: Yeah, even if you have
17 bedrock, you still can -- you're only restricted by
18 economics. You can drill deeper. And that's the design
19 we were looking at, at Waverley West. We have that
20 problem. Lots are too -- too small, too close together,
21 not enough heat there. So the solution was to design
22 loops that instead of were shallow, like going down 40/60
23 feet, they would go down 400 feet.

24 So what you do is you crea -- you've got a
25 -- you have a larger volume of mass that you're drawing

1 the heat out of.

2 MS. SUSAN PROVEN: But the -- but the --
3 digging vertically is more expensive than going
4 laterally.

5 MR. LLOYD KUCZEK: Considerably, yes.
6 You're going --

7 MS. SUSAN PROVEN: Yes. So that -- I
8 mean that makes a huge difference. But no, I was
9 interested in the possibility or, you know, the
10 exploration of the dual fuel type.

11 And I -- yeah, I just wondered how
12 prevalent -- you say there's not much of that.

13 MR. LLOYD KUCZEK: No, there isn't. It
14 doesn't mean that you couldn't put a wood stove in your
15 house. My dad does that with natural gas in Winnipeg
16 here. So, you know, a wood stove just basically
17 supplements it to the degree that you keep adding wood to
18 the stove.

19 MS. SUSAN PROVEN: Thank you.

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: And, Mr. Kuczek, in your
23 answer to Board Member Proven, you were -- you were
24 indicating that you could go for the Cadillac version and
25 oversupply your home if -- if payback period and

1 economics weren't a concern. That's what I heard you
2 saying.

3 MR. LLOYD KUCZEK: The consumer would
4 have that choice, I believe. There -- there are some
5 code restrictions in terms -- or CSA standards that
6 installers have to abide by. So -- but if you install
7 the system and wanted to do that, I guess you could.

8 MR. BOB PETERS: But from an economic
9 payback perse -- perspective, it doesn't make sense to
10 put in 100 percent peak coverage, because the payback
11 period would be too long and you'd be better with some
12 alternative fuel source?

13 MR. LLOYD KUCZEK: Correct.

14 MR. BOB PETERS: All right. In the --
15 while we're on fuel sources and geothermal, in an answer
16 you gave -- and I don't think I included that in the book
17 of documents.

18 But it's -- it was a question,
19 PUB/Manitoba Hydro First Round 82(c), where you were
20 asked to talk about the impacts on load growth of
21 different factors. And one of those factors was
22 geothermal heating.

23 Do you recall in general that, Mr. Kuczek?

24

25

(BRIEF PAUSE)

1 MR. LLOYD KUCZEK: Yes.

2 MR. BOB PETERS: If -- if you did recall
3 it, or do, or do want to read it, on page 2 of that
4 answer:

5 "The load forecast you have before the
6 Board is assuming that electricity used
7 to serve geothermal customers is going
8 to grow by 53 gigawatt hours over the
9 forecast period."

10 Correct?

11 MR. LLOYD KUCZEK: Correct.

12 MR. BOB PETERS: And that forecast period
13 is going out -- I'm trying to think.

14 Was it ten (10) years, or was it longer?

15 MR. LLOYD KUCZEK: It's a twenty (20)
16 year forecast.

17 MR. BOB PETERS: All right. And even at
18 the end of the twenty (20) years, the saturation is
19 expected to -- to only increase 0.7 percent?

20 MR. LLOYD KUCZEK: Yes and this is --
21 just so we're all clear, this is the load growth due to
22 geothermal -- geothermal installations that would occur
23 naturally and not the result of our geothermal program.

24 MR. BOB PETERS: Well then you're ahead
25 of me on that, because your load growth forecast, then,

1 just assumes what customers will do independent of any
2 incentive or program for Manitoba Hydro?

3 DR. WILLIAM LUCAS: That's correct.

4 MR. BOB PETERS: And most of those
5 customers who are putting in geothermal are doing it now
6 without incentive or assistance from Manitoba Hydro?

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

8 MR. BOB PETERS: There is a bit of a
9 lower interest rate on some of your loans for residential
10 customers. I'm not sure it's commercial, but...

11 MR. LLOYD KUCZEK: Residential.

12 MR. BOB PETERS: All right. So the load
13 growth forecast before the Board doesn't contain an
14 assumed growth for geothermal related to Waverley West
15 construction?

16 MR. LLOYD KUCZEK: That's correct.

17 MR. BOB PETERS: You don't have it in
18 there?

19 MR. LLOYD KUCZEK: It's not in there.

20 MR. BOB PETERS: Why is it not in there?

21 MR. LLOYD KUCZEK: Well, that was our --
22 our best guess at the point -- at that point, given the
23 information we had. I believe at the time we created the
24 '07 load forecast we had -- well, there was a number of
25 issues.

1 But we were getting -- we were doing the
2 cost estimates at that point, sending out some requests
3 for information and -- from installers.

4 We also had some concerns from industry
5 about doing this. And so we had moved from guidance of
6 installing 100 percent geothermal to -- to a much smaller
7 number, and only for the first phase to start with.

8 So the planned installations was
9 considerably smaller at that point and was subject to
10 risk, as far as even proceeding with that at the time.
11 So we decided to put zero installations in as an
12 assumption for a load forecast when it was prepared at
13 that time.

14 MR. BOB PETERS: You knew when you did
15 your load forecast that the economics weren't working for
16 this, for the idea of going heavy duty into geothermal in
17 the Waverley West area?

18 MR. LLOYD KUCZEK: We knew the economics
19 were not looking good, yes.

20 MR. BOB PETERS: In the -- in -- am I
21 correct that in -- in Waverley West in the Phase 1, that
22 you called it, that's land owned by Manitoba Housing?

23 MR. LLOYD KUCZEK: Yes.

24 MR. BOB PETERS: And on that land you're
25 installing natural gas services to each home as well as

1 electricity services to each home?

2 MR. LLOYD KUCZEK: Correct.

3 MR. BOB PETERS: There's probably four
4 (4) party trenching going on there, but that's maybe
5 another story for -- for another movie.

6 But -- but you're putting in all the
7 services to every home, correct?

8 MR. LLOYD KUCZEK: That's what we're
9 doing today, yes.

10 MR. BOB PETERS: Whether a home's going
11 to use the natural gas or not, it's still going to get
12 the service to its -- to its property line?

13 MR. LLOYD KUCZEK: That's correct.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: In your discussions with
18 Board Member Proven you were -- you were indicating that
19 cheaper to put the geothermal pipes shallow in the ground
20 than going deep. Let's just put that in perspective.

21 Shallow is how deep, and deep is how deep?

22 MR. LLOYD KUCZEK: So shallow would be
23 until you hit bedrock, because at that -- well, that's --
24 that's the most economic. So instead of going deeper,
25 what you do is just put more holes in, provided your lot

1 is big enough, so --

2 MR. BOB PETERS: And how -- how deep is
3 that in Manitoba or Waverley West?

4 MR. LLOYD KUCZEK: Yeah, it really
5 depends. In the Brandon area you can go down 200 feet.
6 In Waverley West you're talking 45 to 60 feet. And it
7 varies from street to street, but it's in that range.

8 And then to answer your question about how
9 deep, the depth is determined by how much -- what size of
10 cube you need under your house to heat your home in a
11 sustainable fashion.

12 MS. SUSAN PROVEN: That was not my
13 understanding of shallow. My understanding from
14 neighbours that have done this is that it was a lateral.
15 It was totally lateral. So that's what I was thinking of
16 as shallow, not -- not a vertical bore but, you know...

17 MR. LLOYD KUCZEK: Okay. There's two (2)
18 -- there's two (2) design -- two (2) shallow designs.
19 One is where you drill vertically and connect those
20 loops. The other is where you drill horizontally, as
21 you're suggesting.

22 And you don't actually -- there's two (2)
23 ways of doing that, too, one is to actually put in loops,
24 and you don't -- you can just trench it and basically put
25 in these loops. And those are -- might be down 10 feet

1 only. So you could use the same concept with lakes.

2 The typical design, and your -- that is
3 a typical design, too. The other typical design is where
4 you just drill down 40, 50 feet, and you have a number of
5 holes that way.

6 MS. SUSAN PROVEN: But the -- but the
7 first one, the one that we say is laid horizontally, is
8 substantially cheaper because it's -- isn't -- isn't it?
9 I mean, I don't want to give evidence, but it would make
10 sense to me that you're clearing off a huge area and
11 putting in the loops, and they're not that deep.

12 MR. LLOYD KUCZEK: I want to be careful
13 there, because each situation could be different, and
14 then you have to look at the efficiencies of the system.
15 With a horizontal design as you're suggesting, you need
16 much longer loops, so you have more loop cost associated
17 with that.

18 MS. SUSAN PROVEN: Okay.

19 MR. LLOYD KUCZEK: You also are --
20 usually you're not capturing the mass of the earth -- as
21 much of the mass of the earth through a design like that,
22 so not as efficient that way.

23 MS. SUSAN PROVEN: Okay. Thanks.

24

25

(BRIEF PAUSE)

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Instead of being a
3 utility-driven program for geothermal, Manitoba Hydro's
4 now going to leave that to be customer driven.

5 Would that be fair?

6 MR. LLOYD KUCZEK: Well, that -- the
7 Waverley West was custom -- customer driven. It was
8 driven by the developer in that case.

9 MR. BOB PETERS: Has Manitoba Hydro
10 scaled back its plans then on geothermal as a result of
11 not being able to -- to do more on Waverley West?

12 MR. LLOYD KUCZEK: Not at all.

13 MR. BOB PETERS: And in terms of Waverley
14 West as an example, Mr. Warden, this might be a policy
15 question, but is it not economically preferred by
16 Manitoba Hydro to have gas be the fuel of choice for
17 space heat rather than electricity?

18 MR. LLOYD KUCZEK: If -- if you install
19 geothermal in a -- as opposed to putting in electric
20 heat, there are economic advantages to Manitoba Hydro,
21 provided the rates in the export market are higher than
22 the domestic market.

23 So if you can get more in the export
24 market than domestic residential rates, there would be an
25 economic advantage to you -- well, I -- I should be

1 careful there. It's more than just the export rates,
2 it's the avoided costs, which includes those other
3 components as well.

4 And we don't have the same economic
5 advantage in natural gas serviced areas because, as you
6 know, natural gas is just a pass-through for the company.

7 MR. BOB PETERS: I was politely trying to
8 suggest that it's financially more attractive for
9 Manitoba Hydro, in its overall financial picture, to have
10 consumers use more natural gas as opposed to electricity
11 or space heat, because then you'll have access to the
12 electricity they're not using for your export.

13 MR. LLOYD KUCZEK: You -- you're correct,
14 but it's the other components as well. It's the marginal
15 value that -- which brings economic value to the company.

16 MR. BOB PETERS: All right. Well, we'll
17 talk about that with maybe the next panel as well. While
18 we're talking about the load forecasts and the growth on
19 this, and I'm looking at that PUB/Manitoba Hydro First
20 Round 82 Question C, you also indicate that computer
21 Internet usage is up, but over twenty (20) years there's
22 going to be an extra approximate 30 gigawatt hours of --
23 of load directed towards computers, correct?

24 MR. LLOYD KUCZEK: Correct.

25 MR. BOB PETERS: And what about the big

1 screen TVs that are being promoted, and I'm not even sure
2 you can buy the old cathode -- cathode-rayed TVs anymore,
3 but they're all plasma or LCD, are they not?

4 MR. LLOYD KUCZEK: Yes, and we're seeing
5 more usage due to the -- those TVs as well.

6 MR. BOB PETERS: But -- but does the TV
7 itself use more, or they're just being used more by the
8 consumers?

9 MR. LLOYD KUCZEK: I believe the TV uses
10 more as well, relative to some of the older TVs, but
11 there are more TVs, as well, being installed.

12 MR. BOB PETERS: You don't have a
13 forecast as to where that's taking the load, or is that
14 such an insignificant number that it doesn't show up on
15 the -- the load forecast growth?

16 MR. LLOYD KUCZEK: I'm fairly sure it's
17 modelled within our system, but I don't know the details
18 of that.

19 MR. BOB PETERS: Am I correct -- I hate
20 to do math in public, as I've said before, but if -- if
21 we talk about one (1) gigawatt hour, an extra gigawatt
22 hour per year, what we're really talking about is a
23 hundred (100) homes using 10,000 kilowatt hours of
24 electricity?

25 MR. LLOYD KUCZEK: I'll assume your math

1 is right.

2 MR. BOB PETERS: Oh, that's your mistake,
3 then. My -- my point, Mr. Kuczek, is that for every
4 gigawatt hour in your load forecast that you assume is
5 going to be increasing for, let's say, computer use, and
6 roughly you're at 1 gigawatt hour per year for the next
7 twenty/thirty (20/30) years, for computer use. That's
8 the equivalent of a hundred (100) homes going -- a
9 hundred (100) new homes being built that use 10,000
10 kilowatt hours and heat with natural gas.

11

12 (BRIEF PAUSE)

13

14 MR. LLOYD KUCZEK: Well, if you multiply
15 a hundred (100) times 10,000 kilowatt hours, I -- I'm
16 getting 1 gigawatt hour, I think, so --

17 MR. BOB PETERS: Yeah, and that's what I
18 tried to do on the fly here, too, Mr. Kuczek. But I'm
19 just suggesting that -- that that 1 gigawatt hour then is
20 equivalent to one hundred (100) gas-heated houses that
21 use 10,000 kilowatt hours of electricity for appliances
22 only.

23 Or, I suppose, you could say forty (40)
24 all-electric homes, if you want to give an example as to
25 what that 1 gigawatt hour of growth means per year.

1 MR. LLOYD KUCZEK: I think your
2 rationales are reasonable.

3 MR. BOB PETERS: All right. That -- that
4 helps put it into perspective in terms of where this --
5 where this growth is taking us.

6 You would agree with me -- and Mr.
7 Surminski might have to help us here -- that in terms of
8 the company's load forecast, when you were last before
9 the Public Utilities Board on your -- on your load growth
10 forecast, you were telling the Board that looking forward
11 from '04/'05 -- looking forward three (3) years -- you
12 saw about 600 gigawatt hours of increased load coming.

13 And then we come to this General Rate
14 Application and that 600 gigawatts is now increased to
15 about 1,900 gigawatt hours per year.

16 Mr. Surminski, that's approximately
17 correct?

18 MR. HAROLD SURMINSKI: That sounds
19 correct, yes.

20 MR. BOB PETERS: And of that additional -
21 - now, that's part of this load growth forecast that
22 you've told the Board there's going to be more domestic
23 consumption needed in Manitoba -- and of that domestic
24 consumption in Manitoba, am I correct that, certainly,
25 half of it, Mr. Surminski, is being assumed to come from

1 the -- from the energy-intensive industry sector?

2 MR. LLOYD KUCZEK: I believe we had an IR
3 that responded to that. And I'm trying to recall the
4 number, but I thought 57 percent of the load growth was
5 coming from that area.

6 MR. BOB PETERS: So you're agreeing that
7 it's over 50 per -- just over 50 percent of -- of that
8 growth is being attributed to -- to the energy-intensive
9 industry sector.

10 MR. LLOYD KUCZEK: Yes, it's in that
11 range, let's say.

12 MR. BOB PETERS: And -- and that energy-
13 intensive industry sector -- if we can -- if we can pare
14 that down and look at it a little closer, that additional
15 growth is coming from primarily two (2) types of
16 customers: One (1) is the electrochemical industry, and
17 the second is the pipeline transportation industry.

18 MR. LLOYD KUCZEK: Correct.

19 MR. BOB PETERS: And those are the two
20 (2) industries, if I may, to whom, or at which Manitoba
21 Hydro is proposing a new above-baseline rate to -- to
22 apply to some of their energy consumption.

23 Are you aware of that?

24 MR. LLOYD KUCZEK: I'm aware of it, but
25 I'm not the expert --

1 MR. BOB PETERS: Oh, I know. And Mr.
2 Thomas is going to rip the microphone from me or Mr.
3 Wiens if I -- if I go any further, so I'm going to leave
4 it at that.

5 MR. LLOYD KUCZEK: But before we go a
6 little further, I'd like to add some clarification.

7 When we were talking about that geothermal
8 component of the load growth, all that was was
9 identifying, based on our database, the fact that there
10 was more geothermal systems going in, and that was the
11 electrical consumption due to those geothermal homes.

12 It didn't mean we were experiencing an
13 increase in electricity consumption because people were
14 putting in geothermal homes. If that's clear.

15 MR. BOB PETERS: I've got your point. I
16 think it's -- I think it's made for the record then.
17 Thank you for that.

18 I want to turn to -- I want to turn to
19 Exhibit Manitoba Hydro 14. Mr. Derksen, Mr. Page, I
20 think you calculated this for the Chairman where it dealt
21 with removing from the debt/ratio the \$250 million
22 debenture that was used to finance the acquisition of
23 Centra Gas, and then you refiled the financial targets.

24 Can you just briefly explain to the Board
25 what you've done on this one.

1 (BRIEF PAUSE)

2

3 MR. IAN PAGE: For the purpose of this we
4 -- we simply remove the \$250 million of debt from the --
5 from the balance sheet, and then from the operating
6 statement there was the interest savings on that 250
7 million not being there. Other than that, it's the same
8 as what's in the IFF.

9 MR. BOB PETERS: And the 12 million
10 annual contribution from the gas side of the operation to
11 the electric side was also removed?

12

13 (BRIEF PAUSE)

14

15 MR. IAN PAGE: Yes, I believe that was
16 netted against the interest savings.

17 MR. BOB PETERS: And -- and in looking at
18 the debt/equity ratio, or the debt ratio, all that really
19 did was -- was change the debt ratio by, I guess, a
20 hundred (100) basis points.

21 MR. IAN PAGE: Yes.

22 MR. BOB PETERS: Mr. Warden, in questions
23 from -- I'm not sure if it was Mr. Anderson or Mr.
24 Williams, but -- but you were talking about the -- the
25 Corporation's projected net income from the 2008 fiscal

1 year.

2 And you put a number on the record earlier
3 today, and I wondered have -- have you changed that
4 number in any way from what you've previously testified
5 to the Board in terms of the expectation?

6 MR. VINCE WARDEN: No, Mr. Peters, not
7 significantly. We -- when I put that number on the
8 record initially, that was based on actual results to the
9 end of January. We now have actual results to the end of
10 February and the favourable trend that we've experienced
11 to the end of January is continuing. So the \$300 million
12 number that I referenced is still obtainable.

13 MR. BOB PETERS: It was 300 million plus,
14 was it not?

15 MR. VINCE WARDEN: Yes, it'll be slightly
16 over 300 million.

17 MR. BOB PETERS: And when you answered an
18 oral undertaking this morning, or answered orally through
19 Ms. Ramage, as to when the Corporation's financial
20 statements, not only from Manitoba Hydro Consolidated but
21 also the, I believe, the Wuskwatim Power Limited
22 Partnership ones would be available, your indication was
23 approximately the second week in June, if I remember.

24 MR. VINCE WARDEN: Yes.

25 MR. BOB PETERS: Is that -- that's when

1 they would be publicly available? Is that what I'm
2 understanding you to say -- to be filed on the public
3 record?

4 MR. VINCE WARDEN: No, I'm thinking that
5 would be the date at which the Minister authorizes
6 Manitoba Hydro to release them to -- to this Board in
7 confidence.

8

9 (BRIEF PAUSE)

10

11 MR. VINCE WARDEN: Mr. Peters, maybe
12 while you're -- bit of a pause, if I could just respond
13 to a question you had earlier this afternoon with respect
14 to the HVDC system loss during that event in 1996.

15 Mr. Derksen was able to find that
16 information already, and the loss -- the operating loss
17 was \$7.5 million, and this was attributable to the lost
18 extra-provincial sales, additional power purchased, and
19 thermal generation. So 7.5 million on the operating side
20 and additional \$3.6 million in capital expenditures to
21 restore the transmission line at that time.

22 MR. BOB PETERS: And was Mr. Derksen able
23 to work -- work his magic and break that 7.5 million down
24 into how was much was extra-provincial sales lost and how
25 much was import costs?

1 MR. WILLY DERKSEN: No, sir, I was not,
2 that was the level of detail that we had available.

3 MR. BOB PETERS: That's sufficient.
4 Thank you very much for that effort, appreciated.

5 Mr. Surminski, I may have spoke
6 inappropriately earlier to suggest that it was Mr. Kuczek
7 who filed the only colour exhibit. Exhibit 17 is in fact
8 in colour, it's your System Energy and Reservoir -- or
9 System Energy and Reservoir Storage graph that you
10 updated for the Board.

11 And would the Board be correct when it
12 looks at this document, sir, to assume that you're in
13 about the 90th percentile of your capacities as we sit
14 here today?

15 MR. HAROLD SURMINSKI: Yes, that's
16 correct. That's also looking at reservoirs outside the
17 Manitoba Hydro -- outside the province. I think looking
18 at reservoirs within the province it's even higher than
19 that.

20 MR. BOB PETERS: Okay, just so I'm clear,
21 90 percentile overall for all your -- all your drainage
22 basins, but those that you have control over in the
23 province are higher than that.

24 MR. HAROLD SURMINSKI: Yes. In fact we -
25 - we have -- and we confused it -- we have another

1 graphic that includes the reservoirs only within the
2 province and -- and it showed that we're pretty well at
3 the top of the line.

4 MR. BOB PETERS: And even though you're
5 at the top of the line, what are you able to conclude in
6 terms of your forecasts for generation, hydraulic
7 generation, for -- for next year?

8

9 (BRIEF PAUSE)

10

11 MR. HAROLD SURMINSKI: Nothing has
12 changed, I guess, from -- from yesterday when we talked
13 about the whole situation. It's very much dependent on -
14 - on further spring rains and -- and summer
15 precipitation. So snow pack is -- is only one (1) factor
16 and, you know, going beyond one (1) or two (2) months
17 after snow pack is -- is very much dependent on the --
18 the precipitation in the form of rain.

19

20 (BRIEF PAUSE)

21

22 MR. BOB PETERS: From an operational
23 perspective -- and I don't want to test you too far here,
24 Mr. Surminski -- but does this system energy and
25 reservoir storage picture lead Manitoba Hydro to conclude

1 that it's going to depress the export market for its
2 product, because it's got so much available? The supply
3 is too -- is so great that the price is going to go down.

4 MR. HAROLD SURMINSKI: We no longer
5 assume that we actually depress the market. What happens
6 is we are forced to sell at less opportune times, like
7 off-peak hours and get lower prices for that.

8 MR. BOB PETERS: And the reason you're
9 selling at off-peak times is because the tie-line
10 capabilities are maxed-out during the peak times?

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

12 MR. BOB PETERS: So even though you have
13 all this extra energy in -- in storage and it's worth a
14 lot during the peak hours, you just can't get it to
15 market in those times?

16 MR. HAROLD SURMINSKI: Yes. It's not
17 only the -- the interconnection -- interconnection
18 capability at the peak times, it's also the generation
19 capability. I have spoken to our -- people more familiar
20 with this and -- and they say it's -- it's the generation
21 capability that's also a big driver, currently, of -- of
22 being able to export it on peak hours.

23 And it's not -- as earlier we had
24 discussed it seemed to be -- I think the -- the
25 conclusion was that it was transmission capability.

1 Perhaps it leaves the wrong impression that it's so major
2 -- the transmission is so major a factor. It is also the
3 generation capability in on-peak hours.

4 MR. BOB PETERS: All right. Thank you
5 for that. When I think back to our discussions about the
6 Wuskwatim Generating Project, would you agree with me
7 then though, that having the additional generation from
8 Wuskwatim you're going to confront those same
9 transmission restrictions that you have?

10 MR. HAROLD SURMINSKI: Yes. And -- but,
11 yes, what the Wuskwatim does is -- is increase your --
12 your on-peak generation capability -- what I've just
13 said. If we are limited in on-peak generation capability
14 and maybe not necessarily the trans -- the
15 interconnection, what Wuskwatim will able -- will be able
16 to do is increase that on-peak generation capability and
17 get on-peak prices in the export market. The system will
18 be able to get that.

19 MR. ROBERT MAYER: Think how much more of
20 that we'd have if we had Conawapa on-stream.

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: Well, it leads -- it
24 leads us back into a circle, doesn't it, Mr. Surminski,
25 to -- to say that more interconnections or tie-lines with

1 export customers would be valuable to Manitoba Hydro
2 because it could send more electricity out of the
3 province during peak hours?

4 MR. HAROLD SURMINSKI: Yes, I'd indicated
5 that earlier and that's --

6 MR. BOB PETERS: And that brings us back
7 to the counterparties not necessarily wanting to go that
8 route at this point in time?

9 MR. HAROLD SURMINSKI: I would not say
10 that is a conclusion. The counterparties would like to
11 obtain energy from Manitoba Hydro, so I don't think the -
12 - it's the conclusion falls that they would not want
13 transmission lines because they would have to pay high
14 prices.

15 MR. BOB PETERS: Well, one (1) of the
16 consequences of them having greater interconnection
17 capabilities with Manitoba is that Manitoba could move
18 the electricity more during peak hours, which attracts
19 the higher cost?

20 MR. HAROLD SURMINSKI: Yes, but we are
21 moving it into -- into a market and -- and the
22 alternatives in the market determine the price, so
23 it's...

24 MR. BOB PETERS: All right. I think
25 we're back to that point. I agree, and I understand, and

1 thank you for that.

2 I wanted to move --

3 MR. ROBERT MAYER: Mr. Surminski, just
4 before we go away from that, there's the suggestion by
5 Board counsel that -- that you disagreed with was that
6 the -- the other side doesn't want to build these lines.

7 Once again, it's something I've heard, and
8 I ask you if you can confirm or deny it, is my
9 understanding there's been some resistance to
10 transmission lines, especially going into northern
11 Minnesota, from farmers who would much prefer that the
12 power be purchased from the wind generators that would
13 tend to be situate on their farms.

14 And that we're also getting some
15 resistance in -- in the northern States from the
16 environmentalists, because in some parts of Minnesota, at
17 least, they have some of this nice forest and some really
18 nice rivers.

19

20 (BRIEF PAUSE)

21

22 MR. HAROLD SURMINSKI: No, I really
23 cannot confirm or deny that. But siting of transmission,
24 as I had indicated earlier, is definitely an issue.
25 There was a Wisconsin transmission line, it took many

1 years and siting -- getting rights-of-way. There was a -
2 - most of the landowners co-operated but then there would
3 be 1 or 2 percent and they held the whole process up for
4 a long time. So siting of a line is -- if very
5 difficult.

6 MR. ROBERT MAYER: And who -- who does
7 that work? Is it the -- is it the -- the counterparty
8 that has to find the route, or is it a commission or is it
9 governed by something like our Clean Environment
10 Commission?

11 MR. LLOYD KUCZEK: It's usually a joint
12 committee between our transmission people and the
13 counterparties transmission people.

14 And then they would be respon -- like you
15 jointly have to design the system obviously -- and then
16 they would be responsible for doing the work south of the
17 border and we'd be responsible for the work north of the
18 border, including all regulatory approvals and any other
19 work associated with it.

20 MR. ROBERT MAYER: And does the fact that
21 they undoubtedly have a whole lot less Crown land -- when
22 we're talking about building a Bipole line out of Gillam,
23 we're tr -- we're moving a good 50 percent of it, or at
24 least a good portion of it across Crown land. Is -- I'm
25 assuming in the -- in the northern States there's a whole

1 lot less -- well there won't be any Crown land, but
2 there's a whole lot less publicly owned land and you have
3 to deal with private owners in order to -- in order to
4 site your transmission towers.

5 MR. LLOYD KUCZEK: That's correct.

6

7 CONTINUED BY MR. BOB PETERS:

8 MR. BOB PETERS: Mr. Surminski and Mr.
9 Kuczek, can you tell the Board whether, through any joint
10 committee, or otherwise, there are -- Manitoba Hydro's
11 actively working to put interconnection capabilities with
12 its -- your American trading partners right now?

13

14 (BRIEF PAUSE)

15

16 MR. HAROLD SURMINSKI: There are
17 activities related to new interconnection and the
18 Minnesota Power Sale is one that has an interconnection
19 associated with it. There is -- there are other
20 counterparties that are also interested in sharing that
21 particular interconnection, so we've had -- there are
22 consultant studies on alternative routes, locations of
23 routes and, as I mentioned, it could be AC or DC but prob
24 -- most likely AC.

25

But definitely there is -- there's a lot

1 of activity right now in investigating interconnection,
2 and a lot more interest than there has been in the last
3 twenty (20) years.

4 MR. BOB PETERS: Wouldn't it be correct,
5 Mr. Surminski, for the Board to conclude that the time
6 that Manitoba Hydro gets these interconnections in place,
7 is when there's a major export agreement reached with an
8 American counterparty? That's the time when these
9 interconnections happen?

10 MR. HAROLD SURMINSKI: Yes, because there
11 is a will on both sides to -- to have it done.

12 MR. BOB PETERS: So it's got to be part
13 of the deal that's negotiated with the American
14 counterparty?

15 MR. HAROLD SURMINSKI: It seems like,
16 yes, it has -- that facilitates that whole process, yes.

17 MR. BOB PETERS: Mr. Surminski, we were
18 talking about your Exhibit 17, the System Energy and
19 Reservoir Storage Exhibit.

20 It appears from, again, rough math that I
21 do, that 6 terawatt hours have been drawn down between
22 December of '07 and as we sit here today.

23 Is that approximately correct?

24 MR. HAROLD SURMINSKI: Yes.

25 MR. BOB PETERS: From which reservoirs

1 would that be being brought down from?

2 MR. HAROLD SURMINSKI: I -- I don't have
3 the specifics. It's almost related to the question that
4 Mr. Anderson had. You'd have to look at all the
5 reservoirs. But I know Grand Rapids would be certainly
6 one (1) of them. Cedar Lake is a reservoir that we
7 normally start nearly full in -- in the fall and winter,
8 and draw down into the spring, in order to make room for
9 next year's storage.

10 And Lake Winnipeg I don't believe has
11 changed very much during that time period. It's -- it's
12 been pretty -- pretty flat at 714 feet all winter.

13 MR. BOB PETERS: And so you've told the
14 Board, I think, in answer to the Vice-Chair, that there
15 was spillage along the Winnipeg River System.

16 Is that the only place?

17 MR. HAROLD SURMINSKI: Yes. The Nelson
18 River is well below -- flows are well below maximum plant
19 capacity. It's -- it's quite rare that the flow -- that
20 Nelson River would be spilling. Similarly, Grand Rapids
21 almost never spills.

22 So the Winnipeg River is -- is the one (1)
23 area. And we've had very good flows for winter flows on
24 the Winnipeg River. It is quite rare to be spilling all
25 winter on the Winnipeg River.

1 MR. BOB PETERS: Is it the Corporation's
2 expectation, Mr. Surminski, that the spring runoff will
3 replenish this 6 terawatt hours?
4

5 (BRIEF PAUSE)
6

7 MR. HAROLD SURMINSKI: I cannot say, but
8 I would think that that's the maj -- that's the time of
9 year when major replenishment occurs. So, the magnitude
10 of that -- of the 6 terawatt hours, I'm not sure about,
11 but that is a major time of replenishment.

12 MR. BOB PETERS: Is there a conscious
13 effort, that you're aware of, in the Corporation to stay
14 within the historic range of experience? Or can you load
15 the reservoirs greater than what's shown in the -- the
16 beige or the yellow-coloured area on the -- on the chart?

17 MR. HAROLD SURMINSKI: Usually there are
18 licence constraints and we stay within those, unless
19 we're not able to. In 2005 the -- the upper bounds of
20 that line were -- were increased, because that was record
21 flow year.

22 MR. BOB PETERS: When I asked you a few
23 minutes ago what -- what was happening for next year, I
24 think your answer was the hydraulic flow generation for
25 next year is the same one that you've put before the

1 Board in the -- in the materials.

2 Is that -- is that right? If I look to
3 Tab 15 of the book of documents, that's what you're
4 expecting for the test year of '09?

5 MR. HAROLD SURMINSKI: Can you describe
6 what Tab -- what you're looking at?

7 MR. BOB PETERS: I -- I was looking at
8 the Power Resource Plan and...

9 MR. HAROLD SURMINSKI: No, the Power
10 Resource Plan is -- is just dependable energy, so that
11 will not give you an indication of -- of expected flows.

12 MR. BOB PETERS: Yes. And I'm being
13 corrected in stereo here, Mr. Surminski. I've got your
14 point.

15 But if you also go back to Tab 11 of the
16 book of documents and turn to the -- to the hydraulic
17 generation assumptions. It would be found on the page
18 numbered 3, third page in at Tab 11 of the book of
19 documents which is PUB/Manitoba Hydro First Round 55.

20 In the '08/'09 test year, Manitoba
21 hydraulic generation is shown as approximately 31,000
22 gigawatt hours. And I'm asking you whether you've now
23 increased or is that -- that's going to -- is it going to
24 be more than that or is that going to be your -- your
25 amount next year?

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(BRIEF PAUSE)

MR. HAROLD SURMINSKI: The thirty thousand, nine hundred (30,900) is already above average, and so it's -- it's basically considering the additional storage that -- that we've had over time.

I do not have an exact update, but I would not -- I would be surprised if it's significantly different than that.

MR. BOB PETERS: Do you expect it to be more than it was this year when it was 33,979 gigawatt hours?

MR. HAROLD SURMINSKI: No, we cannot say that right now from energy in storage. It's -- it's further precipitation, spring rains, spring, summer, and into the fall that'll determine the total volume over the year.

MR. BOB PETERS: All right, thank you. Mr. Warden, I was thinking back to some questions we had about, I guess, around Waverley west just a few minutes ago.

Would -- would you agree as a matter of policy that Manitoba Hydro -- excuse me.

Would you agree that as a matter of policy

1 Manitoba Hydro is not discouraging natural gas for space
2 heating in any of the areas that it serves?

3 MR. VINCE WARDEN: I agree with that,
4 yes.

5 MR. BOB PETERS: Would you agree that
6 Manitoba Hydro is not promoting electricity over natural
7 gas?

8 MR. VINCE WARDEN: I agree with that as
9 well.

10 MR. BOB PETERS: And would you agree that
11 when you don't -- would you also agree that Manitoba
12 Hydro is not discouraging natural gas use by consumers
13 who are looking for space heat fuel?

14 MR. VINCE WARDEN: Yes.

15 MR. BOB PETERS: And would you agree that
16 by doing that the consumer will have to then carry the
17 risk as to what happens in the natural gas price market
18 in terms of its rates?

19 MR. VINCE WARDEN: Well, there is a risk,
20 certain -- certainly. And we see our job as one of
21 keeping customers informed of what those risks are in
22 their -- in their energy choices.

23 MR. BOB PETERS: You'd agree with me
24 that Manitoba Hydro is in a unique position where it
25 could influence customer choice as to what space heating

1 fuel would be -- would be or should be used by consumers?

2 MR. VINCE WARDEN: I think that's fair,
3 yes.

4 MR. BOB PETERS: And presently, you're
5 suggesting to the Board that you take a neutral stance?

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: Are natural gas prices
8 more volatile than electricity prices, sir?

9 MR. VINCE WARDEN: Yes.

10 MR. BOB PETERS: And that's by -- by the
11 fact that the natural gas prices are based on molecules
12 that are sourced at a market price?

13 MR. VINCE WARDEN: Yes.

14 MR. BOB PETERS: And on the electricity
15 side, subject to what we talk to your next panel about,
16 electricity prices and their rates are based on
17 relatively stable and embedded costs?

18 MR. VINCE WARDEN: Well, they are in
19 Manitoba for sure.

20 MR. BOB PETERS: And so if that's the
21 case, wouldn't it be in the consumers' interest to use
22 electricity for space heating over natural gas?

23 MR. VINCE WARDEN: Well, not necessarily.
24 As -- as we reviewed in one of the exhibits, there's --
25 there still is a small differential between heating with

1 natural gas compared to all electric. Where that will go
2 in the future is somewhat uncertain.

3 But over the long term we do think a
4 natural gas, although it is volatile, there still is a
5 good supply of natural gas which will be there for many,
6 many years into the future and may or may not go up at a
7 rate comparable to electricity rates.

8 MR. BOB PETERS: But looking at Exhibit
9 12, sir, it's only five (5) cents a day cheaper to use
10 natural gas than electricity right now.

11 Isn't that the case?

12 MR. VINCE WARDEN: Well, for a -- just
13 referring to the Exhibit 12, a high-efficiency furnace is
14 a eight hundred and forty dollar (\$840) annual cost
15 compared to nine sixty-one (961) for -- for electric.
16 That's not an insignificant difference on an annual
17 basis.

18 MR. BOB PETERS: All right, point taken.
19 But I was looking at the mid-efficiency, the nine hundred
20 and forty-four (944) compared to the nine sixty-one
21 (961).

22 And they're roughly --

23 MR. VINCE WARDEN: I think --

24 MR. BOB PETERS: -- comparable at that
25 point --

1 MR. VINCE WARDEN: -- I think --

2 MR. BOB PETERS: -- are they not?

3 MR. VINCE WARDEN: -- I think most people
4 today though, when they're converting their furnace or
5 when they're installing new, are installing high
6 efficiency.

7 MR. BOB PETERS: So it's the ten dollar
8 (\$10) a month savings that you feel will motivate the
9 customer to pick natural gas over electricity?

10 MR. VINCE WARDEN: I'm not sure what
11 would motivate a customer. I think, again, it's our role
12 to provide all the information so that customer --
13 customers can make informed choices.

14 MR. ROBERT MAYER: Where we do add the
15 piece into the -- that all-electric homes don't generally
16 blow up? I've never heard of a street being closed
17 because of an electricity leak.

18 MR. VINCE WARDEN: I have, though, heard
19 of fires being caused from electricity shortages, so --
20 short --

21 MR. ROBERT MAYER: I have. But
22 interestingly enough, they don't -- they don't seem to
23 come -- they seem to come more from other sources other
24 than the furnace.

25 THE CHAIRPERSON: I think we will take

1 the midafternoon break.

2 MR. BOB PETERS: Thank you.

3

4 --- Upon recessing at 2:49 p.m.

5 --- Upon resuming at 3:11 p.m.

6

7 THE CHAIRPERSON: Okay folks, I guess
8 should let you know, by the way, that the Board is
9 double-booked again today, another water and sewer
10 hearing. So we will be shutting at 4:00 again. Okay,
11 Mr. Peters.

12

13 CONTINUED BY MR. BOB PETERS:

14 MR. BOB PETERS: I'll be done before
15 then, mercifully. I promise.

16 Mr. Warden, we were having a discussion --
17 I won't even call it a debate -- about Manitoba Hydro
18 being the energy company in Man -- in the province.

19 That's a title that the Corporation gladly
20 puts on itself?

21 MR. VINCE WARDEN: Yes.

22 MR. BOB PETERS: And that was part of
23 its, I suppose, strategy when it purchased Centra Gas as
24 well as Winnipeg Hydro?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: It wanted to be the
2 provincial energy company and provide energy solutions to
3 most, although not all, Manitobans.

4 MR. VINCE WARDEN: For the benefit of all
5 Manitobans, yes.

6 MR. BOB PETERS: And by owning the gas
7 company that has the largest franchise in Manitoba,
8 Manitoba Hydro was able to get another perspective on the
9 energy side of the business, correct?

10 MR. VINCE WARDEN: Yes.

11 MR. BOB PETERS: And one of the -- one of
12 the perspectives Manitoba Hydro saw, when looking from --
13 from the Centra Gas side of the business, is that natural
14 gas customers put a premium on price certainty?

15 MR. VINCE WARDEN: Some do.

16 MR. BOB PETERS: In fact, most do,
17 whether they're with gas brokers or whether they're with
18 -- with Centra Gas. They have been surveyed, and they
19 put a premium on, and they value price certainly.

20 MR. VINCE WARDEN: Well, the surveys do
21 indicate that. However, the large majority of -- of
22 customers -- gas customers do remain with system supply,
23 which has a degree of variability in that supply.

24 MR. BOB PETERS: All right. And I'm not
25 going to go far down the gas line here, Mr. Warden.

1 But even though the majority of Manitoba
2 gas consumers are on system supply, they would have their
3 primary gas rate change every gas quarter?

4 MR. VINCE WARDEN: Yes.

5 MR. BOB PETERS: And the minority of
6 natural gas customers will purchase from a supplier, in
7 this case a natural gas broker or marketer, that can
8 offer a fixed-price product?

9 MR. VINCE WARDEN: Yes.

10 MR. BOB PETERS: And even though there
11 are a majority who still stay with Centra as a supplier,
12 many of those who are with Centra when surveyed still
13 indicate that they too would like some price certainty?

14 MR. VINCE WARDEN: That's true.

15 MR. BOB PETERS: And the company may or
16 may not be working on providing options in that area in
17 the -- in the next quarter or two (2)?

18 MR. VINCE WARDEN: Yes, as directed by
19 this Board, we are working on options.

20 MR. BOB PETERS: All right. And
21 recognizing that, recognizing that the gas customers put
22 a value on certainty, you can't expect it would be any
23 different than your electricity customers, could you?

24 MR. VINCE WARDEN: Fair enough.

25 MR. BOB PETERS: And so for most of the

1 customers in Manitoba who space heat their residence, one
2 of their desired factors and criteria in fuel would be
3 price certainty?

4 That's desired by them?

5 MR. VINCE WARDEN: Yes, I think that's
6 fair. We -- we certainly -- on the gas side of our
7 business, customers don't mind at all when the price goes
8 down, as...

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: But if most customers
13 like price certainty, there is more price certainty with
14 electricity than with natural gas, correct?

15 MR. VINCE WARDEN: There -- there's
16 definitely more stability with electric prices than there
17 has been with natural gas, yes.

18 MR. BOB PETERS: So, for customers who
19 want price certainty, shouldn't Manitoba Hydro be
20 promoting electric space heat as opposed to gas space
21 heat?

22 MR. VINCE WARDEN: Well, it's a question,
23 I think, of short term versus long term. If a customer
24 is making a commitment to a heating choice, they're
25 looking for price certainty over -- over, perhaps, a

1 twenty (20) year time horizon and would be less
2 interested in what that price certainty might be over --
3 over the shorter term.

4 MR. BOB PETERS: Well, I can't get Mr.
5 Surminski to tell me the price of gas tomorrow, let alone
6 long term or short term what the Corporation's looking
7 at.

8 But is that answer suggest to the Board,
9 Mr. Warden, that long term, the price of electricity is
10 going to fluctuate and vary as much as it does for
11 natural gas?

12 MR. VINCE WARDEN: No, but I think as
13 we've -- as we've seen in our -- in our financial
14 forecast, the price of electricity is forecast to
15 increase by a rate close to the rate of inflation,
16 perhaps higher than the rate of inflation, over the next
17 number of years. So --

18 MR. BOB PETERS: Can you tell the Board,
19 ten (10) years from now, twenty (20) years from now,
20 thirty (30) years from now, what is this Manitoba Hydro
21 Exhibit 12 going to look like?

22 Is it going to be electric space heat is -
23 - is the cheapest -- cheaper than gas? Or is gas going
24 to still be cheaper than electricity as we go down and
25 pick a time horizon -- ten (10), twenty (20) years?

1 extent, nothing's changed?

2

3

(BRIEF PAUSE)

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5 MR. VINCE WARDEN: With respect to the
6 differential between electricity and natural gas. I
7 think there definitely has been a narrowing of that gap.
8 In fact, there definitely has been.

9 Whether that will -- that cross-over will
10 occur in the future, though, I think is still unknown at
11 this time.

12 MR. BOB PETERS: Is there any conscious
13 strategy by Manitoba Hydro to keep its rates for space
14 heating in a certain range relative to natural gas space
15 heating costs?

16 MR. VINCE WARDEN: No.

17

18

(BRIEF PAUSE)

19

20 MR. BOB PETERS: Do you agree with me,
21 Mr. Warden, that natural gas price escalation would
22 impact natural gas space heating more than it would
23 impact the export of electricity prices?

24 MR. VINCE WARDEN: No, I wouldn't
25 necessarily agree with that.

1 MR. BOB PETERS: You're saying that your
2 export prices are that closely tied to natural gas prices
3 and the impact would be far greater than what it would be
4 for the natural gas space heat market in Manitoba?

5 MR. VINCE WARDEN: Yeah, I think because
6 of the uncertainty around new coal file -- fired
7 generation, we are seeing more and more gas fired
8 generation -- generation in North America, which will
9 have a direct impact on electricity prices.

10 MR. BOB PETERS: But in Manitoba Hydro's
11 export market you're seeing more and more coal generation
12 coming on --

13 MR. VINCE WARDEN: Well --

14 MR. BOB PETERS: -- or at least plan to
15 be coming on.

16 MR. VINCE WARDEN: -- no, that's -- I
17 don't think that's necessarily true. I think there's --
18 there's gas fired generation coming on in our -- where we
19 export as well. So, no, I don't think that's...

20 MR. BOB PETERS: But Manitoba Hydro can
21 compete favourably with natural gas fired generation, can
22 it not?

23 MR. VINCE WARDEN: Yes.

24 MR. BOB PETERS: And that being the case,
25 it won't negatively impact then what export prices will -

1 - will be?

2 MR. VINCE WARDEN: No, but it'll draw --
3 it'll -- it'll positively impact as far as our export
4 prices are concerned. I expect it will positively impact
5 those prices.

6 MR. BOB PETERS: Is that another way of
7 saying you'd rather export that electricity and get the
8 higher prices that you're forecasting than leave it to
9 the residential market in Manitoba to see if the prices
10 will be as high?

11 MR. VINCE WARDEN: No, I don't think that
12 necessarily follows.

13 MR. BOB PETERS: Well, it does follow
14 mathematically.

15 MR. VINCE WARDEN: Mathematically, yes,
16 but we aren't consciously promoting natural gas over
17 electricity for that reason.

18

19 (BRIEF PAUSE)

20

21 MR. BOB PETERS: Well, you're not
22 promoting natural gas over electricity in any way, are
23 you?

24 MR. VINCE WARDEN: That's true, yes.

25 MR. BOB PETERS: And if Manitoba Hydro --

1 it will get less revenue if geothermal options are used
2 than if the space heat is by -- by gas.

3 Would that be true?

4 MR. LLOYD KUCZEK: If you put geothermal
5 in, we would actually have more revenue from that
6 customer.

7 MR. BOB PETERS: But that revenue will be
8 lower than the price that Mr. Surminski tells us we can
9 get on the export market.

10 So you'd be better off economically having
11 that customer heat with natural gas?

12 MR. LLOYD KUCZEK: Yeah, but that
13 economic benefit is related to deferred transmission and
14 distribution charges, not just the export revenue, so...

15 MR. BOB PETERS: So you're saying it's
16 close to being a wash?

17 MR. LLOYD KUCZEK: No, I'm just saying
18 I'm -- I'm being a little careful in terms of whether or
19 not we'll see more revenue, because part of that a -- a
20 marginal cost value is a voided cost as opposed to
21 revenue. And Harold -- Mr. Surminski, can talk more or --
22 - yeah, more details about that. But that -- that's the
23 point I was making there.

24 MR. BOB PETERS: What you do know and the
25 Board will know is that if you put natural gas services

1 to these houses in, let's say, Waverley West and they
2 don't use the natural gas services, Manitoba Hydro
3 subsidiary Centra Gas has a lot of money tied up in plant
4 in the ground that's not going to pay for itself?

5 MR. LLOYD KUCZEK: That's true if they
6 don't use natural gas.

7

8 (BRIEF PAUSE)

9

10 MR. BOB PETERS: I was just taking a
11 minute to look at the Corporation's natural gas forecasts
12 and comparison of domestic and export revenue rates
13 comparing the US MMBTU costs of natural gas supply
14 compared to electricity exports.

15 And in all of this example the electricity
16 is the -- is generally the -- the cheaper of the two (2),
17 from PUB/Manitoba Hydro First Round 98(c).

18 But in terms of long term, Mr. Warden,
19 you're not prepared to commit to the Board whether
20 there'll be a cross-over or whether there will be
21 equilibrium at some point?

22

23 (BRIEF PAUSE)

24

25 MR. VINCE WARDEN: That's correct, Mr.

1 Peters.

2 MR. BOB PETERS: Although you won't
3 commit to that, you will commit that the volatility is on
4 the gas side as opposed to the electric side?

5 MR. VINCE WARDEN: Yes.

6 MR. BOB PETERS: And because of that, the
7 consumers have to bear the risk of that volatility if
8 they don't choose a fixed-price natural gas product?

9 MR. VINCE WARDEN: Both the upside and
10 the downside, yes.

11 MR. BOB PETERS: In Manitoba Hydro's
12 Exhibit 18, there was a discussion of the fibre optic
13 system.

14 And would the Board be correct in
15 understanding that Manitoba Hydro is converting all of
16 its microwave systems to fibre optics?

17 Sorry, that was Undertaking 16, which was
18 Manitoba Hydro Exhibit 18.

19

20 (BRIEF PAUSE)

21

22 MR. VINCE WARDEN: Mr. Peters, I believe
23 that is the long-term plan. Where exactly we are in that
24 conversion, though, I don't -- I don't have that
25 information immediately available.

1 MR. BOB PETERS: That's okay. Can you
2 tell the Board whether -- before this fibre optic system,
3 did Manitoba Hydro have its own microwave system? Or did
4 it lease that from MTS?

5 MR. VINCE WARDEN: We had our own
6 microwaves.

7 MR. BOB PETERS: And in the answer that
8 was provided Manitoba Hydro not only serves its own
9 needs, but it -- it sells its fibre optic service to
10 thirty-five (35) commercial customers as I understand it?

11 MR. VINCE WARDEN: Yes.

12 MR. BOB PETERS: Mr. Derksen, where does
13 the Board find the revenue from the thirty-five (35)
14 customers in the financial statements of the Corporation?

15 MR. WILLY DERKSEN: They would find that
16 in the "offset to operating costs" under the cost
17 element, Operating Expense Recoveries, in the
18 transmission and distribution business unit that's
19 responsible for maintaining that system.

20 MR. BOB PETERS: And the ballpark amount
21 of offset that's being reflected?

22 MR. WILLY DERKSEN: The total amount of
23 operating expense recovery in the division that's
24 responsible is in the order \$1 1/2 million. And I
25 couldn't give you the breakdown as to what component of

1 that relates to this telecommunications and what relates
2 to other factors, but it -- it would be a substantial
3 portion of it.

4

5

(BRIEF PAUSE)

6

7 MR. BOB PETERS: Mr. Derksen, is that --
8 is that service offered to those thirty-five (35)
9 commercial customers competitively priced or bid on? Or
10 do you know any -- any method of source of how that's
11 valued?

12

13

MR. WILLY DERKSEN: I don't have the
answer to that, Mr. Peters.

14

15

16

17

MR. BOB PETERS: All right. Speaking of
revenues and -- and other costs, is it correct, Mr.
Derksen, that Manitoba Hydro also bills and collects and
remits deductibles on behalf of the Pharmacare program?

18

19

20

21

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

MR. BOB PETERS: For whom does it do
that? Is it Manitoba Hydro employees? Is it anybody
other than Manitoba Hydro employees?

22

23

24

MR. WILLY DERKSEN: I think it would be
for -- I understand it's for all customers that want to
take advantage of that capability.

25

MR. BOB PETERS: Can you briefly explain

1 that to me, in terms of what that involves?

2 MR. WILLY DERKSEN: That would involve us
3 adding a line item on their bill collecting on behalf of
4 the government and remitting those collections to the
5 government.

6 MR. BOB PETERS: Customers can sign up
7 for this?

8 MR. WILLY DERKSEN: Yes, they can.

9 MR. BOB PETERS: And in terms of --
10 Manitoba Hydro remits what it collects from its customers
11 to the government as part of the Pharmacare program?

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

13 MR. BOB PETERS: Does Manitoba Hydro get
14 reimbursed by Pharmacare for whatever overheads may be
15 involved in that process?

16 MR. WILLY DERKSEN: There is an
17 administration fee, yes, and that is based upon costs.

18 MR. BOB PETERS: Is that a -- is that an
19 answer indicating, Mr. Derksen, that there's a total cost
20 recovery by Manitoba Hydro from the Pharmacare program
21 for the costs incurred by Manitoba Hydro to assist the
22 government?

23 MR. WILLY DERKSEN: Yes.

24 MR. BOB PETERS: In terms of GHG
25 emissions -- and I thought since Mr. Tomlin wasn't here I

1 could ask the question -- but just a simple question on
2 Exhibit 21, which was Undertaking 26. It's a conceptual
3 question, and -- and the -- the specifics can be looked
4 at after the answer.

5 But starting in 2002 it appears that
6 Manitoba Hydro was taking notional credit for GHG
7 emission reductions due to its export contracts.

8 Would that be a fair way to interpret the
9 chart?

10

11 (BRIEF PAUSE)

12

13 MR. LLOYD KUCZEK: We refer to it as
14 "reporting." I don't know about notional credit. It's
15 just reporting what we think the -- the GHG reductions
16 are, a result of it.

17 MR. BOB PETERS: That -- that may be a
18 better word, Mr. Kuczek.

19 But in terms of reporting it, you report
20 it with -- with no opportunity for financial gain?

21 MR. LLOYD KUCZEK: That's correct.

22 MR. BOB PETERS: And you can't sell it?

23 MR. LLOYD KUCZEK: And weren't planning
24 on it, no.

25 MR. BOB PETERS: No. Conceptually, if

1 that same amount of electricity that was exported was
2 instead consumed by Manitobans to displace natural gas
3 space heat, would Manitoba Hydro achieve the same GHG
4 emission reductions?

5 MR. LLOYD KUCZEK: It would be a
6 different number.

7 MR. BOB PETERS: Okay, why would it be
8 different if you're displacing a local natural gas source
9 compared to a -- a marginal gas -- a marginal source in,
10 say, United States?

11 MR. LLOYD KUCZEK: The source of -- well,
12 the efficiencies of what you're displacing -- if you were
13 displacing natural gas heat for a residential home, the -
14 - you'd have to look at the efficiency of the natural gas
15 furnace. And so that's a mixture of 60, 80, or 90
16 percent today.

17 And in the United States we're displacing
18 fossil fuel generation, which has much lower efficiency
19 levels.

20 MR. BOB PETERS: So you wouldn't get as
21 much of a -- you wouldn't report as much of a credit, if
22 it was --

23 MR. LLOYD KUCZEK: I think --

24 MR. BOB PETERS: -- if it was -- if the
25 electricity was consumed in Manitoba to displace natural

1 gas space heating?

2 MR. LLOYD KUCZEK: In the residential
3 market, that's correct, yes.

4 MR. BOB PETERS: Mr. Warden, the
5 undertaking -- one of the undertakings you didn't want to
6 provide but you still did, was Number -- Number 12, which
7 was Exhibit 24.

8 And on this one you get a -- you don't get
9 incomplete. You -- you filed the capital coverage ratios
10 assuming that total capital expenditures, including any
11 major new ones, were included.

12 Do you recall that one, sir?

13 MR. VINCE WARDEN: Yes, I do.

14 MR. BOB PETERS: And the results looked
15 as ugly as you thought they would be?

16 MR. VINCE WARDEN: They do.

17 MR. BOB PETERS: And -- and when we go
18 down to that chart, what you're showing here is if -- if
19 you change the definition or the inputs to the -- into
20 the financial test, the results bottom out, and Manitoba
21 Hydro can't fund its capital from its internally
22 generated funds?

23 MR. VINCE WARDEN: I'm sorry, yes, that's
24 correct.

25 MR. BOB PETERS: And if I go down to the

1 year 2009, the test year in this General Rate
2 Application, sir, would the Board be correct in
3 understanding that to say that for every dollar of debt
4 Manitoba has, it has to borrow sixty-six (66) cents? Is
5 that another way to look at that?

6

7

(BRIEF PAUSE)

8

9 MR. VINCE WARDEN: Yes, Mr. Peters, we're
10 -- we're talking capital expenditures here, so not
11 necessarily debt. But for every dollar of capital
12 expenditure we would have to borrow sixty-six (66) cents,
13 yes.

14

15 MR. BOB PETERS: All right. That's --
16 that's a finer way of -- of putting it, and I agree with
17 the refinement.

18

19 So you're showing the Board that after
20 2009, under the changed test, the capital coverage ratio
21 is such that the revenues that are coming in don't even
22 carry the new major capital projects.

23

24 You need outside helping -- outside help
25 for those -- for that capital program?

26

MR. VINCE WARDEN: Yes.

27

28 MR. BOB PETERS: And you'd agree with me
29 that after 2018 there's still more capital expenditures

30

1 coming that will be funded by debt for either Conawapa
2 and/or Keeyask?

3 MR. VINCE WARDEN: Yes.

4 MR. BOB PETERS: It's not likely that
5 this picture's going to change in the short term, is it,
6 Mr. Warden, in light of the capital expenditure program
7 that the Corporation is undertaking?

8 MR. VINCE WARDEN: No, this isn't likely
9 to change until we get all of our major generation and
10 transmission installed. So some time after Conawapa.

11 MR. BOB PETERS: But it only changes back
12 to positive if the capital expenditures essentially stop
13 on those major capital projects under this -- under this
14 definition.

15 MR. VINCE WARDEN: Well, yes, but there
16 was a period going back in time, as you can see, where --
17 where that was the case, where we didn't have any major
18 new generation and transmission and we were able to fund
19 all of our capital expenditures from internal sources.

20 So going forward, once we do get Conawapa
21 installed -- and Keeyask -- there likely will be a time
22 period there where -- where we'll get back to funding all
23 of our capital from internal sources.

24 MR. ROBERT MAYER: That mean to say
25 you're sort of writing off Tidal, White Mud, and Red

1 Rock?

2 MR. VINCE WARDEN: No. But they're, you
3 know, smaller plants, so possibility -- chances are by
4 that time we will be able to fund from --

5 MR. ROBERT MAYER: I think I meant Gillam
6 Island, and that's 1,000 megawatts, if I recall
7 correctly. It's the one downstream from Conawapa.

8 MR. VINCE WARDEN: I just don't recall
9 the size of that one offhand.

10 MR. HAROLD SURMINSKI: Yes, it's -- it's
11 eight hundred (800) to a thousand (1,000), yeah. It's --
12 it's near the estuary, so it has its own environmental
13 problems.

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: Turning to Undertaking
17 20, which was marked as Manitoba Hydro Exhibit 26, it
18 dealt with the levelized cost of electricity savings
19 associated with the City of Winnipeg Power Smart
20 Agreement.

21 And I wonder if the panel could provide
22 the detailed calculation which will identify the various
23 costs and the benefits and also include the gigawatt
24 hours of savings achieved to date, as well as any
25 forecast savings.

1 MR. LLOYD KUCZEK: We can do that.

2 MR. BOB PETERS: All right.

3 MR. LLOYD KUCZEK: Detailed as in you
4 would like to see the spreadsheet?

5 MR. BOB PETERS: That would answer all
6 the questions.

7 MR. LLOYD KUCZEK: Year-by-year?

8 MR. BOB PETERS: Yeah.

9 MR. LLOYD KUCZEK: Yes.

10 MR. BOB PETERS: Thank you.

11

12 --- UNDERTAKING NO. 58: Manitoba Hydro to provide
13 Board the detailed
14 calculation City of Winnipeg
15 Power Smart Agreement which
16 will identify the various
17 costs and the benefits.
18 Include also the gigawatt
19 hours of savings achieved to
20 date, as well as any forecast
21 savings

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: In terms of Exhibit 27,
25 Undertaking 22, the list of export sales agreements, Mr.

1 Surminski and Mr. Kuczek, help us on the diversity
2 exchange agreements.

3 Is the price set on those based on market?
4

5 (BRIEF PAUSE)
6

7 MR. LLOYD KUCZEK: The -- the prices are
8 -- for two (2) of them are now set. They were somewhat
9 uncertain, in terms of there was an interpretation of how
10 the contracts are written and what was meant within the
11 contracts. And the two (2) parties came to an agreement
12 on fixing the price under the -- two (2) of the contracts
13 for a certain quantity of energy, but not all the energy
14 that could be exported under con -- under that contract.

15 And the other contract is the parties
16 negotiate an arrangement year by year, going forward, for
17 the same reasons.

18 And, again, that would be for the minimum
19 amount of energy that they can -- or the maximum amount
20 that that they could take. But the parties always can
21 mutually agree to take more energy under those contracts.

22 That amount, I think, was 20 percent
23 capacity factor when the agreements were originally
24 signed -- all diversity agreements.

25 MR. BOB PETERS: Under those diversity

1 agreements, Mr. Kuczek, if you do not take power under it
2 in the wintertime, are you obligated to deliver in the
3 summer?

4 MR. LLOYD KUCZEK: The diversity
5 agreements are such that you have the right to take up to
6 20 percent energy.

7 And speaking to how they were originally
8 negotiated, there might have been a change to that when
9 they settled the -- how to deal with this uncertainty or
10 misinter -- or varied interpretation of how the prices
11 were going to be set into the future.

12 But the original contracts allowed you to
13 take up to 20 percent and, under mutual agreement, up to
14 100 percent.

15 MR. BOB PETERS: So even if you didn't
16 use the counterparty's electricity in the winter, you
17 would still be obliged to ship to them in -- in the
18 summer?

19 MR. LLOYD KUCZEK: Correct.

20 MR. BOB PETERS: Has Manitoba Hydro used
21 the diversity agreements to any great extent in the last
22 few years?

23 MR. LLOYD KUCZEK: Not to a great extent.

24 MR. BOB PETERS: Would it only be in
25 years where there was low flow it would advantageous to

1 use the -- the diversity agreements?

2 MR. LLOYD KUCZEK: Certainly in low flows
3 there is more opportunity for economic benefit because
4 part of the -- part of what you might do is take the
5 energy on peak and then import off peak and then sell it
6 on peak. And -- and whether or not you would use those
7 diversity agreements, again you'd have to weigh it
8 against your other opportunities. And the other economic
9 advantage to having the agreements in place, is you
10 already paid for the transmission associated with it.

11 So there's -- again you have to take that
12 into account and compare that to your other opportunities
13 available in the marketplace.

14 MR. BOB PETERS: It allows for some
15 arbitraging of the market then?

16 MR. LLOYD KUCZEK: Under certain flow
17 conditions, yes. And -- and we have those opportunities
18 without those agreements, I guess, as well, but...

19 MR. BOB PETERS: Can you quantify to the
20 Board how infrequent you've used these diversity
21 agreements in the last, say, five (5) years or to the
22 extent. And I -- I'm not looking for commercially
23 sensitive information, but just assisting the Board with
24 understanding how -- how relied on are these agreements?

25 MR. LLOYD KUCZEK: We certainly rely on

1 them for planning purposes in terms of operational -- I -
2 - I couldn't provide you with a number and I don't think
3 anybody here today could do that, or an indication of how
4 often we -- we take energy under those contracts.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Mr. Surminski and Mr.
9 Kuczek, in the power resource plan, Tab 15 of the book of
10 documents, there's -- there's imports total contracted
11 line.

12 Is that line contingent on there being
13 diversity agreements or does that exclude diversity
14 agreements?

15 MR. HAROLD SURMINSKI: It is the -- we do
16 count on the energy in the low flow situation, so it --
17 there's two (2) portions: there's the return energy of
18 the diversity, as well as there are energy guarantees
19 associated with diversities.

20 Diversities have a clause where we can
21 coun -- we can count on or ask for energy in low flow
22 conditions, During Manitoba Hydro low -- adverse flow
23 conditions, we have a right to ask for additional energy
24 other than just the return energy of the diversity.

25 MR. BOB PETERS: If we took both parts of

1 that scenario, does that add up to the total of imported
2 -- contracted imports, Mr. Surminski?

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

4 MR. BOB PETERS: And do I also understand
5 that if -- if there's low flow levels in Manitoba, you
6 don't have to provide power on the diversity agreements?
7 There's an out for you in those agreements?

8 MR. HAROLD SURMINSKI: Yeah, we believe
9 that's right.

10 MR. BOB PETERS: Whether you try to
11 honour the commitment through the some other means or not
12 is a business decision you would make in that
13 circumstance?

14 MR. HAROLD SURMINSKI: Yes, we do. And
15 the business decision is to maintain our reputation as
16 reliable suppliers of -- of power.

17 MR. BOB PETERS: Mr. Kuczek, this
18 morning, and I think too Mr. Anderson, I don't have the
19 benefit of the transcript, but I gathered from the book
20 of documents, Tab 37, second page in there as a LICO
21 table, the low income cut-off as you correctly identified
22 it, I think.

23 Did I gather that the table used and
24 prepared by Manitoba was adjusted and it wasn't based on
25 125 percent of -- of LICO?

1 MR. LLOYD KUCZEK: I -- I don't have the
2 details here. As I recall it, we ad -- we adjusted it by
3 25 percent. And I believe this is adjusted by 25
4 percent. And then when I -- mentioned was that there was
5 a slight adjustment under a couple of the categories. I
6 can't recall which they were, but -- and -- and it was
7 just a slight adjustment upwards on the dollar value, but
8 I didn't see it as significant.

9 And it was -- just to give you a little
10 more information, we were comparing the -- whether or not
11 using the 125 percent of LICO or the HIL numbers. And so
12 in a couple categories the HIL numbers were more
13 attractive.

14 And so to resolve any disagreement or
15 dispute in terms of the issues on using the two (2) we
16 just chose to make those slight adjustments.

17 MR. BOB PETERS: Was the adjustment in
18 the dollars of income per household, or was it in the
19 rural versus urban, or do you have any recollection, or -
20 - maybe you can provide that then to the Board so we can
21 see how significant if at all it was.

22 MR. LLOYD KUCZEK: I'll provide it and
23 then you'll have exactly what it was.

24

25 --- UNDERTAKING NO. 59: Manitoba Hydro to provide

1 Board the adjustments made to
2 the LICO or the HIL numbers
3

4 MR. BOB PETERS: All right. Mr.
5 Chairman, I want to repeat my thanks to this panel and
6 certainly those who are working with them in the back
7 row. It might be appropriate to turn it over to Mr.
8 Williams while we sit back and listen to the Foo Fighters
9 warm up next door.

10 THE CHAIRPERSON: I think the Foo
11 Fighters are done.

12 MR. BOB PETERS: They're noisy again
13 today. I don't know what...

14 THE CHAIRPERSON: Mr. Williams, do you
15 want to begin now or would you rather start at 9:00
16 tomorrow?

17 MR. BYRON WILLIAMS: I'm fine either way.
18 I -- I've got eight (8) exhibits to go through, but
19 mostly fairly short questions, but I'm guessing forty-
20 five (45) minutes, so.

21 THE CHAIRPERSON: Okay, then we'll close
22 down now because of the second hearing --

23 MS. PATTI RAMAGE: Mr. Chair, if I could
24 just jump in. There's a couple of corrections, and I
25 think -- or Mr. -- Mr. Derksen has -- he wants to clarify

1 a point and Mr. Kuczek had some information with -- with
2 respect to a question earlier. So maybe we could just
3 get that on the record before we close.

4 THE CHAIRPERSON: For sure. Please,
5 gentlemen?

6 MS. PATTI RAMAGE: Mr. Derksen, do you
7 want to go?

8 MR. WILLY DERKSEN: Yes, thank you. This
9 morning we talked about the overhead rates being what --
10 charged to Wuskwatim, and I had indicated that I
11 understood the rate to be 22 percent. My back row
12 support people have indicated that that was a -- that it
13 is in fact 21 percent is being charged to Wuskwatim. A
14 minor difference, but a correction nonetheless.

15 MS. PATTI RAMAGE: And, Mr. Kuczek...?

16 MR. LLOYD KUCZEK: Yes, it was just
17 information in response to the -- how many households
18 were est -- or estimated to -- for the oil, propane
19 heated residential homes under Bill 11, that category,
20 and the number of homes is three hundred and twenty-five
21 (325) homes.

22 MR. ROBERT MAYER: Too bad Mr. Anderson's
23 not here to hear the answer.

24 THE CHAIRPERSON: I'm sure he'll have the
25 ability to read the transcripts on the internet.

1 Thanks to everyone. We'll see you all
2 tomorrow at nine o'clock.

3

4 (WITNESSES RETIRE)

5

6 --- Upon adjourning at 3:48 p.m.

7

8

9

10 Certified correct,

11

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14 _____

15 Cheryl Lavigne

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