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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
May 2nd, 2008
Pages 3549 to 3860

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1 --- Upon commencing at 8:34 a.m.

2

3 THE CHAIRPERSON: Good morning, everyone.

4 Nice to see you all here at pretty close to 8:30.

5 Okay, Ms. Ramage, do you want to continue?

6 MS. PATTI RAMAGE: Certainly.

7

8 MIPUG PANEL RESUMED:

9 PATRICK BOWMAN, Resumed

10 ANDREW MCLAREN, Resumed

11

12 CONTINUED CROSS-EXAMINATION BY MS. PATTI RAMAGE:

13 MS. PATTI RAMAGE: Mr. Bowman, Mc.

14 McLaren, good morning. Could you confirm your

15 understanding of the Utility's obligation to serve?

16 MR. PATRICK BOWMAN: Yes, good morning,

17 Mr. Chairman, members of the panel. In the case where

18 one normally thinks about regulating utilities operating

19 a monopoly, they would be generally understood to be

20 provided with a -- a two (2) part policy in relation to

21 their services.

22 One (1) is that they would have their

23 rates regulated and the second is that they would have an

24 obligation to serve any customer who requests service on

25 a non-discriminatory basis, subject to certain, you know,

1 practical limitations. It's not -- it's not infinite but
2 it's -- but in general, outside of certain limitations,
3 it would be an obligation to serve any party who requests
4 service within an area in which the Utility has a
5 monopoly which we normally call their franchise area.

6 MS. PATTI RAMAGE: That you would agree
7 that -- that service should be safe, reliable, efficient
8 and environmentally responsible?

9 MR. PATRICK BOWMAN: Well, that doesn't
10 necessarily link to the obligation to serve but I think
11 that's a -- fair characteristics of utility service that
12 customers might expect.

13 MS. PATTI RAMAGE: And it -- and that
14 obligation to serve that -- it will have to meet new
15 demands for new loads, sometimes by constructing new
16 generation or contracting to purchase additional power.

17 Is that correct?

18 MR. PATRICK BOWMAN: Yes, outside of
19 certain, like I said, limitations, as I noted before. An
20 example we've dealt with in other jurisdictions is if
21 somebody builds a new mine far, far off the grid and
22 calls the Utility for power, it doesn't mean the Utility
23 has to build a transmission line to them to serve them
24 because there's a -- a practical constraint. But outside
25 of that, any -- any load on which the Utility has an

1 obligation to serve imposes load upon the Utility that
2 the Utility then effectively has an obligation to acquire
3 power to provide that service.

4 MS. PATTI RAMAGE: Right. I think you
5 were referring to something that's near and dear to the
6 lawyer's heart, that the obligation to serve is not
7 unfettered, it's subject to the ability to pay for that
8 service. But I think that's -- I don't need a comment, I
9 think I just needed to get that out.

10 And although there's an annual capital
11 expenditure program for new generation or new
12 transmission where -- or for generation and transmission
13 and the Utility's operations generally, when new
14 generation and transmission is required, the capital
15 programs have to expand, that's fairly straightforward.

16 MR. PATRICK BOWMAN: Well, new power has
17 to be acquired and if it's by building capital assets,
18 then it has to expand, yes.

19 MS. PATTI RAMAGE: And when we have new
20 programs, we'll likely require additional EFTs, either as
21 part of the company's workforce or as contractors.

22 Is that correct?

23 MR. PATRICK BOWMAN: Well, to a certain
24 degree, I -- I suppose that's true, Ms. Ramage. I've
25 certainly reviewed materials that suggests things like

1 adding Wuskwatim to the system doesn't necessarily add
2 very many EFTs. The number five (5) sticks in my head.
3 But, it -- it does add some extra load to the system --
4 or extra -- of requirements to the work compliment in
5 order to maintain that system.

6 MS. PATTI RAMAGE: Okay. And as well as
7 the obligation to serve on a -- on another side of the
8 coin in a utility's operation -- during the Utility's
9 operations, operational programs may have to be expanded
10 when demand is higher; new facilities are placed in
11 service, or to meet more stringent environmental safety
12 or regulatory standards.

13 Is that correct?

14 MR. PATRICK BOWMAN: Right. I think you
15 may be talking about what I would put in two (2)
16 different categories, but -- all of that's true. Higher
17 demand might -- would typically drive higher costs;
18 that's the issue of the fact that for almost any utility
19 I deal with other than a very, very few exceptions,
20 marginal cost or the cost of adding new load is higher
21 than the cost to serve the existing load, the average
22 costs of embedded -- the embedded costs or the historic
23 assets.

24 Environmental is a different one to throw
25 in there because I don't know that that's being driven by

1 load per se; it's being driven by regulations or other
2 obligations. But -- but it certainly is something that
3 people tend to spend more money on over time as new
4 regulations come into service.

5 MS. PATTI RAMAGE: And do you agree that
6 aging infrastructure can cause additional operational
7 requirements and -- what I mean is that older assets
8 generally require more upkeep than new assets.

9 MR. PATRICK BOWMAN: Yes, it's -- yes.

10 MS. PATTI RAMAGE: And sometimes those
11 assets are going to need to be replaced.

12 MR. PATRICK BOWMAN: Absolutely.

13 MS. PATTI RAMAGE: And would you prepare
14 to accept that these factors are all factors that are
15 being faced, not only by Manitoba Hydro, but by other
16 utilities and other organizations that are capital
17 intensive?

18 MR. PATRICK BOWMAN: Yes.

19 MS. PATTI RAMAGE: One (1) of the issues
20 we're hearing from utilities across the country, and I
21 think you referenced it yesterday, is the rising fuel and
22 commodity costs. In fact, I think not only utilities, I
23 think everyone in the room can -- has pulled up to the
24 pump over the past year and seen the -- the price
25 increases.

1 But that's something that's faced by
2 utilities across the country?

3 MR. PATRICK BOWMAN: Absolutely. It's
4 one (1) of the reasons why it's advantageous to have
5 something like a Hydro utility that doesn't require that
6 -- that fuel. But it's true for fuel, it's true for
7 copper, it's true for a number of different type of
8 commodities.

9 MS. PATTI RAMAGE: And would you be
10 prepared to acknowledge that other essential commodities
11 such as cooper and steel have risen by factors of up to a
12 100 percent or more over the last five (5) years?

13 MR. PATRICK BOWMAN: I don't know the
14 specific numbers or percentages, but I think it's fairly
15 common knowledge that those commodities are -- are --
16 went up in price quite substantially. I'm -- I'm not
17 sure whether some of that has yielded, I seem to recall
18 hearing that lately, but nonetheless they're at a
19 considerably higher level than they were, you know, a
20 number of years ago.

21 MS. PATTI RAMAGE: And would you agree
22 that the shortage of skilled labours -- labour has
23 recently become a problem for this and other industries?

24 MR. PATRICK BOWMAN: I hear that with
25 nearly every client I work with in -- in this industry

1 and others.

2 MS. PATTI RAMAGE: And a shortage of any
3 resource generally leads to an esc -- escalation in it's
4 cost.

5 Is that correct?

6 MR. PATRICK BOWMAN: That -- that follows
7 from the -- my previous comment, yes.

8 MS. PATTI RAMAGE: Okay. Could we maybe
9 now turn to your exhibit, MIPUG-15.

10

11 (BRIEF PAUSE)

12

13 MS. PATTI RAMAGE: Okay, if you have that
14 in front of you, as a -- as a preamble and to make sure
15 we're all working from the same numbers, could you
16 confirm that the last column on this -- that's the one
17 labeled, PCOSS '08 Schedule B-3, that column includes
18 only embedded costs allocated to all domestic customers
19 with the exce -- exception of SEP customers and the
20 diesel zone?

21 MR. PATRICK BOWMAN: Yes, no SEP, no
22 diesel, no export.

23 MS. PATTI RAMAGE: Okay. Now I'd like
24 you to confirm that the net export allocations have been
25 -- that net export allocations have been used to reduce

1 the -- those embedded costs allocated to the classes
2 listed. For example the 176 million at the top of that
3 PCOSS '08 column, that figure represents the embedded
4 costs less the export allocation.

5 Is that correct?

6 MR. PATRICK BOWMAN: Right, that when you
7 work your way through the list of numbers it ends up with
8 the net revenue requirement that Hydro is seeking from
9 domestic ratepayers. So the -- the -- it ends up being
10 the one-o-four nine (1049) at the bottom of -- of column
11 E. And although it's all broken out to each of the
12 classes in the box to show the reference to PCOSS '08,
13 it's -- it's a cost of service type of approach using a
14 marginal approach designed to collect the same number of
15 dollars that the Cost of Service Study would be designed
16 to collect.

17 MS. PATTI RAMAGE: Thank you. Don't --
18 don't put MIPUG-15 away, but could you turn to Tab 2 in
19 the book -- book of documents we distributed yesterday.

20

21 (BRIEF PAUSE)

22

23 MS. PATTI RAMAGE: Okay. Here I'd just
24 like you to confirm that the unit costs allocated to the
25 export class is quite a bit higher than what is allocated

1 to the domestic classes. And -- and maybe if I could
2 preface it for the lawyers in the room, we're looking at
3 -- so we're all on the same page -- the five (5) -- five
4 point one five (5.15) cents per kilowatt hour under the
5 export column is higher than, for example, the three
6 point one six (3.16) cents in the GSL greater than one
7 100 kV; that the exports are higher than all of the
8 domestic class listed.

9 Is that correct?

10 MR. PATRICK BOWMAN: Yes, that's correct.
11 That's the question we got from the Board in -- in PUB-8.
12 So if -- if you'd like a longer explanation, it's set out
13 in that interrogatory response. But, yes, it's correct,
14 it's higher.

15 MS. PATTI RAMAGE: Okay. If we can turn
16 back to MIPUG-15 now, and here I'm looking at
17 transmission costs, again because I -- just to confirm
18 that for transmission generation, sub-transmission, none
19 of these purport to show the costs allocated to export on
20 account of those functions.

21 Is that correct?

22 MR. PATRICK BOWMAN: That's correct. The
23 -- the -- this exhibit, MIPUG-15, was prepared on the
24 same basis as the Exhibit Manitoba Hydro 68 which was to
25 show the -- the domestic classes and how they -- that

1 falls out.

2 MS. PATTI RAMAGE: And if we look at the
3 marginal cost column, that's column C, you can confirm
4 that these functional costs are all drawn from Manitoba
5 Hydro Exhibit 68, that's correct?

6 MR. PATRICK BOWMAN: That -- that's
7 correct. Column C is all drawn from Manitoba Hydro's
8 Exhibit 68.

9 MS. PATTI RAMAGE: Okay. Now if I can
10 focus in just on the generation section for a moment.
11 The total embedded cost is \$532.9 million. Would you
12 agree that that figure represents 51 percent of all
13 embedded costs? Or five hundred and thirty two (532) is
14 51 percent of the \$1.049 billion at the bottom of the
15 page?

16 MR. PATRICK BOWMAN: Yes. The generation
17 cost is approximately half of the system, yes.

18 MS. PATTI RAMAGE: And then if we turn to
19 column C we see that the total marginal cost for the
20 generation function is \$1.3 billion.

21 Would you agree that that figure
22 represents 70 percent of all marginal costs?

23 MR. PATRICK BOWMAN: Well, it gets into
24 the reason we did this table. It -- the -- the division
25 of one three one four (1314) in the numerator and one

1 eight eight nine (1889) in the denominator gives you 70
2 percent.

3 But it gets into the reason we did this
4 table, that when you look at using a marginal cost Cost
5 of Service Study, you end up with a lot of things getting
6 -- to use the words of the fellow we talked about in
7 California, a lot of things getting hidden in here if you
8 start to mix functions, which is why they would do it by
9 function.

10 So, yes, it works out to 70 percent when
11 you do the division but only because you're in a sense
12 mixing apples and oranges.

13 MS. PATTI RAMAGE: You mentioned you
14 talked to someone in California. Can -- and I understand
15 that your EPMC calculation you say is -- is based on
16 California.

17 Can you tell us where you got that
18 information from?

19 MR. PATRICK BOWMAN: Well, we -- we had
20 seen the NERA study which talked about using the marginal
21 cost Cost of Service approach that Manitoba Hydro filed
22 in the previous application and it had referenced that
23 four (4) locations do this and use an EPMC approach and
24 California was one (1) of those.

25 We didn't have the time to investigate all

1 four (4) but when we saw the discussion going on in
2 regards to using a marginal cost Cost of Service in this
3 room and -- and trying to do back of the envelope, EPMC
4 calculations, we thought it might be useful to add to the
5 discussion some actual experience as to how someone else
6 actually does this rather than back of the envelope
7 calculations.

8 The main thing we tracked down was copies
9 of evidence that one (1) of the Utilities there had
10 prepared, San Diego Gas and Electric, and -- and that
11 evidence is -- was available from regulatory proceedings
12 and explained the way that they do this it -- for a
13 generation function, and they do a separate cost of
14 service for a distribution function.

15 Now we just went on and -- and talked to
16 the fellow who prepared the evidence to make sure that we
17 were understanding it correctly. But it's as much in --
18 in the filed evidence he prepared as in -- in the
19 discussion we had, San Diego Gas and Electric.

20 MS. PATTI RAMAGE: Thank you. Now going
21 back to Exhibit MIPUG-15, just to confirm, if we consider
22 then the generation and transmission functions together,
23 these two (2) items would account for 63 percent of
24 embedded costs and 84 percent of marginal costs.

25 Do those figures sound correct?

1 MR. PATRICK BOWMAN: They do. I would
2 only
3 -- and I would note the caution that -- that we heard
4 when we looked through the California situation is that
5 they don't use any sort of marginal concept for
6 transmission because that's regulated Federally by FERC.

7 So -- so that was -- we -- we extended --
8 their two (2) function EPMC approach to all of the
9 functions here. But if you were actually to go to
10 California it would all be done by way of a transmission
11 tariff set by the Federal regulator and that would not be
12 part of -- of what the regulators in California deal via
13 an EPMC approach.

14 MS. PATTI RAMAGE: But in terms of
15 Manitoba, these are -- or Manitoba Hydro, there's no
16 dispute these are a significant part of Manitoba Hydro's
17 costs, either on a historical or forward looking basis,
18 and as such I think everyone in the room wants to -- to
19 get this right.

20 And if we look at the generation function
21 on its own, I'd like to just look at the dollar values.
22 We've confirmed that the embedded costs, and that's under
23 the PCOSS'08 column, are 532.8 million, would you agree
24 that the domestic marginal generation costs are quite a
25 bit higher, that's at 1.3 billion and that would be 146

1 percent higher, than the embedded costs?

2 Do you accept that number?

3 MR. PATRICK BOWMAN: Yes, that's the
4 function of the -- the table that was in the MIPUG book
5 of documents comparing embedded cost to marginal costs
6 for generation on -- on the system. So, yes I'll accept
7 that number.

8 MS. PATTI RAMAGE: And similarly for
9 transmission, marginal cost exceeds embedded costs by a
10 wide margin, \$280 million versus \$130 million or 113
11 percent.

12 Would you agree with that figure?

13 MR. PATRICK BOWMAN: That -- those would
14 be the ratios that arise from this table.

15 MS. PATTI RAMAGE: Now if we do the same
16 exercise for sub-transmission we find that it's the
17 embedded cost that's higher. Is that correct?

18 And in this case embedded cost is \$66
19 million whereas marginal cost is only \$23 million. In
20 that case would you accept that marginal cost is lower by
21 64 percent?

22 MR. PATRICK BOWMAN: I would be very
23 cautious about that -- the ratio you said it was correct,
24 I'd be very cautious about accepting that as indeed
25 showing anything in particular about the sub-transmission

1 function alone, because that is solely based on a
2 marginal cost looking at the operating and maintenance
3 cost of sub-transmission. When we went to Manitoba
4 Hydro's Exhibit 68, it only did generation transmission
5 and distribution, it did not separately break out sub-
6 transmission.

7 So you'll see in the first column when it
8 says something like, Transmission marginal cost, that is
9 the marginal cost related to capital for transmission.
10 And there's a second column that is the marginal -- or
11 the average cost related to O&M for transmission.

12 When you move to sub-transmission there's
13 -- there was no separately identified marginal cost for
14 capital for sub-transmission. So in this case the
15 marginal transmission is really just the operating costs
16 of the sub-transmission system. I'm not sure whether
17 Hydro develops a separate marginal cost for sub-
18 transmission distinct from distribution and distinct from
19 transmission.

20 So at -- at that level, we -- we did what
21 we could with the data available but, I'm just saying one
22 would want to be cautious about looking solely at a sub-
23 transmission function because it's got no capital in
24 there at all. It's one (1) of the reasons that we
25 wouldn't, you know, recommend using this approach or

1 parsing a table like this too far because it hasn't --
2 it's not -- this approach, when it's been mentioned in
3 Manitoba, be it Manitoba Hydro's table or this one, isn't
4 reviewed or prepared with that type of rigour.

5 That's why we get results like general
6 service large thirty (30) to one hundred (100) going from
7 forty-six thousand dollars (\$46,000) of assets they
8 really use, or of embedded cost, to 8.7 million when you
9 go to a marginal cost approach. You know, if that type
10 of result was coming out of Hydro's embedded cost of
11 service study I'm sure that there are people internally
12 who would catch it and go back and investigate and try to
13 understand why it's going on.

14 But given it's coming out of sort of a --
15 a quick one (1) page table, it doesn't seem to have been
16 prepared and reviewed with that same -- with that same
17 rigour.

18 MS. PATTI RAMAGE: And sub -- I accept
19 those comments, but looking now at distribution and
20 customer service we see embedded cost and marginal cost
21 is the same, at \$72 million.

22 You have no dispute with that?

23 MR. PATRICK BOWMAN: I have no dispute,
24 with the same caveat that there's no capital in there,
25 although I'm not sure how the distribution and customer

1 service capital marginal cost would arise, but
2 nonetheless the same caveat that there's -- that it's
3 only operating cost there.

4 MS. PATTI RAMAGE: Well, I would suggest
5 to you Mr. Bowman, that the capital you'd find in the
6 next column which would be "Distribution Plant", and in
7 this case we see that embedded cost exceeds marginal cost
8 to -- embedded cost is 247 million versus 199 million.

9 Would you agree that marginal cost is
10 lower by approximately 20 percent in that category?

11 MR. PATRICK BOWMAN: Those -- that ratio
12 arises from the table, yes.

13 MS PATTI RAMAGE: And now I'd just like
14 to take you to the bottom of your table, and I'd like to
15 confirm our calculation of the gap between allocating
16 embedded cost using the total marginal class as per
17 Manitoba Hydro Exhibit 68. And that is set out at the
18 very bottom of Column C for anyone trying to follow, and
19 your version of the EPMC which is shown at the very
20 bottom of Column F. Now for residential, here I'm -- and
21 here I'm looking at line 46. I calculate that the
22 divergence of revenue allocation from the total marginal
23 cost is 38 percentCan you accept that?

24 MR. PATRICK BOWMAN: Well, I -- I'm
25 seeing a number there that says 37 percent, but I think

1 it's measuring something different. 38 percent -- the --
2 the two (2) numbers are different by two hundred and
3 seventy (270) odd million which is the amount by which
4 residential would have to pay more if we really priced
5 power at marginal costs.

6 So I guess 270 million on four thirty-six
7 (436) is -- I'm not -- I'm not sure if we ought to be
8 dividing by four thirty-six (436) or by seven-o-five
9 (705), I guess, is the -- the question.

10 But -- but if -- if you're trying to
11 capture that there's a -- a difference between those two
12 (2) numbers, I can accept that.

13 MS. PATTI RAMAGE: Just to make sure
14 we're all on the same page, I calculated that by taking
15 the difference between 705 million in column C, 437
16 million in Column F. That equals two hundred and sixty-
17 eight (268) as you alluded to, and then divided that by
18 705 million to get the 38 percent calculation. I wasn't
19 looking at the amount in Column D.

20 MR. PATRICK BOWMAN: I'll -- I'll accept
21 the math, subject to check.

22 MS. PATTI RAMAGE: And I'm going to run
23 through the rest of these very quickly and -- and if you
24 could just do a -- a rough sort of a thumbnail
25 calculation and -- and I just ask that you accept,

1 subject to check, cause I don't need you to pull your
2 calculator out, but using that same calculation, the
3 diversion for revenue calculation for general service
4 non-demand would be 38 percent.

5 Does that look about right?

6 MR. PATRICK BOWMAN: It looks about
7 right, and it would make -- make sense since they're
8 similar characteristics to a residential customer.

9 MS. PATTI RAMAGE: And general service
10 small demand would be 44 percent?

11 Does that sound right?

12 MR. PATRICK BOWMAN: It looks about
13 right.

14 MS. PATTI RAMAGE: General service medium
15 would be 45 percent?

16 MR. PATRICK BOWMAN: I'll accept your
17 math.

18 MS. PATTI RAMAGE: And then general
19 service large less than 30 kV would be 45 percent?

20 MR. PATRICK BOWMAN: Again, I'll accept
21 the math.

22 MS. PATTI RAMAGE: And then the
23 divergence for general service large 30 to 100 kV would
24 be 47 percent?

25 MR. PATRICK BOWMAN: It looks

1 approximately correct.

2 MS. PATTI RAMAGE: And then we get to
3 general service large greater than 100 kV, and here we
4 find the divergence is 58 percent.

5 That look right?

6 MR. PATRICK BOWMAN: I'll -- I'll accept
7 your math. It -- it looks like it could be approximately
8 correct.

9 MS. PATTI RAMAGE: And then finally area
10 and roadway lighting is 33 percent.

11 Does that sound right?

12 MR. PATRICK BOWMAN: It -- it does. With
13 area and roadway lighting I think it's always worth
14 making the mention though that we're -- we're only
15 talking about the energy component of the bill they pay.

16 This -- these numbers don't include the --
17 the lamp component of the bill they pay, and -- and as
18 soon as you take a number -- you seem to get into a
19 percentage game. You can get caught by different
20 classes, different aspects that use different parts of
21 the system, because area and roadway lighting has this
22 huge extra component which is the payment for the bulbs
23 and on that they basically fully cover their costs.

24 The fact that -- that they have a -- a
25 fairly large variation in the bulb part component gets

1 muted in the numbers. They -- they seem much smaller
2 when you get to the percentages at the end because of the
3 -- because of the -- the bulb effect if you want to call
4 it that.

5 MS. PATTI RAMAGE: Okay. Now putting
6 Exhibit MIPUG-15 aside for a moment, which I think we'll
7 all be pleased to hear, I -- I'd like to now -- to deal
8 with your comments with respect to the D -- DSM and the
9 Cost of Service. At a high level, I think you'd agree
10 that successful DSM with domestic customers frees up
11 energy to sell in the export market, correct?

12 MR. PATRICK BOWMAN: If high -- well, it
13 -- it -- successful DSM with domestic customers frees up
14 energy that, you know, could -- could serve many
15 purposes. I -- I think the evidence is about 85 percent
16 of the time it's -- it's in -- Hydro would consider it an
17 export related linkage although sometimes it's avoiding
18 imports or avoiding thermal, but that's -- that's the
19 premise behind the -- the marginal cost summaries that
20 we've -- we've heard.

21 MS. PATTI RAMAGE: And when that saved
22 energy is made available, where does it come from?

23 How is it generated?

24 MR. PATRICK BOWMAN: Well, it depends on
25 how you're recording the system or how you think about

1 the system. If you think about it in terms of somebody
2 who's got to operate the system, they'll have to make
3 sure that the generation balances the load at every
4 instant in time. And so there -- they have generation
5 resources and they have load, and there's -- it's a
6 mixture of those generation resources that supplies the
7 system.

8 If you think about it from a planning
9 context, which is the way DSM is usually thought about,
10 and -- and this would be more like along the lines in
11 Manitoba's Power Resource Plan -- DSM is treated more as
12 a -- as a generator if you like it. It's in the resource
13 side of the equation, not in the load side of the
14 equation.

15 So there's two (2) different ways to think
16 about it, depending on -- on the way that you -- whether
17 you're involved in operating a system or whether you're
18 involved in planning a system.

19 MS. PATTI RAMAGE: Okay. I think my
20 question was intended -- and perhaps I didn't make it
21 clear -- to be a little simpler -- I'm not -- I'm asking
22 where the actual electron comes from. It doesn't come
23 from the balance sheet. It doesn't come from a Cost of
24 Service Study. We do -- it comes from Manitoba Hydro's
25 thermal or hydraulic generation.

1 Is that correct?

2 MR. PATRICK BOWMAN: Well, it depends on
3 how you think about it. If you looked at our table at
4 page 33, we show you the balance -- the way it would be
5 shown in the Cost of Service Study and where the
6 generation is coming from, and there's nothing there
7 called DSM generation.

8 I was just saying if you look at it in a
9 power resource plan context, there is something called
10 DSM resource. So, does the electron come from the
11 customer didn't use it anymore? Or does it come from the
12 generator that it no longer has to flow to that customer,
13 it goes somewhere else?

14 It's -- it's a bit of an angels on the
15 head of a pin type of argument. There's -- there's an
16 electron freed up in any event.

17

18 (BRIEF PAUSE)

19

20 MS. PATTI RAMAGE: Sorry, if I could have
21 one (1) moment 'cause this could shorten the cross-
22 examination a bit so I think it's worth taking thirty
23 (30) seconds.

24

25 (BRIEF PAUSE)

1 MS. PATTI RAMAGE: Mr. Bowman, you made a
2 statement to the effect yesterday that Manitoba Hydro's
3 target debt/equity ratio will not be achieved for
4 decades. Can you point to the specific evidence on
5 the record upon which you based that statement?

6 MR. PATRICK BOWMAN: No, there's no
7 evidence on the record that goes beyond the ten-year (10)
8 horizon of the IFF, which I guess qualifies as a decade.
9 But, all that we've been relying on is that when you look
10 to the types of net income that Hydro has in its IFF
11 towards the end of the period that they forecast at -- I
12 can get the number if you like -- but, you know in the --
13 in the order of 200 million a year or less, and you
14 consider the fact that there's, you know, a number of
15 billions of dollars of capital only a few years beyond
16 that.

17 There's a fair bit of time before one will
18 build up anywhere near 5 or 6 billion in -- in retained
19 earnings if you sort of stay on that track, which would
20 be required to achieve the debt/equity ratio. So it's a
21 -- it's sort of a simple extrapolation. But there's --
22 there's no one has filed any evidence that goes, you
23 know, beyond year eleven (11).

24 MS. PATTI RAMAGE: Finally, Mr. Bowman,
25 dealing with MIPUG Exhibit 9, and you don't need to turn

1 to it, that's the economic impact of the -- of MIPUG --
2 the March, 2008, update.

3 Did you or your firm assist in the
4 preparation of that document?

5 MR. PATRICK BOWMAN: I was not personally
6 involved. The MIPUG members worked with people at our
7 firm to compile their data into that document. They --
8 each member shared their data but they had one (1) place
9 where centrally compiled it -- added up the different
10 totals. They didn't share it with each other and helped
11 them get it written in the form that they were satisfied
12 with.

13 MS. PATTI RAMAGE: Are you aware if
14 attempts were made to insure you were getting apples to
15 apples comparisons? For example, were -- would there be
16 a standard EFT calculation used by all members?

17 Do you know what efforts were made?

18

19 (BRIEF PAUSE)

20

21 MR. PATRICK BOWMAN: Yeah, it was
22 prepared working with the data that the members could
23 make available and different companies consider those
24 type of statistics in different ways. So the -- the
25 intent within that -- that study was simply to -- to

1 compile numbers following along the way that each
2 individual member would -- would report them.

3 And -- and I should note that I believe
4 there may even be one (1) or two (2) members who didn't -
5 - didn't report anything towards -- towards the study.
6 But for those who did contribute data, it was -- it was
7 the data the way that they report them.

8 It wasn't -- it wasn't something that was
9 intended to be error checked or -- or produced for sort
10 of at an evidentiary level.

11 MR. ROBERT MAYER: Just as an aside, Mr.
12 Bowman, I can tell you that Highway Number 6 extending
13 from Grand Rapids to Ponton was not done in the '60s.

14 MR. PATRICK BOWMAN: My only comment on
15 Highway Number 6, because it was something that you
16 wanted to make sure about, was the reference in the study
17 is two (2) facts pulled off of the City of Thompson's
18 website.

19 So that -- that's where the -- that
20 information comes from.

21 MR. ROBERT MAYER: Provincial Trunk
22 Highway Number 6 was built when Joe Borowski was the
23 Highways Minister. It was built in the '70s.

24 The highway that was built in the date
25 1966 is Provincial Road 391 which went from Thompson to

1 the junction of Highway 10. And that resulted from the
2 1964 strike and that was part of the negotiations that
3 settled the '64 strike with Inco. I'm surprised your
4 clients are not aware of that.

5 MR. PATRICK BOWMAN: I'll try to make
6 sure the next version of the study includes that with the
7 appropriate personal communication reference. Thank you.

8 MS. PATTI RAMAGE: Mr. Chairman, that
9 concludes Manitoba Hydro's cross-examination. I'd just
10 like to thank the -- the InterGroup panels for their
11 assistance in this hearing.

12 THE CHAIRPERSON: Thank you, Ms. Ramage.
13 Mr. Peters, given Ms. Ramage's cross-examination, is
14 there any few last points that you may want to survey?

15 MR. BOB PETERS: I do have two (2) areas,
16 Mr. Chairman, one (1) on the revenue requirement side and
17 one (1) on the cost of service side that I don't believe
18 have been -- the record is fully complete on them, and
19 I've given Mr. Mayer my time estimate, and I'm going to
20 try to hold to it.

21 THE CHAIRPERSON: Please proceed.

22

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

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

25 Mr. McLaren and Mr. Bowman, in terms of the revenue

1 requirement side, you had indicated to the Board that
2 from your report card, Hydro only made one (1) mistake on
3 the interpretation of the Board's cost of service order
4 and that had to do with DSM, correct?

5 MR. PATRICK BOWMAN: We only identified
6 one (1) item coming out of the earlier cost of service
7 order that Hydro incorrectly applied.

8 I'm -- I'm not sure we necessarily
9 reviewed it on the revenue requirement context which was
10 your -- your lead-in. But within the Cost of Service
11 Study we only identified one (1) thing that it seemed it
12 was -- was incorrectly applied from what this Board
13 directed.

14 MR. BOB PETERS: All right. What about a
15 second aspect and that being the assignment of all
16 thermal costs to exports?

17 Does -- does InterGroup agree that
18 Manitoba Hydro interpreted the Board's order correctly in
19 that area?

20

21 (BRIEF PAUSE)

22

23 MR. PATRICK BOWMAN: I -- I'll admit, Mr.
24 Peters, that it wasn't one (1) that we noticed -- noted
25 -- tweaked upon until we had heard it referenced in this

1 hearing.

2 I think if one goes specifically through
3 the words of the Board's directive, it -- it -- it's a --
4 it may be a fair conclusion that Hydro has not done what
5 the Board's words could be read to say.

6 I haven't gone back to check carefully the
7 Board's wording against the Cost of Service Study. It
8 wasn't -- I'll tell you the reason it didn't -- didn't
9 come up as one (1) of the things we -- we noted in our
10 review, was without parting the words we would have
11 understood the Board's intent to be that it really was
12 fuel costs that was meant to be -- to be assigned against
13 that.

14 And -- and that it's not to -- it's not to
15 quibble or say the Board may have -- may have meant
16 something different. But I think on a -- on a -- the
17 read of the order we did, we may have come to the same
18 conclusion as Manitoba Hydro that -- that it was -- it
19 would have meant to be fuel because, in a sense, clearly
20 the thermal assets are a necessary compliment to the
21 Hydro assets and as a result, probably merit
22 consideration the same as other common pool generation
23 assets.

24 I'm -- I'm not sure if I'm being perfectly
25 clear, but I -- I think our test was of reasonableness of

1 the study more so than strict interpretation of -- of the
2 Board's order. It wasn't exactly the way we reviewed it.

3 MR. BOB PETERS: All right, do I take
4 from that answer than, Mr. Bowman, that the remaining \$45
5 million of finance depreciation OM&A related to thermal
6 costs going into the allocation pot -- if I can -- is an
7 acceptable methodology according to your interpretation?

8 MR. PATRICK BOWMAN: Yes, the -- you --
9 you pretty much can't have a Hydro system operating at
10 its best without the backup of thermal resources, be that
11 in the same jurisdiction or elsewhere. So, it's -- it's
12 almost a necessary compliment in order to make sure you
13 get the best of the plants, in order to back you up
14 against drought.

15 Otherwise you -- you start to, trying to
16 go to an almost 100 percent Hydro system, you start to
17 have to build Hydro assets to protect yourself on the
18 drought of the other Hydro assets, and it's -- it's not
19 necessarily the most efficient way to consider backing
20 yourself up against drought.

21 MR. BOB PETERS: All right, thank you.
22 Still related to the Cost of Service Study, the energy
23 waiting was done on a twelve (12) period basis with the
24 eight-year (8) average surplus energy prices, correct?

25 MR. PATRICK BOWMAN: It's definitely on a

1 twelve (12) period basis using historical SEP prices
2 adjusted for inflation. I -- I don't recall it being
3 eight (8) years or not eight (8) years. It's just one
4 (1) number that's not in my head at the moment. But --
5 but the twelve (12) period aspect is correct.

6 MR. BOB PETERS: And to assign energy to
7 different time periods, Hydro used actual information for
8 2005/'06?

9 MR. PATRICK BOWMAN: Yes, I believe
10 that's correct.

11 MR. BOB PETERS: And that -- that was a
12 high water flow year, from your recollection, Mr. Bowman?

13
14 (BRIEF PAUSE)

15
16 MR. PATRICK BOWMAN: If 2005/'06 actuals
17 -- sorry, 2005/'06 actuals would correspond to a high
18 flow year, other years of the eight-year (8) period would
19 correspond to different flows.

20 MR. BOB PETERS: And if you picked that
21 the high flow year, that would have the effect of perhaps
22 skewing the results of the energy assignments?

23 MR. PATRICK BOWMAN: Well, it -- it
24 could, if there was a high flow year included. It could
25 if there was a low flow year included, but this is always

1 the challenge about using actuals. In a sense, one (1)
2 thing you know about actuals is they've always got --
3 they're always burdened with all the things that actually
4 happened, be it gas prices that existed or equipment
5 failures that existed in the system, or all sorts of
6 other things, weather, flows.

7 And so when you're going to try to use
8 actuals to deal with something that is meant to represent
9 a future condition using something that averages over
10 time like Hydro has proposed, and -- and has implemented,
11 accepted by this Board, is a -- is a sensible way of
12 trying to dampen out those, all -- all that burden of the
13 actual events that occurred during that period.

14 It would cause us more concern -- my key
15 comment on the SEP weightings, is they're being used to
16 -- to allocate the relative dollars to each of the
17 periods. It's -- it'd be a different thing if they were
18 being used to set the actual level of rates so that you
19 were looking for the absolute values to be correct.

20 If you're looking at -- in -- in this
21 case, you don't need the absolute values to be correct in
22 order to get the right weightings. You just need them
23 relatively to be balancing in comparison to each other in
24 order to get weightings that are representative of the --
25 of the value in the different time periods.

1 MR. BOB PETERS: In that answer, Mr.
2 Bowmen, you're assuming that Manitoba Hydro used averages
3 for the energy distribution, correct?

4 MR. PATRICK BOWMAN: I'm not sure I
5 understand the question, Mr. Peters.

6 MR. BOB PETERS: Let me ask it this way:
7 If -- if one was to use average -- the average energy
8 distribution over a time period you would support using
9 the average export sales prices over the same time period
10 if you were going to do the calculation?

11 MR. PATRICK BOWMAN: Well, I'm -- I'm
12 still a little bit confused about the energy
13 distribution, as to whether you mean the twelve (12)
14 period energy that's in the cost of service that these
15 allocations are used to -- to ultimately come up with the
16 allocator. Or whether you mean the energy distribution
17 in terms of looking at not just the price of SEP energy
18 in some past period, but also the quantity of SEP energy
19 sold. That -- I'm -- I'm not sure which of those two (2)
20 you're -- you're sort of referring to.

21 MR. BOB PETERS: I was referring to the
22 latter, but to -- to help the Board understand the topic
23 or the issue a bit better, if -- if the energy weighting
24 is done on a twelve (12) period basis, with let's say an
25 eight (8) year average surplus energy prices, then would

1 it also be correct to use average export sales prices
2 over the same eight (8) year period? Or ex -- yeah, I'm
3 sorry, export volumes -- sales volumes over that period.

4 MR. PATRICK BOWMAN: I -- I would say the
5 answer is no. If -- if -- again it's -- it's a little
6 bit hard for me to -- to think exactly, you know, the
7 different steps; where exactly we're talking about in the
8 -- in the mix. But when you're doing -- let -- let me
9 see if this answers it -- when you're doing the Cost of
10 Service Study you start with the inputs from the revenue
11 requirement, from the financial forecast. Those should
12 reflect your best forecast of what's going to occur in
13 the year that -- that you're modeling. And you bring
14 forward those costs and you bring forward those loads.

15 The SEP prices are -- are solely used to
16 determine what is the relative value of energy in -- in
17 the twelve (12) different time periods we talk about:
18 peak versus off-peak, summer versus spring versus fall.
19 And it's meant to capture the -- particularly, the -- the
20 result being peak energy is -- is more valuable in an SEP
21 context than off-peak energy and summer energy is more
22 valuable than -- than spring energy. And eight (8) year
23 averages of SEPs are meant to capture that and to give a
24 -- a quantifier to that allocation method -- the -- to --
25 to the twelve (12) different periods, a -- a relative

1 allocation.

2 Again when you say export prices, remember
3 we use that relative allocation then to assign costs to
4 the classes which includes an export class, and in terms
5 of export prices that export class is you know, revenues,
6 should be based on your forecast of export revenues for
7 the year in which you're -- you're looking ahead.

8 And I -- so I -- I don't think you have to
9 look at the export revenues, or prices, or the relative
10 balance, or quantity of exports, or the relative quantity
11 of power sold to simply use those SEPs to capture the
12 difference in value of energy between on-peak versus off-
13 peak or -- or summer versus winter.

14 MR. BOB PETERS: Okay, I -- I have your
15 point on that. I want to turn to your exhibit, MIPUG-15,
16 and, Mr. McLaren or Mr. Bowman, when you use the marginal
17 cost of generation in your column A, line 9, you use the
18 \$1.3 billion number from Manitoba Hydro's Exhibit 68.

19 Have I got that correct?

20 MR. PATRICK BOWMAN: Correct. Our intent
21 was not to recalculate any numbers, it was simply to show
22 that using the same inputs as Hydro's table with the one
23 (1) arithmetic correction that we noted, how does it flow
24 through the -- the a -- a marginal cost of service
25 perspective when you actually apply it by function as

1 other people would use the EPCM (sic) test.

2 MR. BOB PETERS: Do you accept that the
3 \$1.315 billion correctly reflects the marginal cost of
4 generation?

5 MR. PATRICK BOWMAN: We have no basis to
6 accept that, Mr. Peters. I don't believe there is -- it
7 relies on the output of the marginal cost studies and --
8 and data that -- that has been put forward in this
9 Hearing, but that no party has any ability to test, so
10 we're -- we're simply working with Hydro's numbers.

11 MR. BOB PETERS: Is it your view that
12 Manitoba Hydro could actually sell 20,800 gigawatt hours
13 of additional energy into the export market at about
14 eight point three (8.3) cents? Or, sorry, six point
15 three (6.3) cents.

16 MR. PATRICK BOWMAN: Not as the system
17 now exists, but that's -- that's the -- the challenge
18 with taking a concept like marginal that's supposed to
19 apply to a small margin and trying to apply it to the
20 full bulk quantity of power.

21 That's the -- that's one (1) of the
22 reasons why things like marginal cost of service or some
23 of these aspects of planning marginal costs tend not to
24 be used in this way, other than those very few cases we
25 noted, because there's a real danger at saying -- of

1 extending too far the slope of the graph, if you like,
2 which is what you're trying to measure when you deal with
3 the marginal costs.

4 MR. BOB PETERS: And then on MIPUG
5 Exhibit 15, in column C and D, you simply weighted the
6 marginal cost of generation provided by Manitoba Hydro as
7 a percentage of the total of a 100 percent, correct?

8 MR. PATRICK BOWMAN: That's correct.
9 That's what column D does.

10 MR. BOB PETERS: And then you multiply
11 that by the embedded costs total which was in column E?

12 MR. PATRICK BOWMAN: That's correct.
13 That -- that is what is meant by when you say the equal
14 proportion of marginal costs. The gap -- the number you
15 don't see there -- which is 780 million, or -- or the
16 difference between five thirty two (532) and one three
17 one four (1,314) is allocated back to all the classes in
18 effect in equal proportion to their marginal cost, and
19 their proportion of the marginal costs is what is indeed.

20 MR. BOB PETERS: Can you confirm that if
21 you used Exhibit 68 from Manitoba Hydro and took the 2008
22 PCOSS weighted energy column, which is the top left
23 numerical column, it would yield the same results as the
24 equal proportion of marginal costs that you calculated in
25 your Exhibit 15?

1 MR. PATRICK BOWMAN: I haven't checked
2 the math but for generation, I would expect it would
3 because all of the kilowatt hours are priced the same. I
4 don't believe that might happen for the others, like
5 transmission, which are based on -- on peaks rather than
6 energy. But -- but I believe that would happen for
7 generation. I wouldn't mind checking the math to make
8 sure that's the case, but I believe that would be the
9 case.

10 MR. BOB PETERS: All right. With that,
11 Mr. Chairman, again I'd like to thank Messrs. Bowman and
12 McLaren for their answers and those conclude my
13 questions.

14 THE CHAIRPERSON: And we too join in --
15 in thanking the MIPUG panel. We appreciate their
16 contributions --

17 MS. TAMARA MCCAFFREY: Just before we
18 leave the MIPUG panel, Mr. Chair --

19 THE CHAIRPERSON: I'm sorry. Re-direct?

20 MS. TAMARA MCCAFFREY: Very brief.

21

22 RE-EXAMINATION-IN-CHIEF BY MS. TAMARA MCCAFFREY:

23 MS. TAMARA MCCAFFREY: Just two (2) --
24 two (2) concepts to clarify from the discussions that
25 have gone on in the last couple of days. Ms. Ramage

1 yesterday, Mr. Bowman, was having a discussion with you
2 about this concept of reserves and retained earnings, and
3 I believe I even heard her say, "renaming retained
4 earnings".

5 Are reserves and retained earnings
6 interchangeable concepts?

7 MR. PATRICK BOWMAN: Well, they're not
8 interchangeable concepts in its simplest form if you're
9 someone who has to run financial statements. In its
10 simplest form, the reserves may look no different than
11 retained earnings or maybe nothing but retained earnings
12 by a different name, if you like, and it's not that
13 different than this Board's comment on internally
14 restricting retained earnings in its simplest form.

15 It may look that way when you are running
16 the statements, but it may look very different when
17 you're sitting there looking forward to a year and
18 setting rates. If indeed it allows this Board a second
19 item of consideration -- if -- if some portion of those
20 otherwise named retained earnings arise due to a -- not
21 just the residual net income but what happens above that
22 in the mix as a priority on Hydro's rate changes.

23 That -- that looks different from a
24 regulatory context when you're setting rates. It may not
25 look different from an accounting context when you're

1 running the statements at the end of the year. And,
2 again, that's just in its sort of simplest form.

3 MS. TAMARA MCCAFFREY: And there, sir,
4 you are talking about the distinction between the reserve
5 concept to manage risks as opposed to the current model
6 of using a debt/equity ratio in retained earnings to do
7 that?

8 MR. PATRICK BOWMAN: Correct.

9 MS. TAMARA MCCAFFREY: One (1) final
10 point. There's been some discussion about the RIM test
11 in the context of evaluating DSM, and we have your
12 evidence regarding the tests used. I just want to
13 clarify your position. We talked about the merit or the
14 lack of merit of a TRC test in turning -- in terms of the
15 possible potential of screening out efficient DSM.

16 Is that your position with respect to the
17 RIM test also? Or is the RIM test something that is
18 still a useful tool to evaluate DSM?

19 MR. PATRICK BOWMAN: Our comments
20 suggesting that the RIM be the priority was in order to
21 reflect the fact that there's -- we have some discomfort
22 with eliminating DSM programs or not considering DSM
23 programs which would fail the other test, the TRC test or
24 the MRC test.

25 The concept of those earlier tests, TRC or

1 the like, is that Hydro first screens whether the DSM
2 participant has any economics to participate in the DSM
3 program, whether they're going -- whether the customers
4 are going to see a good return on their money. If the
5 customer's not going to see a good return on their money
6 it doesn't make it to the next level of consideration.

7 Well, what we know is that a lot of times
8 when you look to human behaviour, people decide a lot of
9 things -- to do a lot of things beyond the return they're
10 going to get on their money. I -- I hear that there's a
11 lot of people buying hybrid cars who will never see a
12 return on the extra premium they pay for the hybrid, but
13 they do it anyway.

14 We also heard that people who are
15 installing small wind turbines on their properties out in
16 western Manitoba are -- are not going to see a good
17 return on their money compared to the price that Manitoba
18 Hydro sells for, but some are doing it anyway.

19 So if those type of -- of cars, just to
20 give an analogy, I'm not suggesting Manitoba Hydro has a
21 role in civics -- but if those type of opportunities --
22 we give another example in our -- in our interrogatories
23 which is solar hot water heating for people who have
24 electric hot water heat -- those -- those technologies
25 are unlikely to be economic for the customer. But

1 there's still people who may want to do it and there's
2 people who may be even more encouraged to do it with only
3 a small amount of -- of help from Hydro.

4 That would be a worthwhile investment by
5 Hydro. It would provide resources to the grid at a price
6 to Hydro that is -- is less than they could require other
7 resources. And it would provide someone who wants to
8 otherwise get on with it a bit of help to get on with it.

9 Ruling that out, because in Hydro's mind
10 there's no economics for the ratepayer, is -- is not
11 something we're recommending. We're saying, look at --
12 look at the cost you can get resources for, consider what
13 -- what people may be interested in doing, find out
14 whether for a small amount of investment you can
15 encourage people to -- to do things that would lower the
16 electrical load, be it solar, or hot water heating, or
17 indeed fuel switching; using more natural gas for certain
18 things that they'd otherwise use electricity; lower
19 overall greenhouse gas emissions as we've seen in one of
20 the interrogatories, and do it for a relatively modest
21 investment that provides a good return to Hydro and let
22 the customer get on with something they'd otherwise want
23 to do.

24 Now, Mr. McLaren cautioned me to make sure
25 that we're saying the intent isn't to dupe people. It

1 isn't to pretend that they're going to get a return when
2 they're not. But if someone otherwise wants to get on
3 with it, don't -- don't ignore the potential that might
4 be there to acquire some electricity resources at -- at a
5 -- at a reasonable cost.

6 MS. TAMARA MCCAFFREY: Thank you. Those
7 are the only questions I have with respect to re-direct.
8 I can indicate that we did provide an undertaking to Mr.
9 Williams yesterday to provide the Newfoundland and
10 Labrador Hydro report, February 5th, 2008, Review of
11 Industrial Customer Rate Design.

12 We have copies of that and I can
13 distribute them as well, and they can be marked as
14 Exhibit -- I suppose we're at sixteen (16) now, I
15 believe.

16 THE CHAIRPERSON: Sixteen (16), I
17 believe.

18

19 --- EXHIBIT NO. MIPUG-16: Newfoundland and Labrador
20 Hydro report, February 5th,
21 2008, Review of Industrial
22 Customer Rate Design

23

24 MS. TAMARA MCCAFFREY: The other thing I
25 -- I have today is, pursuant to our -- our obligation

1 that we accepted to keep the Board apprised of
2 development of witness -- witnesses that we intend to put
3 forward at the second hearing, we have now received a --
4 a letter from Tony Frayne who is from Quebec. And it's a
5 brief summary similar to the document that we filed from
6 Peter Ostergaard from BC, just giving a brief summary of
7 some of their experience with respect to -- it's not
8 intended to be evidence in the next proceeding, but just
9 to give the Board and others a flavour for -- for where
10 we're going with respect to this.

11 And with your permission, we'd be happy to
12 -- to provide it and distribute it around the room.

13 THE CHAIRPERSON: Yes, that would be
14 helpful.

15 MS. TAMARA MCCAFFREY: Thank you.

16 THE CHAIRPERSON: Mr. Gaudreau I'm sure
17 will assist.

18 MS. TAMARA MCCAFFREY: Ms. Pollitt-Smith
19 is also here to -- to help as well.

20 THE CHAIRPERSON: So with that, thank
21 you, Ms. McCaffrey, and thanks again to the panel. I
22 appreciate your testimony.

23

24

(WITNESSES STAND DOWN)

25

1 THE CHAIRPERSON: We're going to move now
2 to the Coalition witness panel of Mr. Harper and Mr.
3 Dunsky.

4 Mr. Williams, do you want a few minutes
5 to --

6 MR. BYRON WILLIAMS: If I might, Mr.
7 Chairman.

8 THE CHAIRPERSON: -- to situate yourself.

9 MR. BYRON WILLIAMS: Good morning, if we
10 have a couple minutes for set-up that be helpful.

11 THE CHAIRPERSON: Very good.

12 MR. BYRON WILLIAMS: I might suggest you
13 stand down for perhaps ten (10) minutes. There...

14 THE CHAIRPERSON: Okay, we'll take the
15 morning break now.

16

17 --- Upon recessing at 9:30 a.m.

18 --- Upon resuming at 9:46 p.m.

19

20 THE CHAIRPERSON: Okay, welcome back all.
21 Mr. Williams will proceed with swearing in the witnesses,
22 introductions and direct testimony.

23 MR. BYRON WILLIAMS: Thank you.

24 THE CHAIRPERSON: And welcome to the
25 panel, of course.

1 MR. BYRON WILLIAMS: And I'll certainly
2 introduce them, Mr. Chairman, in just one (1) second. I
3 did also want to welcome one (1) of my clients, Ms.
4 Gloria Desorcy, who's over to your extreme left, lobbying
5 Mr. Rose about more low income energy efficiency
6 programming for Manitoba Hydro.

7 And I would like to introduce to the --
8 the Board, to your -- going from left to right, Mr.
9 Philippe Dunsky and Mr. William Harper, and I'd ask that
10 Mr. Harper be sworn and Mr. Dusky be affirmed, please,
11 Mr. Gaudreau.

12

13 COALITION PANEL:

14 PHILIPPE DUNSKY, Affirmed

15 WILLIAM HARPER, Sworn

16

17 (VOIR DIRE COMMENCES)

18

19 EXAMINATION-IN-CHIEF BY BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: Thank you, Mr.
21 Gaudreau. We'll -- we'll start out with qualifications
22 and Mr. Harper, by the looks of things I think you're a
23 little more senior than Mr. Dunsky, by my gray hair
24 count, in any event, so I know the Board's familiar with
25 you but I wonder if very briefly --

1 MR. ROBERT MAYER: Back to hair, are we?

2

3 CONTINUED BY MR. BYRON WILLIAMS:

4 MR. BYRON WILLIAMS: We won't be letting
5 any hair down, Mr. Mayer. I've learned my lesson.

6 But Mr. Harper, perhaps if you could
7 briefly outline your qualifications?

8 MR. WILLIAM HARPER: Thank you, Mr.
9 Williams and good morning panel. In terms of my
10 background, I've spent over twenty-five (25) years
11 working in the electricity industry sector, primarily
12 with Ontario Hydro, and then at successor company, Hydro
13 One Networks, more recently as a consultant with
14 Ecoanalysis Consulting Services.

15 During my years with Ontario Hydro, I
16 initially worked on cost of service studies, and I
17 subsequently moved to their rates department where I was
18 the manager for seven (7) years with responsibilities for
19 rate design, and the regulation of Ontario's municipal
20 electric utilities.

21 During my last five (5) years with Ontario
22 Hydro and Hydro One, I worked in regulatory affairs where
23 I was responsible for coordinating the company's
24 participation in various regulatory and other reviews.
25 While at Hydro, I testified a number of times before the

1 MR. BYRON WILLIAMS: And prior to that
2 you were the executive director of the Helios Centre for
3 Sustainable Energy Strategies which is an energy think
4 tank.

5 Is that right, sir?

6 MR. PHILIPPE DUNSKY: Yes, that's right.

7 MR. BYRON WILLIAMS: And you served with
8 Helios from 1996 to 2004.

9 Is that right?

10 MR. PHILIPPE DUNSKY: Indeed.

11 MR. BYRON WILLIAMS: And prior to that my
12 understanding is that you worked for five (5) years in a
13 variety of consulting and analytical capab -- capacities
14 in the field of sustainable energy including as a member
15 of the Quebec Government Commission tasked with revising
16 the provinces energy policy.

17 Is that right, sir?

18 MR. PHILIPPE DUNSKY: That's absolutely
19 right.

20 MR. BYRON WILLIAMS: I want to just turn
21 to energy efficiency for a couple minutes. Would it be
22 fair to say that you've been involved in the design and
23 analysis of energy efficiency and related programs for
24 over fifteen (15) years?

25 MR. PHILIPPE DUNSKY: Yes, indeed.

1 MR. BYRON WILLIAMS: And in your current
2 consulting practice, you advise -- you advise a wide
3 range of clients, utilities and government agencies on
4 energy -- including utilities and government agencies on
5 energy efficiency programs?

6 MR. PHILIPPE DUNSKY: Yeah, to a large
7 extent my clients now are utilities and government
8 agencies indeed.

9 MR. BYRON WILLIAMS: Okay. And would it
10 be fair to say that your clients include or have included
11 Hydro Quebec, Gaz Metro, the Quebec Energy Efficiency
12 Agency, the Federal Office of Energy Efficiency, the
13 Energy Efficiency Fund, the Long Island Power Authority,
14 the New Jersey Board of Public Utilities, and the New
15 Brunswick Energy Efficiency and Conservation Agency, sir?

16 MR. PHILIPPE DUNSKY: Yeah, those have
17 been some of my clients in the past -- in the past couple
18 of years.

19 MR. BYRON WILLIAMS: And just currently
20 would I be correct in suggesting to you that you're --
21 you're serving as senior advisor to the -- associated
22 with the State of New Jersey in the development of a high
23 level comprehensive portfolio of energy efficiency
24 programs. Would that be fair, sir?

25 MR. PHILIPPE DUNSKY: Indeed.

1 MR. BYRON WILLIAMS: And you also serve
2 as advisor for the design of residential sector programs
3 for the Long Island Power Authority.

4 Is that correct?

5 MR. PHILIPPE DUNSKY: Yes, indeed.

6 MR. BYRON WILLIAMS: Turning back to
7 Canada, you're the lead consultant to Hydro Quebec in
8 it's strategic review of current -- it's current
9 portfolio of energy efficiency programs?

10 MR. PHILIPPE DUNSKY: Yes.

11 MR. BYRON WILLIAMS: And you're an
12 advisor to the Quebec Energy Efficiency Agency in the
13 context of it's own long term energy efficiency process?

14 MR. PHILIPPE DUNSKY: That's right.

15 MR. BYRON WILLIAMS: Okay. Let's just
16 focus on low income for energy efficiency programs for a
17 second. I know it's not your primary focus, but would it
18 be fair to say that they've been part and parcel of many
19 of the program portfolios that you worked on?

20 MR. PHILIPPE DUNSKY: Yes, anywhere I
21 work on -- on broad energy efficiency portfolios, low
22 income programs tend to be, as you said part and parcel
23 of them.

24 MR. BYRON WILLIAMS: Okay. And in 2001
25 you were the author of the first study of a proposed

1 Canada-wide low income energy efficiency program,
2 correct?

3 MR. PHILIPPE DUNSKY: Indeed, yes.

4 MR. BYRON WILLIAMS: Okay. And you've
5 also recently conducted a review of low income energy
6 efficiency program best practices throughout the United
7 States and to a lesser degree, Canada and the UK?

8 MR. PHILIPPE DUNSKY: Yes, in that
9 capacity I reviewed upwards of twenty-five (25) or thirty
10 (30) different low -- low income energy efficiency
11 programs in North America.

12 MR. BYRON WILLIAMS: And without going
13 into details, in terms of programs that are underway but
14 not yet announced, can you tell us what you're doing in
15 this your -- at a high level in terms of your work for
16 Hydro Quebec and low income energy efficiency program.

17 MR. PHILIPPE DUNSKY: In terms of low
18 income energy efficiency programs, I'm -- I'm currently
19 working -- I'm tasked with the design of -- of a large
20 scale energy efficiency program for low income customers
21 in the province of Quebec. I'm doing that formally for
22 Hydro Quebec, and -- and I might say informally for --
23 for the full array of distributors, electricity and
24 natural gas distributors, oil heating and propane, as
25 well as the Quebec Energy Efficiency Agency.

1 Harper and Mr. Dunsky as experts, as proposed.

2 THE CHAIRPERSON: Ms. Ramage...?

3 MS. PATTI RAMAGE: We have no dispute
4 with these gentlemen's qualifications.

5 THE CHAIRPERSON: Ms. McCaffrey...?

6 MS. TAMARA MCCAFFREY: We have no
7 challenge to their qualifications.

8 THE CHAIRPERSON: Very good then.

9

10 (VOIR DIRE CONCLUDES)

11

12 MR. BYRON WILLIAMS: And before we
13 proceed perhaps I might ask Mr. Gaudreau to distribute
14 three (3) documents. The first, Mr. Harper will speak
15 about this in just a couple of seconds, but is a revised
16 response first -- or to the Information Request, Manitoba
17 Hydro/Coalition Number 3.

18 Secondly -- and I'd suggest that be marked
19 as Coalition Number 40, Mr. Chairman.

20 THE CHAIRPERSON: Very good.

21

22 --- EXHIBIT NO. COALITION-40: Revised response to the
23 Information Request, Manitoba
24 Hydro/Coalition Number 3

25

1 MR. BYRON WILLIAMS: Thank you, Mr.
2 Gaudreau. Secondly, it'll be an outline of Mr. Dunsky's
3 oral testimony, the PowerPoint presentation in print
4 form, which I'd suggest be marked as Coalition-41.

5
6 --- EXHIBIT NO. COALITION-41: Outline of Mr. Dunsky's
7 oral testimony

8
9 MR. BYRON WILLIAMS: And then also I
10 don't believe Mr. Dunsky's CD is on the record, so we
11 thought that we'd ask that that be marked as Coalition-
12 42.

13 THE CHAIRPERSON: That's fine.

14
15 --- EXHIBIT NO. COALITION-42: Mr. Dunsky's CD

16
17 (BRIEF PAUSE)

18
19 THE CHAIRPERSON: Okay, we have the
20 exhibits.

21 MR. BYRON WILLIAMS: Okay, thank you.
22 And thank you, Mr. Gaudreau.

23
24 EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS:

25 MR. BYRON WILLIAMS: Mr. Harper, just in

1 terms of your evidence can you confirm that the evidence
2 filed with the Board on February 1st, 2008 titled,
3 "Review of Manitoba Hydro's Proposed 2008 Revenue
4 Requirement and Residential Rate Design Changes", was
5 prepared by you, sir?

6 MR. WILLIAM HARPER: Yes, it was.

7 MR. BYRON WILLIAMS: Similarly, can you
8 confirm that the interrogatory responses filed on
9 February 20th, in response to questions from the PUB
10 staff, Manitoba Hydro, TREE, and MIPUG regarding the --
11 that evidence, was prepared by you, sir?

12 MR. WILLIAM HARPER: Yes, I do with one
13 (1) exception and that is MIPUG/COALITION Number 3, which
14 Mr. Williams advises me he provided as a preview to the
15 Coalition's final submissions in that particular area.
16 That one was not prepared by myself.

17 MR. BYRON WILLIAMS: Okay. Mr. -- Mr.
18 Harper, are there any changes or corrections you would
19 like to make to either your evidence or interrogatory
20 responses at this time?

21 MR. WILLIAM HARPER: Yes, there were a
22 few obvious typographical errors in my evidence, but
23 there's a couple I'd like to note and correct if I could.
24 The people could like to turn to my evidence and on page
25 31 --

1 MR. BYRON WILLIAMS: If you could just
2 wait one (1) second, Mr. Harper. Go ahead.

3 MR. WILLIAM HARPER: On page 31 on the
4 very last line, which was line 23, there's a reference to
5 29 kilowatt hours. That should be 29 kilowatt hours per
6 day. And the reason why I was correcting that was if you
7 turn over and continue on that line, the line finishes
8 off 30 kilowatt hours and the top of the next page says,
9 "per month", and that again should be per day. So it's
10 29 kilowatt hours per day and 30 kilowatt hours per day.

11 The next set of corrections are on page
12 35. And I realized in going through one of the IRR
13 responses, my aging eyes had skipped a line when I was
14 going across and picking up numbers. So if we go to the
15 first line which -- on that page -- page 35, the 32
16 percent should be 28 percent, so it reads more than 28
17 percent of all electric customers.

18 And then on page -- and then on line 10,
19 the -- it should read from 28.7 percent to 32.4 percent.

20 MR. BYRON WILLIAMS: Mr. Harper, just the
21 last correction on line 10 of page 35 reads from 28.7
22 percent to 32.4 percent.

23 Is that right, sir?

24 MR. WILLIAM HARPER: That -- that's
25 correct. I'm sorry if I misspoke myself.

1 MR. BYRON WILLIAMS: Okay.

2 MR. WILLIAM HARPER: Also as Manitoba
3 Hydro noted in this rebuttal evidence, there was an input
4 error in one (1) of my interrogatory responses. So if we
5 turn to my response to Manitoba Coalition Number 3, and I
6 -- Mr. Williams has provided as Exhibit 40, a revised
7 version of this. And as Manitoba Hydro has noted, the
8 growth in labour costs per FTE should have been 3.8
9 percent instead of the 4.8 percent that's in the table.
10 And that's what I've corrected in the revised response.

11 Now that changes a number of other
12 elements and the line items in the table as well, and
13 perhaps if I could just walk through those, it would be
14 clear where we're coming from.

15 So going from the original table, the --
16 it's now 3.8 percent under the labour costs per FTE
17 instead of four point eight (4.8), which means that the
18 combined impact now changes from what used to be five
19 point seven (5.7) to four point seven (4.7).

20 The labour costs contribution line changes
21 from four point seven (4.7) to three point seven (3.7)
22 and the contribution of labour to the OM&A growth changes
23 from three point (3.3) to 2.6 percent where the two point
24 six (2.6) is simply 70 percent of the three point seven
25 (3.7).

1 At the bottom, the growth and other costs
2 are additional labour requirements and the line changes
3 from 2.4 percent to 4.7 percent.

4 And the -- to text -- and to -- text
5 supporting -- supporting interrogatory response has been
6 changed, just to be consistent with those changes.

7 MR. BYRON WILLIAMS: Mr. Harper, before
8 we leave this response, this was more of a clarification
9 than a correction, but you'll recall that in its rebuttal
10 evidence, Manitoba Hydro also had some concerns at page 9
11 about your calculations so perhaps you could walk them
12 through them briefly for the benefit of Hydro in
13 particular but for other parties as well.

14 MR. WILLIAM HARPER: Of course. If you
15 go back to the original table I had in the original IRR
16 response, Manitoba Hydro Coalition Number 3, Manitoba
17 Hydro in its rebuttal suggested that if labour costs was
18 increasing at 3.3 percent and the total OM&A growth is
19 4.4 percent, then other costs must have to be increasing
20 by more than 4 percent as opposed to 2.4 percent showing.

21 What Manitoba Hydro missed was the fact
22 that the 3.3 percent is not the forecast growth for
23 labour costs. That was four point seven (4.7). The 3.3
24 percent is simply 70 percent of the four point seven
25 (4.7), or labour costs contribution to the weight -- to

1 the weighted average 4 percent value.

2 As I've shown in my revised response, the
3 contribution of labour costs escalation to the 4 percent
4 is now 2.6 percent which means the implied growth for
5 other costs is four point seven (4.7).

6 So the weighted average of labour costs at
7 three point seven (3.7) and other growth at four point
8 seven (4.7) gives you a weighted average value of 4
9 percent overall. One (1) value is higher, one (1) -- one
10 (1) value is lower.

11 If I go to my second table, which is over
12 on the page -- and this isn't changed from the original
13 response -- and we used the labour metrics for 2007 to
14 2009 -- labour costs after allowing for the productivity
15 offset are increasing at 2.2 percent per annum. With the
16 combined growth in other costs of 4.9 percent, this
17 yields the -- the weighted average overall OM&A of 3 -- 3
18 percent, which is the level of OM&A increase that I've
19 suggested is reasonable to consider.

20 The overall point being is that my
21 recommended 3 percent per annum growth for OM&A allows
22 for a 4.9 percent increase in other costs, which is
23 higher than what's been experienced his -- historically
24 and is also higher than the 4.6 percent Manitoba Hydro is
25 showing as the growth in other costs in -- in its

1 Appendix 12.11.

2 MR. BYRON WILLIAMS: Thank you, Mr.
3 Harper.

4 Apart from those corrections and
5 clarification, the evidence and responses are accurate to
6 the best of your knowledge and belief, sir?

7 MR. WILLIAM HARPER: Yes, they are.

8 MR. BYRON WILLIAMS: And we'll get your
9 direct evidence in just a moment. But let's take care of
10 Mr.

11 -- Mr. Dunsky as well while we're at it, Mr. Harper.

12 Mr. Dunsky, you were responsible for the
13 preparation of the evidence dated February 18th, 2008,
14 regarding Manitoba Hydro's proposed Low Income Energy
15 Efficiency Program, sir?

16 MR. PHILIPPE DUNSKY: Yes, I was.

17 MR. BYRON WILLIAMS: And you were also
18 responsible for some Information Responses or
19 Interrogatory Responses which were filed on or about
20 February 28th, 2008, with regard to that evidence, sir?

21 MR. PHILIPPE DUNSKY: That's right.

22 MR. BYRON WILLIAMS: And are there any
23 corrections or clarifications, in terms of your evidence,
24 that you -- you'd wish to bring to the attention of the
25 Board at this time, sir?

1 MR. PHILIPPE DUNSKY: Yes, I -- I too am
2 guilty of a couple of -- of typos. But beyond the minor
3 typos, there's a silly cut and paste error on page 9 of
4 my original written testimony.

5 MR. BYRON WILLIAMS: So that's your
6 written testimony of February 18th, sir?

7 MR. PHILIPPE DUNSKY: That's right. On
8 page 9...

9

10 (BRIEF PAUSE)

11

12 MR. BYRON WILLIAMS: Proceed, Mr. Dunsky.

13 MR. PHILIPPE DUNSKY: On page 9 I
14 produced a table that was my understanding of --
15 essentially of the way the Manitoba Hydro program, as it
16 was proposed, is going to work for the different customer
17 segments.

18 And as I -- I just recently noticed, the
19 bottom right-hand quadrant is actually the exact same as
20 the bottom left-hand quadrant. And that's just a -- a
21 cut and paste error.

22 And so in the bottom right-hand quadrant,
23 where -- where it refers to the CBO, the CBO should be
24 replaced by Manitoba Hydro.

25 MR. BYRON WILLIAMS: Just so I

1 understand, Mr. Dunsky, that's -- because I think a
2 couple of people are just catching up with this.

3 MR. PHILIPPE DUNSKY: Sure, sure.

4 MR. BYRON WILLIAMS: That's page 9, the
5 bottom right-hand corner of the -- the table there, the
6 word

7 "CBO" should be replaced by "Manitoba Hydro."

8 Is that correct?

9 MR. PHILIPPE DUNSKY: That's right.

10 MR. BYRON WILLIAMS: Okay. Any further
11 corrections?

12 MR. PHILIPPE DUNSKY: Not so much
13 corrections, but -- but perhaps a note about something
14 that I said later in my testimony.

15 And that's actually in my response to
16 interrogatories on page 7 of my responses, where I was
17 asked a very detailed question about -- about how to
18 appropriately measure fridge consumption when deciding
19 whether to do a -- a fridge replacement program or
20 whether to replace a specific fridge within a -- a
21 context of the fridge replacement program.

22 And in that response I suggested that the
23 -- that the best approach would not be actual metering on
24 the site. This is a bit of a detail, but just mention it
25 in passing. I've since had the opportunity to look a

1 fair bit more into this particular matter and have come
2 to the conclusion that metering can indeed be -- be an
3 appropriate approach for determining an eligible
4 candidate during an
5 in-home visit.

6 So I just want to retract that -- that
7 position again. It's largely an operational detail but
8 worth mentioning.

9 MR. BYRON WILLIAMS: Mr. Dunsky, just so
10 I'm clear, would that be your response to Information
11 Request Number 12?

12 MR. PHILIPPE DUNSKY: Yes. That does
13 look like it. That's page 9.

14 MR. BYRON WILLIAMS: Page 7?

15
16 MR. PHILIPPE DUNSKY: Was the page 7? I
17 did indeed, yes.

18 MR. BYRON WILLIAMS: Okay, so the
19 clarification relates to your response to PUB Information
20 Request of you, Number 12?

21 MR. PHILIPPE DUNSKY: That's right.

22 MR. BYRON WILLIAMS: Okay, thank you.

23 Subject to those correction -- that correction and that
24 clarification, is the evidence and the information
25 response -- is correct, to the best of your knowledge and

1 ability, sir?

2 MR. PHILIPPE DUNSKY: Yes.

3 MR. BYRON WILLIAMS: Okay. Back to you,
4 Mr. Harper. What's the purpose of your evidence as filed
5 with the Board in this proceeding?

6 MR. WILLIAM HARPER: Ecoanalysis
7 Consulting Services and specifically myself, was asked by
8 the Coalition to review Manitoba Hydro's proposals with
9 respect to the proposed revenue requirement, the overall
10 general rate increase, as well as the proposed
11 residential rate design changes and offer my views and
12 recommendations for consideration by -- by the PUB.

13 MR. BYRON WILLIAMS: Let's start with the
14 overall revenue requirement and the proposed general rate
15 increase for 2008/09.

16 What did you look at in your review of
17 that proposal, sir?

18 MR. WILLIAM HARPER: I primarily looked
19 at Manitoba Hydro's overall performance since -- since
20 the last GRA, which was back in 2004, as well as it's
21 OM&A and cap -- capital spending as is reflected in both
22 the application and the subsequently updated IFF '07-01.

23 The reason for looking at OM&A and capital
24 spending, was that these are two (2) areas of the
25 financial forecast that are most under the direct control

1 of Manitoba Hydro.

2 Now, I realize and acknowledge in my
3 evidence that the PUB cannot dis -- dis -- excuse me,
4 disallow capital spending. However, capital spending
5 does have a significant impact on the Corporation's
6 financial ratios, which in turn influence the decisions
7 about the level of net income and therefore the level of
8 rate increase that's required, and as a result I felt it
9 warranted review.

10 MR. BYRON WILLIAMS: Now, you -- you
11 mention that you had looked at Hydro's overall
12 performance since the last GRA in 2004.

13 With respect to its recent financial
14 performance, what are your conclusions, Mr. Harper?

15 MR. WILLIAM HARPER: Well, for reference,
16 I deal with this on pages 2 through 8 of my evidence, and
17 overall I've concluded that Manitoba Hydro's current
18 financial position at the end of 2006/2007 is better than
19 what was forecast for 2006/2007 at the time of the last
20 GRA.

21 The debt/equity ratio is 80 percent on a
22 consolidated basis, as opposed to the 86 percent forecast
23 at the time of the GRA. Now part of this was due to the
24 higher rate increases directed by the PUB, but it was
25 also due significantly -- to the significantly higher net

1 export revenues that -- that have occurred over that
2 period, despite the drought that we saw in 2003 and 2004.
3 Furthermore, with these improved results for 2006/2007,
4 have come about despite the fact that actual OM&A
5 spending levels exceeded forecast at what had been
6 forecast at the time of the last GRA.

7 Finally, the outlook through to 2013/2014
8 has now improved over what we were looking forward to at
9 the time of the last GRA as well. This can readily be
10 seen by the fact that the debt/equity ratio for that year
11 is now projected in IFF '07 to be 78 percent, as opposed
12 to the 82 percent we were seeing back then.

13 Again, part of this improvement is due --
14 due to the planned domestic rate increases looking
15 forward, which -- which in the current IFF are 2.9
16 percent, as opposed to 2.5 percent. But I believe it's
17 also fundamentally a -- a function of the fact that right
18 now we're at a far better starting point going forward to
19 that year than we were -- how 2006/2007 looked back in
20 the GRA.

21 I've also noted that earlier testimony by
22 Manitoba Hydro's witnesses with regarding to the expected
23 results for 2007/2008 are calling for a higher net income
24 than what was originally included in the plan, which
25 would suggest that the outlook now is probably even a

1 little bit better than what we were seeing in IFF '07-01.

2 MR. BYRON WILLIAMS: How much better?

3 MR. WILLIAM HARPER: Well, I think
4 they're talking about net income now in excess of 300
5 million as opposed to the 264 million, so that's what,
6 \$35 million plus in terms of an additional net income for
7 the year which would go to retained earnings.

8 MR. BYRON WILLIAMS: Thank you, Mr.
9 Harper. I'd like to turn to OM&A, and before we get to
10 talking specifically about Manitoba Hydro, perhaps we
11 could talk -- excuse me -- at a more general level about
12 how regulators can test and insure the reasonableness of
13 OM&A spending plans that utilities put before them.

14 As a starting point, Mr. Harper, are there
15 different ways of testing OM&A forecasts, sir?

16 MR. WILLIAM HARPER: I think -- yes, I
17 think it's fair to say that regulatory boards and indeed
18 intervenors like the parties I support, employ a number
19 of different approaches to test the prudence of a
20 utility's OM&A forecast.

21 In my mind, if I think about it there are
22 probably at least four (4) different ways of trying to
23 address this specific issue, many of which have come up
24 in some form or to some degree or another in -- in this
25 proceeding here already.

1 One way is to look at the actual elements
2 of OM&A themself, and focus on those that have changed
3 significantly from one (1) year to the next and test the
4 reasonableness of the underlying reasons for those
5 changes.

6 This approach assumes the starting values
7 are appropriate, and is probably most useful when the
8 starting values themselves have been set and are -- and
9 are approved values in a previous hearing and the
10 regulator has previously approved them. So then
11 everybody feels they have a sound and approved starting
12 base to work from.

13 In Order 20-07 the PUB directed Manitoba
14 Hydro to file a detailed review of cost causation in it's
15 next GRA which -- which is this one. And in response to
16 that Manitoba Hydro filed Appendix 12-11, which provides
17 a review of year over year changes in costs by cost
18 element and by organizational unit. So this is one way
19 of looking at OM&A.

20 Another way is to approach the assessment
21 on an envelope basis using key cost drivers such as
22 customer count. Variances would then be explained on the
23 basis of unique or one-off requirements. As I understand
24 it, the Corporation's planning process follows a similar
25 approach by setting OM&A per customer targets as part of

1 it's corporate strategic plan and using those as input
2 into the budgeting process that follows.

3 A third way is to benchmark the cost of a
4 utility against other utilities with similar
5 characteristics. This has the advantage of going beyond
6 simply comparing the utility against itself, but also
7 using external comparators in order to test the
8 reasonableness of the budget.

9 Manitoba Hydro Appendix 12.12 provides a
10 simple example of this. The benchmarking studies I
11 referenced in my response to MIPUG Information Request
12 1(A) and the ones prepared by Hydro One and referred to
13 in Mr. -- by Mr. Williams in his cross-examination -- I
14 think that was Coalition Exhibits 8 and 9 -- are more
15 detailed examples of this particular approach.

16 Finally the fourth way I've seen this
17 approached is one can look at -- I want to emphasize this
18 -- one can look at how the utility's spending plans are
19 developed and prioritized. The perspective being that if
20 there's a sound a logical approach to planning then one
21 should have some confidence in the results that come out.

22 Also year over year changes can then be
23 directly linked to changes in the conditions or the
24 inputs to the planning process and this makes it much
25 more easier to link changes in the observed cost to the

1 underlying cost drivers.

2 This is where reports such as an asset
3 condition assessment are useful in demonstrating the
4 current deficiencies in the system. Assets are always
5 getting older. However, to support increased spending
6 utilities should be required to demonstrate that the
7 condition of the assets has changed such that additional
8 spending is truly required.

9 MR. BYRON WILLIAMS: I'm quite interested
10 in this -- the subject of asset condition assessments,
11 Mr. Harper. Could you help me to understand what it
12 actually -- what they actually are, sir.

13 MR. WILLIAM HARPER: It's not really
14 complicated at all. An asset condition assessment is
15 simply a snapshot of the state of an utility's assets
16 noting their degree of degradation or need for
17 rehabilitation and replacement at a certain point in
18 time.

19 It's frequently done by an external party,
20 but it's never done independently of the utility.
21 Rather, what it represents is that external party helping
22 the utility pull together on a systematic and organized
23 basis the information the utility probably already
24 collects itself and is maintained in the individual
25 divisions around the company into an overall

1 comprehensive assessment, or state of the nation is what
2 I would like to call it.

3 And basically what it does it's presented
4 in a way that shows the areas that need most attention
5 and it, therefore, allows work requirements to be
6 prioritized across the entire utility's asset base.
7 Frequently at the same point in time, utilities will also
8 prioritize their assets. Some assets are more critical
9 than others.

10 I think Manitoba Hydro, in some
11 discussions, has noted this in terms of some assets, if
12 they fail they impact more customers than the failure of
13 other assets. Some assets, perhaps if they fail, it's a
14 longer time to bring them back to service, and therefore
15 you would want to sort of take a preemptive action on
16 addressing problems on those. Whereas, other assets can
17 be brought back pretty quickly and maybe they're run to
18 failure on that basis, and you don't take preemptive
19 action on them.

20 Through process of prioritizing assets in
21 the asset condition assessment one can then further
22 prioritize the areas of the company where the -- 1) there
23 is a deficiency and where addressing that deficiency is
24 most critical. And on that basis it gives a good logical
25 foundation for one's OM&A and capital spending for that

1 matter.

2 Undertaking an asset condition assessment
3 is also a means of identifying those areas where there
4 are information gaps. Like I said there may be
5 information pocketed around the company, but as you pull
6 it all together there may be certain assets you find you
7 don't have enough information on. And therefore it --
8 it's a good indication for the company, or the company
9 with assistance of other parties, to pull together and
10 identify the condition of those assets, so they can have
11 a more complete picture of the company overall.

12 Finally, and probably what's most useful
13 as you work on this through time, is as you do regular
14 asset condition assessments -- and we don't see them done
15 every year, maybe they're done every two (2) or three (3)
16 years, sort of thing.

17 You can get a sense of whether or not the
18 overall state of the nation, as I said, is improving or
19 getting worse. And that in itself helps substantiate
20 whether there's need for increase spending -- if things
21 are getting worse, address the problem -- or whether
22 things are actually improving, and maybe there isn't as
23 much justification for increase spending on an ongoing
24 basis, because the level of spending that's been made is
25 -- is actually hel -- helping to make things better.

1 MR. BYRON WILLIAMS: Mr. Harper, let me
2 stop you there just for a second. This sounds like a --
3 a big job.

4 Is it only the -- the big utilities, like
5 Hydro One, who can undertake this asset condit --
6 assessments, sir?

7 MR. WILLIAM HARPER: No, actually, over
8 the last four (4) months I've probably been involved in
9 reviews of reg -- regulatory requirements probably
10 pushing close to twenty (20) distribution utilities in
11 Ontario, all the way from very large ones like Toronto
12 Hydro and Hamilton/St. Catharines, down to very small
13 ones like Hydro 2000, which is probably four hundred
14 (400) customers; let me put it that way.

15 You know, and we've seen asset condition
16 assessments not done by all of them. And for some of
17 them that aren't, the Board is ordering that they be done
18 by the end of the year. In other cases, asset condition
19 assessments are done by very small utilities as well as
20 large utilities.

21 The beauty of it is a small utility
22 probably has fewer assets to do an assessment on. And so
23 therefore, proportionally, you know, it -- it sounds like
24 a big job. They have fewer assets. It's not as big a
25 job quantity-wise as it is for a large -- that company

1 that -- that had more assets. Clearly they have a
2 smaller budget overall and, you know, therefore couldn't
3 afford to spend the amount of money you'd -- a large
4 company would spend. But they don't have the asset base
5 to -- to assess.

6 So I think it's fair to say it's done by
7 small utilities. And to be quite honest with you, some
8 of the studies I've seen done by small utilities are
9 better than the studies done by large utilities.

10 MR. BYRON WILLIAMS: Mr. Harper, just in
11 terms of those four (4) different ways one can look at
12 O&MA expenditures from a regulator, or for that matter an
13 Intervenor's perspective, do you have a preferred
14 approach?

15 MR. WILLIAM HARPER: Well, 1), I think
16 it's fair to say I don't think regulators should rely
17 strictly on one -- one approach to -- to the exclusion to
18 all others. Each approach offers its own perspective and
19 offers a different sort of angle of looking at it. And
20 so it's probably useful to use more than one, if one
21 wants to test -- test the prudence of the proposed O&MA
22 spending.

23 Having said that, in my view, the fourth
24 approach I outlined, which focuses on planning and
25 prioritization as a couple of major advantages. In my

1 view the demonstration of sound planning practices goes a
2 long way to reassuring parties that a utility's proposed
3 spending is reasonable and avoids sort of, micro-
4 managing.

5 You aren't -- you aren't looking at this
6 to sort of secondguess their planning. You want them to
7 demonstrate that they have a sound planning process. And
8 on the basis of that you would expect sound spending to
9 come out of it.

10 Furthermore, such practices in supporting
11 documentation, when they're in place, it -- it's easy to
12 use that information for a utility to both explain and
13 substantiate needs for year over year changes in
14 spending. It can be linked directly back to,
15 particularly, work requirements or areas that have to be
16 improved, where more -- more work is required. And so
17 therefore, it goes a long way to justifying year over
18 year changes, which is the more typical way a lot of
19 utilities' budgets are assessed.

20 MR. BYRON WILLIAMS: Of the four (4)
21 approaches you highlighted, what approach or approaches
22 have you relied on in your evidence?

23 MR. WILLIAM HARPER: I relied primarily
24 on -- on the second one I mentioned, which was the
25 envelope approach. And the reason for this is primarily

1 because of the fact there was insufficient information to
2 use, a number of the other approaches I had talked about.

3 While Manitoba Hydro has provided a year
4 over year variance analysis of changes in its O&MA costs
5 and the information has been helpful in --in
6 understanding the reasons for -- for changes, the
7 breakdown is done on -- on an organizational unit as
8 opposed to a work -- as to by work program area.

9 This made it difficult to understand what
10 the actual work pro -- work requirements were that --
11 that were driving the cha -- the changes in costs.

12 Also the variance explanations, again,
13 didn't focus often on changes in work output required and
14 more importantly on what was driving the need for those
15 changes.

16 Put another way, the changes in cost
17 weren't directly linked to what Manitoba Hydro has
18 identified as being their key cost drivers. For -- for
19 example, it's not particularly informative to say, Cost
20 of increase due to operational requirements, or, Cost of
21 increase because of need for additional FTDs.

22 The real issue is, is what's the work that
23 those additional FTDs are going to be doing, and why is
24 that additional work necessary?

25 If we move on and think about relying on

1 benchmarking, the benchmarking results that were provided
2 by Manitoba Hydro were drawn from utilities' annual
3 reports. And I think, as they've acknowledged, at that
4 high level are fairly -- are -- are fairly simplistic.

5 And I think -- I think they've said, and I
6 agree, that you really can't use those to come to any
7 definitive conclusions in terms of the prudence of a
8 specific specified or proposed level of O&MA spending.

9 Finally, in terms of planning and
10 prioritization, Manitoba Hydro has made general
11 references throughout its application to cost drivers
12 such as aging assets and the need to meet increased
13 customer demands.

14 However, no clear link has been provided
15 between these cost drivers and the changes -- in changes
16 and costs and, as a result, the observed change is to
17 some extent remain unsupported. For example, in the case
18 of aging assets, no details were provided to demonstrate
19 that the condition of Manitoba Hydro's assets -- what it
20 was -- or that the deterioration was such that increased
21 maintenance was actually required.

22 Furthermore, there's no descriptions
23 provided on the maintenance programs that the increase
24 spending would -- would facilitate.

25 MR. BYRON WILLIAMS: In terms of your

1 conclusions regarding Manitoba Hydro's forecast, OM&A
2 expense for 2008 and '09, what were they, Mr. Harper?

3 MR. WILLIAM HARPER: Well, in its
4 application, Manitoba Hydro is forecasting an average
5 annual increase in OM&A expense of 3.9 percent for the
6 period 2006 -- '06/'07, through to '08/'09. That's that
7 two (2) year period.

8 I believe a value of 3 percent as opposed
9 to 3.9 percent is more reasonable and attainable. And
10 this conclusion is reached by looking at the forecast
11 from a number of different perspectives.

12 First, the OM&A forecast growth rate for
13 this period is higher than in the previous financial
14 forecasts for the same period. If you go back and look
15 at previous financial forecasts for the '06/'07 to
16 '08/'09 period, this is the highest rate of growth we've
17 seen.

18 However, as noted earlier, there's no
19 substantiation for the increase spending and indeed, when
20 asked interrogatories, Manitoba Hydro said there were no
21 sort of unique or one-off programs that were taking place
22 during this period.

23 Second, the 3 percent per annum is
24 consistent with the targets that Manitoba Hydro itself
25 has set out in its own corporate strategic plan. As I

1 noted in my evidence on page 19, if Manitoba Hydro were
2 to achieve its own target value of six hundred forty
3 dollars (\$640) per customer for 2007/2008, spending would
4 -- would be \$7 million less. This translates into a 3
5 percent growth rate as opposed to 5.2 percent forecast by
6 Manitoba Hydro.

7 And, third, the historical growth in OM&A
8 over the last four (4) years was 4 -- 4 percent per
9 annum. We saw that in that -- in that interrogatory
10 response I went through earlier. However, looking
11 forward, with customer growth in the coming years is down
12 from .9 percent per year to .6 percent per year and the
13 wage and salary increases per FTE are also down as well
14 from 3.8 percent to 2.6 percent.

15 These factors alone would suggest that
16 OM&A spend over this period should -- should be
17 increasing significantly less than the 4 percent. If I
18 add those two (2) together, a .3 deduction for customer
19 growth and a one point two (1.2) reduction for EFTs,
20 those numbers are fairly material.

21 And so, I believe, that the appropriate
22 level of OM&A spend for this period is something
23 significantly less than the -- than 4 percent which is
24 the historical value, and definitely less than the 3.9
25 percent that Manitoba is proposing in their application.

1 MR. BYRON WILLIAMS: Mr. Harper, just to
2 follow that through -- let's say you're not accepting the
3 3.9 percent in working with the 3 percent per annum
4 growth. Take it through for me the next two (2) years.

5 MR. WILLIAM HARPER: Well, as I said
6 earlier, for '07/'08, this translates into about a \$7
7 million difference. It's a little bit less for the next
8 year so we're looking at \$13, \$14 million overall, which
9 if you translate into rates, is something in the order of
10 more than a 1 percent reduction in rates in order to
11 maintain the same level of retained earnings at that end
12 of '08/'09.

13 MR. BYRON WILLIAMS: Just so -- so I
14 understand, Mr. Harper, you didn't mean a 1 percent
15 reduction in rates, did you?

16 MR. WILLIAM HARPER: No, I meant a 1
17 percent reduction from the proposed rate increase which
18 is -- which was 3.9 percent. Excuse me, 2.9 percent.

19 MR. BYRON WILLIAMS: Okay.

20 MR. WILLIAM HARPER: Per year for each of
21 the next -- two -- '08/'09, sorry.

22 MR. BYRON WILLIAMS: So, Mr. Harper, just
23 so I'm clear, you're talking about in terms of the --
24 those numbers -- the two point nine (2.9) -- in your
25 view, you're looking at a reduction perhaps of 1 percent?

1 MR. WILLIAM HARPER: Yes, if you want to
2 translate -- if you want to take all that difference in
3 that income and translate -- and sort of come back to the
4 same level of retained earnings, it would be 1 percent.
5 If the PUB felt it didn't want to do that, it could be
6 something -- it would be some -- it may be something less
7 than a 1 percent decrease. But I think some decrease is
8 warranted in recognition of this.

9 MR. BYRON WILLIAMS: And I apologize for
10 this but it's a 1 percent less than the 2.9 percent?

11 MR. WILLIAM HARPER: Yes, that's correct,
12 and I apologize if I misspoke myself.

13 MR. BYRON WILLIAMS: And, Mr. Harper,
14 we'll depart from script here just for a second. You're
15 aware that Manitoba Hydro is a big corporation, and it's
16 -- we're talking about revenues domestically in the range
17 of a billion dollars.

18 Would that be fair, sir?

19 MR. WILLIAM HARPER: Yes, that's my
20 understanding.

21 MR. BYRON WILLIAMS: Now you're talking
22 OM&A reductions over a year or two (2) of -- from
23 forecast of \$14 million. Some might label that ad --
24 administrivia, that it doesn't really matter. What's \$14
25 million between friends?

1 How would you respond to that?

2 MR. WILLIAM HARPER: Well, I'd hope you
3 were my friend. I -- I guess, two (2) things, as I've
4 said, you know, that, you know, if you were to translate
5 it all through to rates secretly to a 1 percent lower
6 rate increase than what's proposed, and I suspect if I
7 walked outside of this building and stopped the first
8 person on the street and said, Do you have any opinion as
9 to whether you -- are you indifferent between a 2 percent
10 rate increase and a 3 percent increase in electricity
11 rates, I'm not too sure if anybody would say, I -- I
12 couldn't care, either one's fine by me sort of thing.
13 I'm sure people would -- would have an opinion on that so
14 I think it's more than administrivia.

15 I think also if you go through my
16 evidence, some of the issues I'm raising are concerns
17 about productivity initiatives that Manitoba Hydro says
18 it is starting and hasn't seemed to follow through on;
19 concerns about setting targets for -- for budgeting
20 processes which aren't sort of realized in reality.

21 And this really goes to sort of -- and I
22 have used the word "cost management" or "cost control" in
23 my evidence which is -- which is -- which I think is a
24 fundamental important issue not only for OM&A but also
25 for capital spending.

1 Perhaps even more fundamental for capital
2 spending if -- and I wasn't in the room when the figures
3 were kicked around, we're talking about billions of
4 dollars of capital spending coming up.

5 I think one has to sort of watch the
6 pennies and the dollars will look after themselves, I
7 guess is what some people have said sometimes.

8 MR. ROBERT MAYER: Mr. Harper, you had
9 said early in your evidence that you gave some
10 consideration to Hydro's capital spending because that
11 reflects on OM&A.

12 In light of the apparent announcement a
13 couple of days ago that we now have both Conawapa -- we
14 have Conawapa, Keeyask and Bipole 3 in the very much
15 foreseeable future.

16 Would that, in any way, change your
17 opinion with respect to the rates we're talking about?

18 MR. WILLIAM HARPER: Well I think there's
19 two (2) things. One (1) is we're talking about rates for
20 an increase effective April 1st of this year for '08/'09.

21 And while those projects are within the
22 planning horizon now, I -- I think the real impacts of
23 those projects are yet to be seen on -- on the IFF that
24 Manitoba Hydro produces in years beyond '08/'09.

25 So I think in terms that if you're looking

1 at sort of what the performance is and what the financial
2 picture looks like for '08/'09, I don't think they would
3 have a lot of impact.

4 I think what I've said once already is
5 that going forward clearly they change -- they're going
6 to change the picture as you look forward.

7 And one (1) of the issues which we'll come
8 to a little bit later on when I get to talk about capital
9 spending as well, has to do with concerns about the
10 pressure that capital spending puts on the debt/equity
11 ratios, and therefore puts on the perceived need for rate
12 increases.

13 I think I mentioned that already in my
14 opening comments, and these sorts of projects and putting
15 them more on Manitoba Hydro's plate is just going to
16 accentuate tha -- that problem.

17 So I think it makes -- it makes the issue
18 of managing, prioritizing, capital spending projects even
19 more -- even more important than it's been in the past.

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22 MR. BYRON WILLIAMS: And Mr. -- Mr.
23 Mayer, we'll certainly elaborate on that in the next few
24 minutes.

25 But, Mr. Harper, you did mention some

1 concerns regarding Manitoba Hydro's initiatives to
2 improve productivity. Perhaps you could briefly outline
3 those concerns.

4 MR. WILLIAM HARPER: Yes. In its last
5 three (3) corporate strategic plans, Manitoba Hydro has
6 set out various strategies for improving productivity
7 including process benchmarking and the development of
8 corporate and business unit performance targets.

9 Everyone asked about the status of these
10 individuals. There appear to be very limited follow
11 through on these par -- on these particular issues
12 because they hadn't started or we hadn't set the terms of
13 reference for the studies yet.

14 And so therefore there's some concern on
15 -- on my part as to whether Manitoba Hydro is doing
16 everything it can to sort of pursue and identify and
17 drive out as much productivity and efficiency improvement
18 as -- as is possible.

19 I -- I have a similar concern regarding
20 the productivity savings that were initially attributed
21 to head office, and I sort of watched the transcripts
22 from Toronto as the -- as the hearing has progressed.
23 And initially it was Manitoba Hydro's contention that the
24 cost of the new building would off -- would be offset by
25 productivity improvements, and where, as I understood it,

1 the cost was somewhere between \$18 and \$23 million
2 depending upon how you wanted to view -- view the
3 depreciation costs.

4 And the roughly \$20 million in annual
5 savings would be achieved through a 10 percent reduction
6 in head office staff, roughly two hundred (200)
7 positions. Now, it appears that the number of new
8 positions being held back due to the pending move to the
9 head office is well below a hundred.

10 Also Manitoba Hydro is now saying that
11 they would -- that they really don't want to have to need
12 to demonstrate that these new facilities are going to pay
13 for themselves. They don't want to be accountable for
14 demonstrating that new head office was cost-effective.

15 And indeed if I understand it correctly,
16 the only reductions that are actually included in the
17 current IFF is the avoided lease savings for not having
18 to lease the facilities they're currently in and the
19 standard 1 percent productivity loans.

20 Therefore, there appears to be no increase
21 assumed in productivity savings in the short term
22 strictly due to head office over and above what has been
23 historically achieved by the 1 percent per annum; not the
24 10 percent that was originally talked about, not the 2 to
25 3 percent that was identified in earlier studies done by

1 Manitoba Hydro. And indeed even if there are savings
2 attributable to the new head office, it seems like they
3 haven't been built into the IFF that we're looking at
4 right now in any event.

5 MR. BYRON WILLIAMS: Before we leave
6 OM&A, do you have any suggestions or recommendations to
7 the Board as to how OM&A spending should be addressed in
8 future rate hearings, Mr. Harper?

9 MR. WILLIAM HARPER: Yes, I have three
10 (3) specific suggestions.

11 The first is with respect to how Manitoba
12 Hydro presents its OM&A budget. Manitoba Hydro's current
13 budget presentation focuses on what resources it's
14 spending its dollars on, i.e., labour, travel, equipment,
15 et cetera, and which organizational units are spending
16 it.

17 However, Manitoba Hydro purchases
18 resources in order to accomplish work that's necessary to
19 maintain the system and to provide service to the
20 customers. And it is these work requirements that drive
21 OM&A and drive the need for changes in OM&A.

22 It would be useful if the OM&A
23 presentation focussed on the actual work results Manitoba
24 Hydro is seeking to achieve. If this is not possible,
25 and it may not be possible because of the way they manage

1 the information, at a minimum the various explanations at
2 an organizational unit level should be focussed on what
3 work and what changes in work results are coming about as
4 a result of the change in OM&A, and why those work result
5 changes are necessary.

6 For example, one could show separately and
7 explain separately increases in work results needed for
8 generation versus transmission versus distribution,
9 separate out issues where the costs were going up because
10 of cost escalation as opposed to areas where it's going
11 up because there was actual need and change in the level
12 of output or the level of work required, and why the --
13 why that increase level of work was needed.

14 I think those last comments go to the
15 point of how you're substantiating your OM&A changes.
16 And I think really substantiation of OM&A changes needs
17 to be clearly linked either to changes in results or cost
18 escalation.

19 For example it's insufficient to say that
20 there's a need for increased environmental monitoring. I
21 think it's more useful to say, Why is there an increase?
22 Is it -- is it as a result of a sort of new regulations?
23 And if those new reg -- and if it's new regulations what
24 additional work is -- are those new regulations
25 triggering? And as result of that, one can then clearly

1 is -- and it is that the capital spending for the test
2 period and looking forward and -- to Mr. Mayer's comments
3 -- when I looked forward then, probably looking forward
4 now, he would be a totally -- in picture and the
5 differences would be even more stark. Because, when I
6 looked forward at the time, I was looking at the IFF '07,
7 the spending was higher than previous forecast, and I
8 suspect when we get IFF '08-1, it will probably be higher
9 again.

10 Furthermore, a good portion of the
11 spending is related to new -- to either new generation of
12 facilities or the retrofit of generation facilities or
13 spending design to protect and service dates, all of
14 which, to a large extent, are being done on the basis of
15 increased assets as opposed to maintaining reliability on
16 the system.

17 MR. BYRON WILLIAMS: Mr. Harper, just let
18 me stop you there. You said increased assets.

19 Did you mean to say increased exports?

20 MR. WILLIAM HARPER: Increased exports.
21 Yes, I'm sorry, yes.

22 And, while such expenditures may benefit
23 customers in the long term, the increased debt is placing
24 pressure on today -- on today's rates as we seek to
25 maintain the financial integrity of the company and is

1 one of the reasons I suspect while -- why we have a
2 current proposed rates which are -- rate increase which
3 is in excess of inflation.

4 I guess my message is that I think the PUB
5 needs to be mindful of these pressures and the
6 intergenerational issues when considering the need for
7 rate increases, just as Manitoba Hydro needs to be
8 mindful of these facts when developing its overall
9 capital spending plan.

10 I think -- Mr. Mayer, as you'll recall,
11 the Manitoba Hydro's position during the CEC hearings was
12 that Wuskwatim -- advancing of Wuskwatim wouldn't lead to
13 an increase in rates, I think. It's hard to tell from
14 the current IFF whether that's -- whether it is or not,
15 but I think it's definitely probably one (1) of the
16 contributing factors. It's a significant portion of the
17 increased capital spending we're seeing over the next few
18 years.

19 MR. BYRON WILLIAMS: Just on that point -

20 MR. ROBERT MAYER: If I might, Mr.
21 Harper, you mentioned intergenerational fairness, and we
22 look back and we have plenty of evidence of very little,
23 if any, rate increase through the '90s. Are not the
24 present generation sort of sponging off our foreparents
25 in terms of the assets that presently exist? I'm going

1 back as far as the Winnipeg River generating stations,
2 even into the Grand Rapids and, to some extent, even the
3 lower Nelson.

4 MR. WILLIAM HARPER: Yes, I agree there -
5 - there's some of that going on, I think. It's a matter
6 of degree. And I think that -- that's the thing we have
7 to watch. I think the fact is -- I think your comment
8 that there were no rate increases during the '90s, I
9 guess the question is -- is that -- and I don't know, I'm
10 just offering this as a supposition -- if the -- if
11 during that period in time, the financial position of
12 Manitoba Hydro deteriorated, then perhaps those past
13 customers were, to some extent, sponging off of the
14 current customers who now have to re-build the equity
15 that was sort of drawn down during that period.

16 I haven't looked -- I haven't looked at
17 that, but I think -- I think that's another perspective
18 you'd have to try and look at.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21 MR. BYRON WILLIAMS: Mr. Harper, just
22 before your discussion with Mr. Mayer, you had mentioned
23 that a significant portion of the near-term capital
24 spending is related to Wuskwatim.

25 Isn't Hydro now saying that we need

1 Wuskwatim for domestic purposes as opposed to exports?

2 MR. WILLIAM HARPER: Yes, that's what
3 they're saying and, if you look at the current power
4 resource plan -- that's Appendix 45 in Manitoba Hydro's
5 filing -- it suggests that there's a dependable energy
6 deficit without Wuskwatim, and that Manitoba Hydro
7 attributes this to increased domestic demand relative to
8 -- outlook for demand that was filed at the time that we
9 were going through -- through the CEC hearings into
10 Wuskwatim.

11 However, a more careful look at the
12 current plan, relative to the one (1) that was presented
13 at the CEC, shows that both domestic load and contracted
14 exports are higher than they were at that time.

15 In addition, if we look at it, there is a
16 delay in the Bipole 3. At that point in time, Bipole 3
17 was forecast to come into service in 2010/2011, whereas
18 in the current plan, it's 2017/2018. So that's what's
19 also -- so also these higher contracts for exports and
20 the delay in the Bipole 3 are other contributing reasons
21 for why there's a perceived need for Wuskwatim.

22 It also suggests that, to the extent that
23 perhaps these increased export contracts were entered
24 into on the basis of Wuskwatim coming into service,
25 Wuskwatim was almost created its -- its own need. If you

1 move Wuskwatim forward and then fully contract most of it
2 up for exports, then you're sort of no further ahead than
3 you were without Wuskwatim in the first place, in terms -
4 - if I look at firm demand and how much capacity I have
5 on the system to -- to supply that. So I don't think
6 it's quite as simple as Manitoba Hydro had suggested.

7 MR. BYRON WILLIAMS: Just before we leave
8 the issue of capital spending, perhaps you could deal
9 briefly with Manitoba Hydro's financial targets. And
10 that's an area you were asked to comment on in your
11 response to MIPUG Number 2.

12 What's your understanding as to why
13 Manitoba Hydro has established a target debt/equity ratio
14 which it's striving to achieve?

15 MR. WILLIAM HARPER: As I understand it,
16 there's really two (2) primary reasons. The first is to
17 demonstrate to the financial community that Manitoba
18 Hydro is a financially sound corporation.

19 This is important because the community's
20 perception of Manitoba Hydro's financial integrity
21 affects not only its borrowing rate but also the
22 borrowing rate of the Province of Manitoba which
23 guarantees the Corporation's debt.

24 In this regard, Manitoba Hydro has
25 suggested that 75:25 is a reasonable value since it's in

1 line with the debt/equity ratios for other Canadian
2 electric utilities that are owned by Crowns.

3 The second reason is that maintaining a
4 satisfactory level of equity provides a means of
5 stabilizing rates under adverse events such -- such as a
6 drought.

7 MR. BYRON WILLIAMS: Given the -- the two
8 (2) reasons you've articulated, what's your view on the
9 75/25 as a reasonable target?

10 MR. WILLIAM HARPER: I should perhaps
11 preface my comments by saying I'm no public finance
12 expert as you noticed. As you noted I -- I'm an
13 economist, but my background is not in public finance.

14 However, I think it is possible to
15 approach this from -- from what I would call a pragmatic
16 per -- perspective. The first is that if it's the
17 financial community that one is seeking to satisfy, then
18 one must look at things from their perspective since
19 they're the ones that are writing the rating agency
20 reports that the borrowers are actually rating and
21 deciding on whether or not they're going to loan you
22 funds and at what rate they're going to insist.

23 In this regard it appears that
24 institutions such as Standard & Poor's do not rely on
25 each Utility's own calculations but apply a common

1 methodology.

2 If Manitoba Hydro wants to benchmark its
3 debt/equity ratio against that of other Canadian
4 Utilities, it might be appropriate to use -- to use that
5 same methodology and use the same benchmarking exercise
6 as what the rating agencies apply when they're looking at
7 the issue.

8 In terms of the rating agencies I think
9 it's also important to note Manitoba Hydro's comments
10 that what is really of relevance to the rating agencies
11 is continued improvement in the ratio as much as the --
12 as much as actually achieving a particular target.

13 And indeed maybe what the purpose of the
14 target is, is to demonstrate to those rating agencies
15 that the Utilities are committed to actually making
16 improvement over time.

17 So it may not be as much the magic of a
18 particular number as the fact that they've set a target
19 that's higher than where they are right now, and they've
20 got a commitment to -- to achieving their financial
21 performance, and then through their actual actions every
22 year is demonstrate that they're actually doing that.

23 I'd indicated that the second reason why
24 Manitoba Hydro focuses on the debt/equity ratio is that
25 equity is a means of stabilizing rates in the event of

1 adverse conditions, and I think the prime example that's
2 been used is the drought.

3 Within this context, what is a concern is
4 not the percentage of equity but the overall level of
5 equity or level of retained -- of retained earnings and
6 how it compares with the level of losses that might occur
7 under various types of adverse events.

8 As I indicated in my response to MIPUG-2C,
9 establishing the appropriate level of reserves within
10 this context would involve something more than just
11 estimating the cost of a five (5) year drought.

12 And furthermore, it's unlikely that the
13 results could be translated into a target debt/equity
14 ratio that would be useful over a long period of time,
15 and actually probably have to change the target every
16 time due to fundamental change in the sort of overall
17 capital base for the Utility.

18 Based on these observations, I'm not too
19 sure 75:25 is the right number and whether any precision
20 should be attached to it. However it is use -- it is
21 useful as an overall benchmark to gauge process -- excuse
22 me, to gauge progress towards improvement.

23 I think more work would have to be done if
24 the Board was wanting to establish a unique number which
25 it thought it was precisely the right number and attached

1 some confidence to that.

2 MR. BYRON WILLIAMS: Mr. Harper, I'm
3 going to give you a well-deserved break. We'll -- we'll
4 call you back on just to come to chat about cost of
5 service issues. But poor Mr. Dunsky's been sitting here
6 so patiently.

7 Mr. Dunsky, take it away.

8 MR. PHILIPPE DUNSKY: All right. Thank
9 you very much. I -- I've got to say I used to do
10 testimony a fair bit, and it's been a little while for
11 me. The last time I -- I testified at a public hearing
12 of this nature was -- was about four (4) years ago. I
13 did that from '97 through 2004.

14 But it's been a little while so -- so this
15 is good for me listening to -- listening to Bill
16 refreshing my memory about how we're suppose to do this
17 and now I'm going to do it differently of course. Let me
18 set-up.

19

20 (BRIEF PAUSE)

21

22 MR. PHILIPPE DUNSKY: So as I mentioned I
23 do this a little bit differently from -- from Bill, being
24 a little bit out of -- out of touch, I guess, with --
25 with standard practice and convention at public utility

1 board hearings.

2 I was asked to -- to look at Manitoba
3 Hydro's proposed low income energy efficiency program.
4 And you've seen my -- my testimony; it's -- I know it's
5 been a fair while so maybe I'll take this opportunity to
6 -- to present some slides, just focus in on -- on the key
7 elements of -- of what I've found.

8 And maybe in doing so, I'd like to begin
9 with the sort of fundamental question of why in the world
10 we -- we need or want to have a program, a very distinct
11 program for low income customers. I'm not going to get
12 into -- too much into theory, you know, economic theory
13 and whatnot, but I do want to mention, I think it's
14 important to -- that we always keep in mind -- and this
15 is something that I talk about with every client when
16 looking at designing energy efficiency programs -- why do
17 we have these programs? We have them because of market
18 barriers.

19 Because if we didn't have market barriers,
20 the market works beautifully and the invisible hand --
21 you know, with the invisible hand we all make our -- our
22 egotistical choices and it leads to socially-optimal
23 outcomes and everything is good. But then of course we
24 know that's not the case in reality and there are all
25 sorts of barriers in the marketplace.

1 And, you know, those barriers are not
2 always specific to energy efficiency. There are barriers
3 that leads -- lead to a host of sub-optimal decisions,
4 and that's why we regulate. That's why we have
5 regulators and -- and that's why we regulate safety and
6 whatnot.

7 But -- so -- so barriers definitely also
8 affect the degree to which energy efficiency is adopted,
9 and -- and tends to lend it -- lend themselves to energy
10 efficiency being adopted significantly less than one
11 would expect from an economically optimal perspective.

12 Just very quickly, there are a thousand
13 (1,000) ways to -- to skin a cat and a thousand (1,000)
14 ways to classify market barriers, but the typical ones
15 that I use are -- are these twelve (12) here, and again
16 I'm not going to go into the -- into the detail of every
17 one, but it's just -- tends to be worth reminding
18 ourselves of.

19 Whether the barriers are the costs for --
20 for searching out information, performance uncertainty --
21 me as a customer not necessarily knowing whether it, you
22 know, if I put insulation in my home exactly how much I'm
23 going to save relative to the costs; my inability to --
24 to calculate the value of those savings over a thirty
25 (30) year projected lifetime and discount those savings

1 according to my weighted average cost of capital and
2 whatnot.

3 These are real barriers in the marketplace
4 that -- that create situations in which customers are not
5 investing in energy efficiency the way one would think
6 that they would when one's looking at things from a
7 purely academic and theoretical perspective. There are
8 -- there are other problems.

9 These are problems that affect everyone:
10 access to capital, organizational practices and customs
11 that -- that create situations, for example, in the -- in
12 the business sector where, you know, the person who's --
13 who's responsible for the -- for the operating budget is
14 not the same person who's responsible for the capital
15 budget and so they can't talk.

16 Again, there are many barriers in the
17 marketplace that lead to very energy-inefficient
18 decisions and investment decisions in the market and
19 that's why we develop energy efficiency programs.

20 That said, what we find when we look at
21 the low income market segment is that several of those
22 barriers are significantly more acute for these -- for
23 these populations, and it's -- you know, for certain
24 segments of -- of the low income population and I'll just
25 focus very quickly on -- on a few of them.

1 again split incentives applies to -- to many customers,
2 low income and not, but in reality the low income
3 customers' segment is far more often renters, than the
4 general population. And as soon as someone is a renter
5 there's a split incentive.

6 If I'm a renter I'm not going to invest,
7 obviously, in my building envelope; it doesn't belong to
8 me; I'm not going to be able to keep the benefit. And
9 similarly if I'm a renter and I'm paying the utility bill
10 my landlord's not going to want to invest in my -- in his
11 own building envelope because he will not retain the
12 benefits in terms of energy savings.

13 So split incentives, again a significant
14 barrier that we face everywhere but much more acutely for
15 a population that has much higher rental percentage.

16 A third barrier that oftentimes we -- we
17 tend to not think about it when we're thinking of low
18 income customers. It falls into the category that we can
19 call, "organizational practices and customs," and really
20 they're two (2) issues going on here.

21 For low income customers who are renters,
22 very oftentimes landlords are simply uninterested in
23 investing in the thermal envelope of their homes.
24 Sometimes because of those split incentives, but even
25 when those split incentives don't exist very often the --

1 the business model for landlords of low rent units is to
2 buy low, invest as little as possible, and just collect
3 rent. So that's a business model that lends itself again
4 to lower than optimal investments in energy efficiency.

5 And on the flipside, for low income
6 customers who are owners themselves of their homes, very
7 oftentimes we find contractors who are simply
8 uninterested in serving them. So a low income customer
9 who owns his home may have overcome all of the other
10 hurdles and done the analysis and -- and found there to
11 be economic value to them to improve the efficiency of
12 their home, but they go out and try to find a contractor
13 and have an awful hard time, and then often drop out
14 because of those difficulties.

15 So those are significant barriers again,
16 that we have to address when we're talking about a low
17 income specific energy efficiency program.

18 The other barriers, of course, that are
19 more acute for -- for many, not all, but many low income
20 customers are issues of education levels, illiteracy in
21 many cases; if you are illiterate you're not going to be
22 able to, oftentimes, to just read the pamphlet that is
23 encouraging investments in energy conservation.

24 There are linguistic challenges for -- for
25 many new immigrants. And I understand and I learned

1 savings opportunity issue as well. This is -- you know,
2 low income customers are a significant population base.
3 They're a significant component to residential demand.
4 And -- and they represent significant energy efficiency
5 potential savings. So we want to make sure that we're
6 getting after those savings as much as we can.

7 And so for those two (2) reasons, that's
8 why typically we talk about the importance of developing
9 programs that are specific to the low income segment.

10 So that having been said, let me get into
11 the meat of it, if you will. Let's talk about Manitoba
12 Hydro's proposed -- proposed program.

13 Maybe, just before I get into it, talk a
14 little about principles for success. Low income energy
15 efficiency programs have been around for upwards of
16 twenty-five (25) years now. And there's a lot of
17 experience. A lot of people have cut their teeth on
18 this.

19 It's a very complex market. It's a very
20 complex and difficult thing to do, to design an energy
21 efficiency program for this market segment that's
22 actually going to work.

23 So a lot of people have cut their teeth on
24 it. A lot of regions have tried a wide variety of
25 approaches. And over that quarter of a century of

1 experience in dozens of regions, there are some key
2 principles, or key -- key success factors that I think
3 that we can take out of that as -- as lessons learned.

4 The first is to keep it simple. And, when
5 I keep -- when I say keep it simple, really what I am
6 referring to is there is make it turnkey. I probably
7 should have written down on the slide, frankly.

8 If it's not a turnkey service for the
9 customer, the customer is not going to participate.
10 Obviously, there are exceptions to that. But by and
11 large, turnkey is essential to a successful low income
12 energy efficiency program.

13 MR. BYRON WILLIAMS: Mr. Dunsky, just on
14 that point, I may be the only person in the room who
15 doesn't know what you mean by turnkey.

16 MR. PHILIPPE DUNSKY: I'm sorry. So what
17 I mean by -- by turnkey is, ensuring that we are offering
18 a service where we're taking ownership "A" to "Z" of what
19 we are trying to do with that customer.

20 And that means we are going in. We are
21 doing the audit. We are identifying the energy savings
22 opportunities. We're installing the energy efficiency --
23 the energy savings measures. And we are leaving. It's
24 in and out. And so, it really means taking ownership for
25 a -- for the approach for the interventions in their --

1 in their homes.

2 MR. BYRON WILLIAMS: I don't want to
3 interrupt your four (4) keys to success too much. But
4 just on that point, don't we want the -- the low income
5 customer to take ownership?

6 Isn't -- isn't -- shouldn't we be
7 encouraging their participation?

8 MR. PHILIPPE DUNSKY: Yes, we would like
9 that very much. And, as much as possible, gaining low
10 income ownership of energy efficiency measures is a good
11 thing. But practice and experience has shown us that we
12 cannot rely on that. And so there are -- the most
13 successful programs address the ownership issue through
14 proper education of those low- income customers.

15 And there are -- there are good ways to do
16 education, and there are bad ways to do education.
17 Again, many programs fail horribly on education. When
18 you look through evaluation reports, you find the
19 education component did not at all generate the savings
20 that it was supposed to.

21 But education is the way to get at helping
22 the customer take ownership of the notion of energy
23 efficiency and what can be done in their home. Assuming
24 that they can take ownership of it on their own and
25 relying on that is not the way, again, because experience

1 has shown that if you do that, you simply won't generate
2 participants.

3 So the first point was keep it simple,
4 offer a turnkey approach. The second is, by and large,
5 keep it free. And I know a lot of times we -- we talk
6 about energy efficiency programs, but we don't want to
7 offer things completely free of charge, because we don't
8 like that notion. There's something that smells a bit
9 funny about it. But again, experience shows that with
10 exceptions, if it's not free people, won't participate.

11 And perhaps just as -- as an aside, I can
12 give you a couple of examples. In -- in the Province of
13 Quebec we ran a pilot project for low income customers
14 where we tried to -- we tried to see if low income
15 customers would participate in a program in which we
16 offered to -- to provide them significant insulation,
17 weatherization services, services that are worth
18 thousands of dollars. And the only thing we would ask
19 them to pay is a maximum of 10 percent of the cost up to
20 two hundred dollars (\$200). That's it.

21 It didn't work. And -- and the reason it
22 didn't work, we later found out that when we were looking
23 into it, was really two (2) reasons. One (1) was because
24 of that point I mentioned earlier, contractors weren't
25 interested in serving low income customers. And second

1 point, low income customers were not interested in paying
2 two hundred dollars (\$200).

3 It's -- it's important to -- to bear in
4 mind sometimes -- and I forget this, often, until we look
5 at the market research -- many of these customers are --
6 are living with next to nothing in their bank account. I
7 mean, just trying to, you know, keep a -- keep a hundred
8 dollars (\$100) or two hundred dollars (\$200) in the bank
9 account at all times is -- is a challenge. So it's
10 important for those reasons in most cases to, by and
11 large, keep it free.

12 The third point is to focus on outreach.
13 And again, this is another point that I think is -- often
14 times we neglect, at our peril. We assume, and I might
15 want to assume that if I'm offering something for free I
16 really don't have to invest a lot in sales to get
17 participants.

18 And the strangest thing of all is even
19 when we offer it for free, we find people don't come
20 running. It's almost insulting to those of us who design
21 these programs that people don't come running when we
22 offer it for free, but they don't. We have to do a real
23 significant outreach effort to get participants.

24 And everywhere we look, and you speak with
25 anyone who manages a low income energy efficiency program

1 where the whole thing is offered for free, the biggest
2 challenge is actually getting people interested in
3 participating even though it's free of charge. So, third
4 key to success.

5 And the fourth one is comprehensiveness.
6 And this is like with any sale, you know, the hardest
7 part is getting in the door. Once you're in the door,
8 you do everything that you possibly can, because you're
9 probably not going to get a second chance.

10 So when we're in the door and we have a
11 participant, we want to make sure that we're doing all
12 cost-effective energy efficiency measures and not letting
13 anything -- not leaving anything behind. So I'll -- I'll
14 park that there, but just principles to -- to keep in
15 mind for success.

16 Now, let me talk a little bit about my
17 understanding of Manitoba Hydro's proposal. And -- and I
18 should say, and I'll say this with a bit of humility, in
19 that I was going through the evidence and having a fair
20 amount of difficulty in reconstructing, based on the
21 evidence, exactly how this -- what this program would
22 look like and how it'd be delivered.

23 And -- and that's -- I should say that's
24 not through any fault of Manitoba Hydro's. It's simply
25 the way, you know, we ask questions in IRs. And we get,

1 you know, a piece here, and piece here, and piece here.
2 And fitting it all together in a puzzle is -- is often a
3 challenge.

4 But this is my best understanding at least
5 of what this program is going to look like, and maybe I
6 can go through it quickly.

7 The first thing on the left is my
8 understanding approximately of market shares of the
9 different customer segments and -- different low income
10 customer segments.

11 The second thing, and this is important to
12 keep in mind, is when we're talking about low income
13 customers, the first question is, Who's paying the bill?
14 Because, of course, it matters hugely whether the
15 participant, the low income customer, is paying the bill
16 or whether the landlord is paying the bill.

17 And then the second thing is, Who owns the
18 home, or who owns the -- the building? In some cases
19 it'll be the low income customer, who doesn't have money.
20 In other case it'll be a -- a landlord, who may more
21 access to capital, but who may not be interested in
22 investing because he's not paying the utility bills.

23 So just trying to -- to understand where
24 -- what the market segments look like was a bit of
25 challenge.

1 Now, given that Manitoba Hydro's proposal
2 really fits into two (2) streams, there are really two
3 (2) streams or two (2) tracks in terms of program
4 delivery. There's the individual track and the community-
5 based organization track. And so I'll just go through
6 those quickly.

7 The -- the individual track, four (4)
8 cases were low income customers are homeowners, is a
9 rather complex process. And I think you -- you've seen
10 in my testimony I've
11 -- I tried to draw it out as flow chart, identified
12 something like fifteen (15) steps that customer would
13 have to go through from "A" to "Z." And I'm just, you
14 know, breaking it down to the -- to the most essential
15 ones here in this table so the table isn't too long.

16 But essentially, Manitoba Hydro, once a
17 customer is interested in participating and -- and is
18 approved to participate and provides proof of
19 eligibility, Manitoba Hydro pays for an audit to be done.
20 At the same time installs low-cost/no-cost measures. And
21 this is a pretty standard, fair stuff.

22 The customer then has to apply for a
23 bridge loan to finance at least a portion of the -- of
24 the cost of the work. The customer then is asked to go
25 out and get three (3) quotes from contractors and submit

1 those quotes to Manitoba Hydro for approval.

2 Manitoba Hydro returns to the customer its
3 determination of which -- which contractor quotes are
4 eligible for the program. Once the customer has those
5 eligible quotes, they can get -- well ask for and receive
6 a bridge loan from Manitoba Hydro.

7 The customer can then select a contractor.
8 Hopefully the contractor is still interested. The
9 customer will oversee the work being done. The customer
10 will pay the contractor.

11 And after all that -- after all the work
12 is done and after the results of the work have been
13 verified through a second audit, the -- the loan that
14 Manitoba Hydro gave to the customer is reduced by the
15 amount of Manitoba Hydro's incentives, which are meant to
16 offset a part, not all of the -- of the cost.

17 And at that point the customer can then
18 apply to ecoENERGY, which is a Federal incentive program,
19 and eventually receive a subsidy that hopefully on
20 average will come out to roughly the remainder of the
21 cost and with that subsidy, I guess, pay back the loan.

22 That's by and large my understanding of
23 how it will work for the individual track.

24 For a low -- low income -- for a low
25 income homeowner who goes through the community-based

1 organization track, it's a much different deal.

2 Here we're talking about -- and -- and as
3 I understand it from the -- from the testimony, this is
4 somewhat still in the works and somewhat still -- or at
5 least was back when I was looking at it -- being
6 negotiated or to be negotiated with the -- the CBOs.

7 But at the fundamental level, the idea is
8 that the community-based organization provides
9 essentially a one-stop shop and does a very important,
10 thing by the way, I should say, which is to -- I don't
11 want to belittle or be demeaning here -- but to hold the
12 customer's hand throughout the process. And that's very,
13 very important in this.

14 And then beyond that there still is the
15 bridge loan concept to pay for a part of the upfront
16 cost, which is reimbursed after the fact by the federal
17 incentives.

18 So that's for that segment of our
19 population who are homeowners. And my understanding is
20 that that's roughly two-thirds (2/3s), those two (2)
21 tracks together should cover roughly two-thirds (2/3s) of
22 our target population.

23 The other third, again, if we go back to
24 the individual track, the other third is where we have a
25 low income customer who's a renter. And so in this case

1 we're dealing primarily with a non-low income landlord,
2 not the low income renter.

3 And so here the process is very similar to
4 the -- to the quadrant above. But of course the client
5 is the landlord, and there's -- there's no loan component
6 involved. So the landlord is asked to finance it on
7 their own.

8 In this table I -- I just noticed before,
9 and I apologize for this, I made a little bit of an
10 error. I should have added a couple of other differences
11 in that particular quadrant, one of which is that the
12 landlord has to provide proof of eligibility on behalf of
13 -- of its tenants.

14 And another, and this is extremely
15 important, is that the landlord will negotiate with
16 Manitoba Hydro to ensure that the benefits flow to the
17 tenants, not to the landlord.

18 And that's a key thing to keep in mind.
19 It's -- it's very laudable. But again we need to make
20 sure that landlords are actually going to want to
21 participate in this. And if all the benefits are flowing
22 out, there's definitely a question mark there.

23 This is -- this is a tough piece. And
24 it's not -- I've got to say, this is -- this is a tough
25 issue that we deal with in any program design, any -- any

1 low income energy efficiency program design.

2 And then finally if I look at that same
3 segment of the market as they're being adjusted through
4 the CBO track, it's essentially again the same -- the
5 same approach as for the low income homeow -- homeowners.

6 But once again, the landlord has to
7 provide proof of tenant eligibility. The landlord has to
8 negotiate with, in this case, the community-based
9 organization to ensure the benefits float to the tenants.
10 And finally, that the landlord has to finance the costs,
11 is not eligible for this -- for this bridge loan.

12 So that's my understanding of the program,
13 and I hope I'm not too far off the mark in it.

14 Now let me get to my assessment of it.
15 I'm starting by the strengths, because there are some
16 very significant strengths here. And I've seen a fair
17 number of -- of program designs that fall far short of
18 some of these strengths. And so I think it's worth
19 mentioning.

20 The first one is that there is a goal of
21 covering 100 percent of the cost. It comes back to the
22 point I was mentioning earlier. Now there's a caveat to
23 this, which is that this is a goal, it's not a guarantee,
24 because of the way the program is designed.

25 We're not going in and paying for the

1 measures. We're offering these incentives that, when
2 combined with other incentives, on average we hope should
3 cover roughly 100 percent of the costs. But there's no
4 guarantee.

5 I apologize, there was a note I made to
6 myself earlier. Okay. Still, the principle is very
7 important.

8 Second strength here is the one-stop shop
9 approach. That is very important. And this business of
10 hand-holding of the customer is extremely important here.
11 And I really want to commend Manitoba Hydro for -- for
12 taking that approach. The caveat here is that that
13 approach only applies to the CBO track, not to the
14 individual track, as I understand it.

15 The other caveat is that the -- the degree
16 of one-stop shop-ness, if I may say here, is -- is simply
17 not -- not clear at this point in time, or at least when
18 the evidence was submitted. Again, are were pieces that
19 still remain to -- to be negotiated with the CBOs, and
20 it's not clear how far you can go down that road. But
21 again, the principle is there, and the principle is very
22 important.

23 A third strength of the program is
24 Manitoba Hydro's decision to be flexible with regard --
25 with regards to proof of income. Obviously this is an

1 income testing -- or tested program, and so we need some
2 form of proof.

3 But a -- a problem that many other
4 programs face is oftentimes programs are a little bit too
5 rigid in the type of proof that they require. And many
6 low income customers simply do not have their latest
7 income tax statement with them in their home. Many low
8 income customers do not submit -- do not submit income
9 tax statements. So there's -- there's flexibility there,
10 as I understand it, for some judgement call, and that's
11 very important.

12 And finally, Manitoba Hydro's taking a
13 multi-fuel approach. And this is something I have to say
14 that -- and we're struggling with this in Quebec right
15 now as to how exactly to design a multi-fuel -- a multi-
16 fuel approach. And it's -- it's a bit of a challenge.
17 But this is an area where it's not only a strength, but
18 I'd say it's -- it's a little bit of leadership here.

19 Unfortunately there are many, many
20 programs through North America that are strictly limited
21 to electricity and other programs that are strictly
22 limited to natural gas. And it really makes no sense to
23 -- to not adopt a multi-fuel approach. Manitoba Hydro is
24 adopting a multi-fuel approach, from what I understand,
25 and that's very important to -- to underline.

1 So those are the strengths. Now of course
2 I'm here to talk more about the weaknesses. It's the
3 nature of the job. So let me get into those.

4 The first and most important one, is at
5 the design level. At the design level -- and we'll see
6 later, I'll go into it in more detail, especially at the
7 -- the individual track -- there is a degree of
8 complexity for the participant. There's -- there is a
9 number of hoops that the participant is being asked to --
10 to jump through. There is a lack of taking ownership of
11 this on Manitoba Hydro's side, and instead asking the low
12 income customer to take ownership of it.

13 This is a serious barrier. And this is
14 going to diminish participation tremendously for -- at
15 least for that segment that is being addressed through
16 the individual track. It's a very significant problem
17 area in the program design. I'll get back to it in more
18 detail.

19 The -- the second has to do with the
20 delivery of the program. And I have to say I'm -- I'm a
21 little bit torn on this myself. It's a tough one. The
22 role of community-based organizations, there are
23 advantages and disadvantages. Most importantly there's
24 some serious challenges. And I'll -- I'll just address
25 those challenges a little bit later, because I think

1 they're very important to keep in mind, and they can make
2 the different between success and failure in the delivery
3 of this program.

4 Finally, at the level of measures there
5 are a couple of measure that are either absent or
6 underserved in this program. And those are furnaces, or
7 furnace replacement, and -- and old fridge replacement.
8 And I should really specify old fridge, not all fridges.

9 I was --I was realising as I was coming
10 here on the plane that there's probably another
11 significant measure that should be added to -- to the
12 list. And that's grey water heat -- heat recovery
13 systems. And I'm not going to get into that here, but
14 it's just something to keep in mind.

15 So let me go into these individually. And
16 I'll start with this issue of complexity. And again I'm
17 coming back to -- to my table and -- and reworking it a
18 little bit.

19 So let me start with the CBO track,
20 actually, which is the better of the two (2). The -- the
21 problem that we face -- and I'm focussing on the province
22 here. The problem that -- that we have with the CBO
23 track here is that we're asking the low income customer
24 to take on the risk associated with taking debt, a short-
25 term bridge loan from Manitoba Hydro, and not knowing or

1 not having any guarantees that the incentives that
2 they'll end up getting later on through the Manitoba
3 Hydro and federal programs combined will be enough to
4 cover the amount of that loan.

5 On average it should work out, but what it
6 does is it introduces uncertainty to the participant.
7 And we have to keep in mind, these are -- this is a
8 customer segment that is very, very, very risk averse
9 when it comes to debt. There are many bad experiences
10 with debt. There's not enough money in the bank to -- to
11 cover any -- any shortcomings. They're extremely risk
12 averse.

13 And -- so by not offering a guarantee that
14 we're covering a 100 percent cost, we're introducing a
15 level of uncertainty that will likely reduce
16 participation.

17 What is the solution to this? The
18 solution is that Manitoba Hydro takes ownership of the
19 costs, so actually pays the costs themselves, and deals
20 with Natural Resources Canada directly to recover those
21 federal incentives. I know that may be a little easier
22 said than done, but that's something that -- that
23 intelligent people at Manitoba Hydro and at Natural
24 Resources Canada are able to discuss and negotiate. The
25 benefit, obviously, is eliminating needless risk and --

1 and concern over debt.

2 Let me drop down, still within the CBO
3 track here, to the case of the rental segment. Here the
4 problem -- there are a couple of problems, at least
5 challenges. One is the lack of financing, and the other
6 is possible distrust.

7 The -- let me address the lack of
8 financing. We're asking landlords to finance the
9 measures. And it's understandable, because they should
10 conceivably have access to capital.

11 But first of all, that's not always the
12 case. Different landlords have business models, have
13 different capital budgets.

14 But secondly, and most importantly, our
15 entire approach here is negotiating with them to make
16 sure that the benefits flow out of their pockets and into
17 the pockets of tenants. Now if I'm a landlord, do I
18 really want to be taking on debt to finance something
19 that by its nature is designed not to benefit me? It's a
20 challenge.

21 The second challenge is the issue of
22 distrust with regard to community-based organizations.
23 And this is where, again, I'm going to take on a little
24 bit of humility here. Community-based organizations are
25 many and varied, and I know -- I know them well in

1 Quebec. I know them somewhat well in the northeast US.
2 I don't know them well here in Manitoba. So, you know,
3 on this level it's important that -- that that be kept in
4 mind.

5 My experience with community-based
6 organizations in general is that you have a combination
7 of essentially two (2) different types. You have some
8 community-based organizations that are really focussed on
9 community economic development. And by and large they
10 have very strong reputations within the community, and --
11 and they're very well trusted within the community by
12 all.

13 You have other community-based
14 organizations that are more -- more advocacy groups. And
15 often times there will be low income advocacy groups or
16 tenants' rights advocacy groups. And they do very
17 important work, and I'm not here at all to -- to demean
18 the work that they do.

19 But you cannot ask an advo -- a tenants'
20 rights group to be the prime deliverer of a program that
21 has to convince landlords to participate. There's just a
22 culture clash, and -- and that's going to create barriers
23 to participation.

24 Now again I say that with a grain of salt,
25 because I don't know the nature of the community-based

1 organizations that Manitoba Hydro is talking about using
2 to deliver this tract. And it may be that they are
3 entirely community economic development groups, in which
4 case there probably won't be a problem here. But if they
5 are more advocacy groups, there's -- there's an issue to
6 keep in mind.

7 The solution to lack of financing
8 obviously is to either (a) offer the financing, or (b)
9 offer it turnkey. Again, like we said previously, just
10 pay for it and take the collection of federal incentives
11 behind the curtain on Manitoba Hydro's side. Obviously,
12 this will facilitate participation and minimize
13 reluctance on the part of land -- of landlords to -- to
14 participate. So that's for the CBO track.

15 Let me skip over to the individual track,
16 where frankly the problems are of a -- of a larger scale,
17 and especially for the low income homeowner segment. Put
18 very simply, the problem here is that we're asking too
19 much of the low income homeowner, the low income
20 participant.

21 We're asking the low income participant to
22 -- to contact Manitoba Hydro, enroll in the program,
23 provide proof of eligibility. That's -- that's all
24 necessary. But then go out find contractors who are
25 interested enough to go to them and -- and do a site

1 visit and provide them with quotes; get at least three
2 (3) of them, three (3) quotes, that one then has to
3 submit to Manitoba Hydro; be sure that those quotes are
4 eligible. This alone is erecting enormous barriers to
5 low income participation.

6 Again, coming back to the experience that
7 we had with the -- with the failed pilot project in
8 Quebec. One (1) of the two (2) key reasons why it failed
9 was because contractors were simply not interested in
10 working directly for low income homeowners, under the
11 assumption that the low income homeowner is going to be
12 paying the bill in the end. Even though they knew full
13 well that the utility was going to be compensating the
14 low income homeowner at least 90 percent of the cost, it
15 still didn't work.

16 So there's an enormous barrier there. I
17 call it very significant in scale that will significantly
18 affect participation and therefore affect the success of
19 this program.

20 Beyond the contractor selection and
21 negotiation, by the way and oversight of work that we're
22 asking of the -- of the low income homeowner, there's
23 also again taking on debt and -- and risk, not knowing
24 for certain how much of that debt will be paid back. And
25 there's also a fair amount of paperwork here, a lot of

1 submissions back and forth between Manitoba Hydro and the
2 -- and the customer, a lot of hoops that the customer is
3 being asked to jump through.

4 So this is a very significant barrier to
5 success. The solution to this is really quite simple:
6 that Manitoba Hydro takes ownership of the program.

7 What does that mean? That mean -- that
8 means that Manitoba Hydro chooses the contractor. You go
9 in. You do the audit. You identify the opportunities.
10 You choose the contractor. The contractor goes in, does
11 the work and bills Manitoba Hydro, end of story.

12 Manitoba Hydro then bills Natural
13 Resources Canada for their part of their part of the
14 incentive. And that's again kept behind the curtain as
15 much as possible.

16 That solution -- one of the questions in
17 the interrogatories was, Well, is that really practical?
18 Can that actually work? And the answer is that's as
19 practical as it's being implemented in dozens of -- of
20 regions throughout North America. And, frankly, in every
21 single one of the regions that are understood to be
22 success stories -- they're understood to be best
23 practices -- every single one of them takes this full-
24 ownership approach.

25 Obviously, the benefits of this:

1 eliminating needless hurdles, negotiating better prices,
2 also I -- I didn't mention that earlier. But in addition
3 to making this a lot simpler and easier to participate
4 in, Manitoba Hydro's in a much better position to
5 negotiate good prices with contractors than individual,
6 low income homeowners are.

7 And, thirdly, quality control. One of the
8 significant issues that we find in this type of program
9 is you can get a contractor to install a bunch of
10 measures. You can get a contractor to go in and install
11 insulation or -- or weatherize a home. But that doesn't
12 mean they're going to do it right. And that doesn't mean
13 that they're leaving -- they're not leaving the home far
14 more inefficient than they should be. Lord knows, we've
15 seen this over and over again in evaluations, that many
16 contractors simply do not do weatherization properly.

17 When Manitoba Hydro is the customer,
18 Manitoba Hydro can ensure quality control much more
19 easily than a low income customer can.

20 Finally, if I -- if I go down to the -- to
21 the last segment there, again, within the individual
22 track, talking now about -- about low income renters.

23 In that bottom left-hand quadrant there,
24 the problem really is that -- this issue of requiring the
25 transfer of benefits from the owners to the tenants.

1 And this is a tricky issue. And I'm not
2 here to suggest that low income homeowner -- low income
3 tenants should not benefit from this program. But I
4 think we need to keep in mind that we need to make this
5 attractive for both the low income tenant and for the
6 landlord. Otherwise, the low income tenant simply won't
7 benefit, because they can't participate.

8 So one of the important things here is
9 understanding that a large of the benefits here are non-
10 economic. A large of benefits are in terms of comfort
11 and other non-energy benefits. And those will accrue
12 directly to the low income participant even if they're
13 not taking in the bill savings, for example.

14 So there's got to be some -- some give and
15 take there. There's got to be some understanding that we
16 don't want all of the benefits to flow out. We want some
17 reasonable compromise wherein both tenant and landlord
18 are -- are benefiting from this program.

19 So that's my comment on the -- in terms of
20 the issue of complexity.

21 Very quickly, while this is just again
22 taking back this -- this flow chart that I've prepared in
23 the -- in the initial testimony, again, this -- this
24 representing essentially those fifteen (15) odd steps
25 that -- that I tried to identify that the customer would

1 have to go through.

2 And if, again, if you do a turnkey
3 approach, what you're doing is eliminating the vast
4 majority of them. You get through the initial
5 qualification phase, and then the work gets done, and
6 it's over. And you can add education into that but I
7 didn't deal with that here.

8 MR. BYRON WILLIAMS: Just -- just -- and
9 I'll let you go on, but just on that point, just your --
10 this modified or turnkey approach, my sense is that
11 you've just indicated, it's not a radical thing. It's
12 consistent with best -- best practices and where -- where
13 these programs are working.

14 Is that -- that fair, sir?

15 MR. WILLIAM HARPER: Yes, absolutely.
16 And this is -- this is the approach that -- that by and
17 large is taken by just about every successful program
18 that -- that I've seen.

19 And if you look through -- there are --
20 for low income energy efficiency programs, there have
21 been several best practice reports in recent years.
22 There was one done by the American Council for an Energy
23 Efficient Economy in 2008. There was another done by
24 that same organization in 2005. There was a third one
25 done recently by Chartwell, a private firm. There are

1 many of these.

2 And systematically, the best practice
3 programs adopt this approach systematically. I think if
4 you look through those A-C-triple E reports, you won't
5 find a single one of the best -- of the ones that have
6 been identified as best practices that don't -- don't
7 adopt this simplified turnkey approach.

8 MR. BYRON WILLIAMS: Thank you.

9 MR. PHILIPPE DUNSKY: You're welcome.

10 So let me talk a little about -- about the
11 second issue, which is the challenges related to
12 community-based organizations. And this one admittedly
13 is a fair bit more -- less cut and dry, but I think it's
14 important to -- to bring it up.

15 One issue is capacity versus quality.
16 There are many community-based organizations out there --
17 and I'm sure there are many in Manitoba, not knowing them
18 specifically myself, but I am sure that there are many
19 out there -- that have what it takes to deliver this
20 program. I am sure there are also many that don't.

21 The question is -- I guess there are two
22 (2) ways of looking at this. Either, (a) Manitoba Hydro
23 has to allow itself to be very selective in choosing CBOs
24 that have the institutional ability and reputation and
25 capacity to deliver this effectively; or (b) Manitoba

1 Hydro has to invest significantly in helping CBOs develop
2 those capacities and -- and abilities to deliver
3 effectively.

4 These are two (2) very big challenges.
5 And, let me just say by experience of my own and by
6 experience that I've seen elsewhere, it's not at all
7 obvious that you can do this well.

8 One of the -- one of the pitfalls, to be
9 perfectly -- perfectly honest, is a little bit political.
10 Sometimes if -- and I've worked for -- for many non-
11 profit groups who are constantly struggling to find
12 budgets. And when they're offered an opportunity to
13 deliver a program that provides them budgets and allows
14 them to support some of their -- some of their key staff,
15 they jump at the chance.

16 And it's going to be very difficult for
17 Manitoba Hydro to be selective and say, You're in, you're
18 not, because I'm judging your ability to deliver this
19 program. That's something that Manitoba Hydro will have
20 to, again, do or invest significantly to bring up that
21 capacity so that CBOs can deliver it effectively
22 throughout the province.

23 I haven't seen evidence in Manitoba
24 Hydro's testimony that there's necessarily recognition of
25 the need to build up that capacity. And that may be the

1 case, but I just haven't seen that -- that evidence. So
2 that's -- that's a risk in this program design.

3 The second point that needs to be made is
4 the issue of the right culture for the right job. And,
5 again, this comes back to what I was saying before about
6 the type of CBO. Again, CBOs who are community --
7 community development organizations, and you have CBOs
8 that are advocacy groups. And you want to make sure that
9 you have a right match, especially when we're dealing
10 with landlords.

11 And so, here again, I haven't seen any
12 discussion of this in Manitoba Hydro's evidence. It may
13 be that they're very cognisant of it. It may be not.
14 But they need to be absolutely sure that insofar,
15 especially as landlords are concerned, we're making the
16 right matches, and we're not through expediency choosing
17 CBOs that are mismatches to deliver to -- to landlords.

18 Again, you know, there are no easy answers
19 to this. These are very difficult questions, but now is
20 the time to address them. I've seen many programs that
21 have not addressed these issues at the outset and that
22 have been caught with legacy decisions, that it's been
23 too politically difficult to change after the fact. And
24 that has lead to inefficient delivery. It's lead to lost
25 opportunities, lost savings opportunities, and lost

1 participation opportunities for the people we're trying
2 to help. So some key -- key questions there.

3 The third point I wanted to make has to do
4 with measures. And let me just say from the outset that
5 Manitoba Hydro's program as designed is focussing on the
6 bulk of energy efficiency measures that need to be
7 focussed on for this sort of program. So I'm really just
8 focussing in here on a couple of exceptions.

9 And so there are two (2) exceptions here,
10 fridges and furnaces. And I'll just start with fridges.
11 Fridge, one of the things that we've discovered over
12 time, excuse me, is that the efficiency of refrigerators
13 has improved considerably by a factor of -- of about five
14 (5) over the past few decades. And it's been very
15 significant. It's been very consistent improvement in
16 efficiency.

17 So a fridge that once -- or let me put it
18 differently. If I had to go buy a fridge twenty (20)
19 years ago, that fridge may have been consuming upwards of
20 2,000 kilowatt hours a year. Today it's consuming four
21 hundred (400).

22 What that does is it creates a goldmine of
23 opportunities for energy efficiency program deliverers to
24 help customers get out -- get the -- or take the old and
25 inefficient fridges out and replace them with new,

1 efficient ones. So these fridge replacement programs --
2 or measures, actually, I should say -- are a component of
3 most successful low income energy efficiency programs
4 now. And what we've found is they generate very high
5 penetration levels.

6 So in a given program, I give some
7 examples here, in Wisconsin, for example, for the low
8 income energy efficiency program, over a quarter of all
9 participants to the program have their fridge removed.
10 Why?

11 Not because we're replacing all fridges
12 that we can get at, but because we're replacing all the
13 fridges that are cost-effective to replace. And we're
14 finding there are a lot of them.

15 In Wisconsin it's 28 percent. In New
16 Jersey it's over half of all participants to the low
17 income energy efficiency program we find that they have a
18 cost-effective opportunity to replace their old fridge
19 with a new one. In Long Island it's a third. In
20 National Grid's territory, which covers many states in
21 the Northeast, it's again closer to a half.

22 It's a very significant opportunity. I
23 may be focussing a little bit on one (1) particular
24 measure, but we're talking about a savings opportunity of
25 somewhere between 900 and 1,000 kilowatt hours in one (1)

1 single shot. And it's a really easy one to get at. It's
2 a really easy one to get at. I mean, insulation is
3 complicated. Weatherization is complicated. Replacing a
4 fridge is really simple. So we don't want to miss this
5 opportunity.

6 As you know from my -- from my evidence, I
7 did the analysis of it. I -- I tend to err on the side
8 of caution when I'm doing the economic analyses of these
9 types of measures. I used some pretty conservative
10 assumptions here and found that the cost would be about
11 nine (9) cents a kilowatt hour. That's less than the
12 program's average cost of eleven (11) cents.

13 So in other words if you add this measure
14 to the pile, you're going to be slightly bringing down
15 your overall program costs.

16 MR. BYRON WILLIAMS: Can I stop you? You
17 might guess from my physique that I'm a little obsessed
18 with fridges as well. I want --

19 MR. PHILIPPE DUNSKY: I wouldn't have
20 said that.

21 MR. BYRON WILLIAMS: That's because I
22 have to get your bill paid. But all -- Mr. Dunskey, just
23 moving just for a second away from low income programming
24 and just, I think there's some exciting news in terms of
25 what's going on in Quebec in terms of fridges in the --

1 the last few weeks.

2 I wonder, just a quick update on it?

3 MR. PHILIPPE DUNSKY: Well, sure,
4 actually fridges is -- it's an area where -- where we can
5 get -- we can get confused sometimes, because there are
6 two (2) different types of -- of approaches to -- to
7 getting out the old fridges.

8 For low income populations, what we tend
9 to focus on is taking it out and putting in a new one for
10 free, end of story. For the rest of the population, what
11 we tend to focus on -- and I think that's what you're
12 referring to -- is convincing people to simply get rid of
13 their old, you know, what we call "beer fridges." Either
14 get rid of them or get rid of them and replace them with
15 a new one on their own dime. But -- but what we do is
16 try to convince them to get that one out of the home.

17 And -- and that's a program that's been --
18 or an opportunity, I should say, that's been generating
19 significant savings throughout several parts of the US
20 and now has come to Canada. Ontario launched a full
21 scale, Ontario-wide early -- fridge early retirement
22 program in the fall, I believe it was.

23 And Quebec just launched its own about
24 three (3) weeks ago now. And I should say this is -- for
25 Quebec right now, this -- the fridge retirement, it's

1 interesting, because I -- I remember talking with Hydro
2 Quebec about it the last time I testified in fact at a
3 public hearing in 2003 or 2004.

4 And at the time they sort of laughed at it
5 and said you know, People wouldn't really get rid of
6 their fridges. We're wedded to our beer fridges, yeah.
7 And, everyone -- everyone says that. Everything's a
8 question of marketing, right?

9 But eventually they were convinced to --
10 to do a pilot of it. And they were so astounded by the
11 success of that pilot that this is now their -- their
12 single biggest increase in their overall efficiency
13 portfolio is coming from this new fridge -- fridge early
14 retirement program. It's a very, very significant
15 opportunity. This is a little bit beside from the low
16 income component, but --

17 MR. BYRON WILLIAMS: Thank -- thank you
18 for that.

19 MR. PHILIPPE DUNSKY: My pleasure. So
20 that's it for fridges. Let me turn to furnaces, which is
21 the second measure here. And furnaces are essentially
22 covered by Manitoba Hydro in its evidence in this
23 program.

24 But looking into it, what I understood is
25 that in fact Manitoba Hydro is not proposing to add any

1 additional incentives beyond what's already offered to
2 customers as a whole, which as I -- as I understand is
3 something like 10 percent of -- of the cost of a new
4 furnace, two hundred and fifty dollars (\$250).

5 They are offering a marginally lower
6 interest rate to low income participants then they are to
7 non-low income participants. But that marginally lower
8 interest rate is set to revert back to standard rates
9 after a five (5) year period, which of course is going to
10 be cause for significant, again, uncertainty for a very
11 risk-averse market segment. And if ever the customer
12 does sell their home, they will require full repayment
13 upon sale.

14 In other words, the -- the furnace
15 component of this program really isn't much of one. It
16 is what's being offered already to -- to all Manitoba
17 Hydro customers, and it's something. But it's not
18 something that's going to overcome those very acute
19 barriers to which low income customers face. It's simply
20 not going to address those -- those barriers.

21 So the impact of course is -- is twofold.
22 And maybe I'll take a little aside here. When we talk
23 about energy efficiency, there are two (2) types of
24 energy efficiency opportunities.

25 One is the natural replacement

1 opportunity. So someone's furnace dies. They need to
2 get a new one. We want them to get the high efficiency,
3 92 percent one instead of the standard, mid-efficiency,
4 80 percent one when they go and -- and make that
5 decision.

6 The other opportunity is -- is early
7 replacement. And that is they have a horribly
8 inefficient furnace. It's still got ten/fifteen (10/15)
9 years in it, but it's horribly inefficient. And it's
10 going to continue to be horribly inefficient for those
11 ten/fifteen (10/15) years. We want to convince customers
12 to replace that furnace now instead of waiting that
13 ten/fifteen (10/15) years of inefficiency.

14 This -- what Manitoba Hydro is offering
15 here may have some effect in terms of the natural
16 replacement market. Again, certainly no more than it
17 would for the general population, probably a fair bit
18 less because of the acute barriers that low income
19 customers face. But you know, there might be some effect
20 there.

21 There's no way that this is going to get
22 at the early replacement opportunity. And if I -- if I'm
23 low income and I have a furnace and I'm being told, you
24 know, I can go out and replace it and, you know, and
25 they'll give me two hundred and fifty (250) bucks and --

1 and a 4.9 interest rate they'll revert back to market
2 rates in five (5) years, and I'm not even sure what those
3 market rates will be in five (5) years, that's just not
4 going to generate opportunities there. So this is a
5 missed opportunity in terms of program design.

6 What does that mean? Well there are many
7 options for addressing furnace replacement opportunities.
8 In many regions of North America programs simply offer
9 the replacement for free, period. There are many.

10 WAP is the Weatherization Assistance
11 Program delivered in the US that will replace an old,
12 inefficient furnace, if it's old enough and inefficient
13 enough, for free. There are others that provide a
14 significant subsidy. In Ohio Columbia Gas pays half the
15 cost of a new furnace, trying at least to strongly
16 encourage early replacement.

17 And then there's a third option of
18 aggressive financing. And as you'll see in my testimony,
19 I'm proposing that we focus here on aggressive financing.

20 And let me just talk a little about --
21 about why. And I hesitated on that to be honest with
22 you, because financing is generally not going -- going to
23 have as much success as -- as would obviously paying the
24 whole thing.

25 But Manitoba Hydro -- well, let me just

1 first say, the specific proposal here is a ten (10) year,
2 zero interest loan, fully paid off after ten (10) years.

3 I ran the numbers on this, and it's
4 extremely cost-effective. They were talking about a
5 three and a half (3 1/2) to one (1) benefit/cost ratio.
6 Just using Manitoba Hydro's numbers -- and actually, I
7 should say, using some -- some pretty conservative
8 assumptions about free ridership and net to gross and all
9 those fun things.

10 Beyond that though, the -- the reason I'm
11 focusing in on financing is because Manitoba Hydro has a
12 very interesting tool that unfortunately many utilities
13 in North America don't. And that's on-bill financing.

14 And I have to say, I mean, this is
15 something that I would love many other utilities to do
16 and to -- to emulate Manitoba Hydro on, is providing on-
17 bill financing. I have to say I've had many discussions
18 with other utilities, and typically the answer is, you
19 know, we can't possibly talk with -- with the billing
20 department folks because just for, you know, they'll say
21 that just to open up the file to look at it we're cover -
22 - you know, we're talking about \$1 million. You just
23 don't touch the -- the bill.

24 It's already done here. You have this
25 fantastic infrastructure, and you can leverage that. And

1 you can leverage that for -- for a measure like furnaces.

2 So the opportunity of leveraging this, but
3 by providing a much more aggressive financing --
4 financing offer, I think is probably strong enough to
5 overcome the disadvantages of -- of typical financing
6 approaches.

7 It'll provide a pretty strong sales
8 argument if you can make the sale. And you need people
9 who are well trained to make sales. But at least you
10 have the argument there to generate real participants and
11 hopefully even get into the early replacement opportunity
12 market there.

13 In the longer term hopefully Manitoba
14 Hydro will look into what I think is probably the next
15 step for leveraging the on-bill financing approach that
16 you currently have, which is leasing.

17 Right now we're talking about loans.
18 Eventually, I think especially for something like
19 furnaces, something -- other things, for example, like
20 geothermal, you want to increasingly be looking at
21 leasing. Why leasing? Leasing so that the cost, or the
22 repayment of the -- of the debt, remains tied to the
23 efficient equipment.

24 One of the problems with a loan is if I
25 take out the loan on an efficient furnace and then I sell

1 my home and -- and I move somewhere else, I'm no longer
2 benefitting from that efficiency in my new home, but I'm
3 still paying off the loan.

4 And -- and so what does that mean? That
5 means that when I'm taking on the loan, I'm taking on the
6 uncertainty of not knowing whether I'll still be
7 benefitting from this in the -- in the later years, when
8 I'm still having to repay it. A leasing approach of
9 course allows the repayment to remain tied to the furnace
10 and, therefore, to the benefit-generating system, not to
11 the owner.

12 So -- and -- but here's some numbers that
13 I've already actually submitted to you, but just some
14 sensiti -- sensitivity analysis, really, in terms of the
15 actual cost, the benefit/cost ratio of this measure.
16 Again, pretty much any way you look at it, this is a
17 cost-effective approach. So that's pretty much it for
18 furnaces.

19 Like I mentioned before, by the way, I
20 would -- I would certainly encourage Manitoba Hydro to
21 also, while you're at it, look at the opportunity of --
22 of bringing in grey water heat recovery systems into this
23 program. They've come a long way in the past couple of
24 years and -- and represent a very significant and very
25 cost-effective savings opportunity for hot water savings.

1 But again, that wasn't in my testimony.
2 I'm not going to get into that too much here.

3 To sum up, the -- the proposed LIEEP
4 program, first of all, addresses a very serious need.
5 Second of all, it really is and -- and I don't say that
6 blithely -- it really is a good faith effort to address a
7 very complex market and very complex opportunity.

8 But it has some very fundamental design
9 flaws, particularly as pertains to the individual track.
10 It will face some very significant delivery challenges
11 with regard to how we're dealing with the CBOs and -- and
12 the role that we carve out for CBOs or not.

13 And finally, there are a couple of
14 measures that can be addressed much more aggressively.

15 Key recommendations: I think I'm going to
16 be repeated myself again but it will be the last slide
17 and I'll shut up after that. In terms of design, modify
18 the program design to ensure that we're offering a
19 turnkey service in which -- in which Manitoba Hydro or
20 its contractors, by the way, essentially take on all of
21 the contracting, payment, and incentive collection tasks.
22 This is essential to ensuring participation, and
23 especially so in the individual -- in the case of the
24 individual track.

25 In terms of delivery, do a real clear and

1 honest assessment of CBO capacities prior to contracting
2 with them, giving particular attention to, first of all,
3 investigating the issue of trust between the particular
4 CBO and landlords.

5 And second of all, considering Manitoba
6 Hydro's willingness or ability to either support CBOs
7 development of capacities for delivery of this program,
8 or be very selective in -- in the contracting process.

9 And finally, in terms of measures, add a
10 fridge replacement component to the program and adopt a
11 much more aggressive approach to furnace replacement,
12 essentially through a -- initially at least, through a
13 zero interest, ten (10) year loan.

14 That pretty much concludes my oral
15 testimony and maybe we'll listen to Bill a bit -- bit
16 more and then we can get into questions. Thank you very
17 much.

18 MR. BYRON WILLIAMS: Mr. Chairman and
19 members of the Board, Mr. Harper has done the bulk of his
20 testimony. He has, out of the kind of twenty-three (23)
21 pages of notes, we're on page 20, so we're -- I'm
22 guessing maybe fifteen (15) minutes to -- to go, maybe
23 twenty (20).

24 So we're at certainly the direction of the
25 Board. If you'd like us to finish-off, he's going to

1 address issues related to differential rates and inverted
2 rates. It's up to the Board.

3 THE CHAIRPERSON: I think we'll take a
4 more abbreviated lunch break and come back at 1:00.
5 We're going to have to work very efficiently this
6 afternoon if we're going to be able to complete by the
7 scheduled closing time.

8 MR. BILL GANGE: Mr. -- Mr. Chair, would
9 it be possible to come back at quarter to 1:00? Would
10 that be possible? We -- we have a -- we have a real
11 problem in terms of timing here.

12 THE CHAIRPERSON: Mr. Gange, maybe you
13 could give us an estimate. How much time do you think
14 you're going to require with the panel?

15 MR. BILL GANGE: Twenty (20) minutes.
16 And -- and -- and I can tell you that I -- I have a --
17 I'm giving a seminar this afternoon at two o'clock that
18 was scheduled in about last May.

19 THE CHAIRPERSON: Oh, that's what your --

20 MR. BILL GANGE: So -- so I -- I know
21 that I -- I have to be out of here by ten (10) to 12:00
22 -- ten (10) to 2:00, so I can get over to the Fairmont
23 to --

24 THE CHAIRPERSON: Say no more. We'll be
25 back at quarter to 1:00.

1 MR. BILL GANGE: Thank you. Thank you.

2

3 --- Upon recessing at 12:00 p.m.

4 --- Upon resuming at 12:46 p.m.

5

6 THE CHAIRPERSON: Okay, Mr. Williams, if
7 we're going to get Mr. Gange out of here in time?

8 MR. BYRON WILLIAMS: Actually, Mr.
9 Chairman, I understand there's a delay. Ms. Ramage wants
10 to show her hockey video. back to you though, Mr.
11 Harper.

12

13 CONTINUED BY MR. BYRON WILLIAMS:

14 MR. BYRON WILLIAMS: So, back to you
15 though, Mr. Harper. Just -- I'd like you -- to chat with
16 you for just a couple of minutes about a number of issues
17 associated with Manitoba Hydro's Cost of Service Study
18 and its rate design proposals.

19 And first of all let's talk about your
20 views on whether or not there should be differentiated
21 rate increases for the various customer classes and --
22 and that's something the PUB staff asked you about in
23 PUB/COALITION Number 8, sir.

24 MR. WILLIAM HARPER: Well, I think
25 whether or not there's differentiated rate increases is

1 really a matter to judgment. There's no clear formula
2 that works for this. One (1) of the tools that's used in
3 determining whether differentiated rate increases are
4 required is the result of Manitoba Hydro's embedded Cost
5 of Service Study and the associated analysis.

6 In this regard the Board has directed that
7 a zone of reasonableness be applied to the results. And
8 when we apply the specified ninety-five-one-0 (9510) --
9 ninety-five (95) to one-0-five (105) range to the current
10 COSS results, a minimal amount of rebalancing might seem
11 appropriate. There are three (3) out of the eight (8)
12 classes that are outside the range, however, some of them
13 are just barely outside of the range.

14 However, at this time -- this is really
15 the first time we are reviewing the cost of service
16 results after -- after the Board's decision, I guess,
17 117/'06 on the cost of service methodology, and I think
18 there -- there are a couple of issues that have been
19 raised by Manitoba Hydro and MIPUG as to -- as to sort of
20 what -- what some of the final methodology should be, and
21 I have some sympathy for both the concerns actually. And
22 given the current RCCs and the fact that we're pretty --
23 pretty close to the boundary I think it would be
24 appropriate to -- to resolve those because -- before we
25 make any decisions.

1 Also, as -- as well as the Cost of Service
2 Study results the Board has indicated that it wants to
3 consider a number of other factors in assessing revenue
4 reallocation between the classes including the pre-export
5 allocation, as well as an allocation based on marginal
6 environmental costs.

7 As we've seen in this Hearing from the
8 various exhibits that have been filed by Manitoba Hydro
9 and others these perspectives can yield significantly
10 different results, and depending upon how much weight one
11 puts to one (1) perspective as opposed to another
12 perspective, you can maybe get a totally different view
13 as to if you have differentiated rate increases which
14 class should have a higher or lower average rate.

15 Finally, I -- I don't think the Board can
16 consider a question of differentiated rate increases
17 separately from other aspects of the proposal that will
18 also impact on customers' bills. Manitoba Hydro is
19 seeking an increase that is already higher than inflation
20 and differentiated rate increases would compound the
21 impact for some customer classes.

22 Similarly, Manitoba Hydro is proposing to
23 adjust the rate design and differentiated rate increases
24 would compound the effects of these changes for
25 individual customers so you could have compounded effect

1 upon compounded effect.

2 Ultimately the matter lies with the Board
3 and how it wants to weigh these various issues. But, in
4 my view, and based on what I've gone through, I don't
5 attach a lot of high priority at this point in time to
6 having differentiated rate increases. I think the 2.9
7 percent with the 1 percent for the area and roadway
8 lighting is acceptable.

9 MR. BYRON WILLIAMS: Leaving aside your
10 OM&A cost reductions, Mr. Harper?

11 MR. WILLIAM HARPER: That's correct.

12 MR. BYRON WILLIAMS: We don't want to
13 forget those. Now I'd like to turn and get your comments
14 on Hydro's residential inverted rated proposal, please.

15 MR. WILLIAM HARPER: It's generally
16 accepted that one (1) of the designs of -- one (1) of
17 the, excuse me, the objectives of rate design is to
18 encourage consumers to use electricity more efficiently.
19 Economic theory tells us that to achieve -- to achieve
20 this incremental use should be priced at marginal costs.

21 Therefore, from a theoretical perspective,
22 inverted rates where a second tier as price closer to
23 marginal costs can be considered a positive view. The
24 difficulty lies in turning the theory into practice
25 which, I think, is a lot of what Mr. Dunsky was talking

1 about in terms of getting energy efficiency adopted.

2 It's turning the theory into practice.

3 I think first when it comes to actually
4 implementing inverted rates, questions arise as to how to
5 define and calculate the marginal costs. This includes
6 definal -- issues -- definitional issues, excuse me, as
7 to whether one should use short-run or long-run marginal
8 costs, and in Manitoba Hydro's case, questions as to the
9 transparency regarding the actual calculation itself.

10 These questions can probably be avoided in
11 the near term given that the second tier rate being
12 proposed by Manitoba Hydro is probably less than marginal
13 cost by any definition. However, they are questions that
14 will eventually have to be addressed by Manitoba Hydro
15 and by this Board if one wants to progress down the path
16 of inverted rates the way Manitoba Hydro is anticipating
17 it will do.

18 Secondly, the theory, and the reason why
19 this rate form is being adopted, is that customers will
20 respond and electricity will be used more efficiently.
21 However, the ability to respond depends upon the
22 customer's circumstances. In the evidence I -- in my
23 evidence, I have noted at least three (3) circumstances,
24 those being low income consumers, rural consumers, and
25 tenants, wherefore different reasons the ability of

1 consumers to respond may be limited.

2 For both fairness and efficiency reasons,
3 these situations need to be addressed if residential --
4 inverted rates are to be successful. I think --
5 successful in the terms of publicly acceptable from a
6 fairness perspective, successful in terms of getting
7 efficiency results you want, in terms of having
8 supporting programs so everybody can take advantage of
9 them to the extent they can.

10 Third, we've heard that the price of
11 electricity is inelastic. I'm having problems with these
12 "in" words these days. Inelastic, that means an increase
13 in price doesn't lead to a corresponding decrease in
14 demand. This would suggest that consumers' bills will go
15 up in -- even if they can respond in response to inverted
16 rates. I'd also suggests that rate design by itself will
17 not replace the need for DSM programs such as Mr. Dunsky
18 has been talking about and they will be needed as well to
19 help customers manage their bills.

20 And, finally, there are tradeoffs that
21 have to be made if inverted rates are to be designed so
22 as to recover average costs. We're still talking about
23 recovering the average revenue requirement. As discussed
24 in my evidence, these tradeoffs involve balancing the
25 number of kilowatt hours that would be exposed to the

1 second tier rate against the level that that second tier
2 price is going to have, since overall the combination of
3 those two (2) has to recover the same revenue
4 requirement. The higher the price, the less kilowatt
5 hours you can expose to it if you're going to try and
6 come out at the same average revenue recovery, overall.

7 One can try and manage these issues by
8 varying the size of the second tier rate, either through
9 a reasonable basis as I talked about in my evidence, or
10 on a -- including a space heating provision as Mr.
11 Chernick talked about when he was here with you.
12 However, each of these approaches comes with additional
13 administrative cost and sometimes may introduce some
14 unintended biases in -- in -- to the rate mechanism.

15 MR. BYRON WILLIAMS: Thank you for that,
16 Mr. -- Mr. Harper. In terms of the proposal before the
17 Board of Manitoba Hydro, what are your -- your views?

18 MR. WILLIAM HARPER: As I indicated in my
19 evidence, I generally agree with Manitoba Hydro's
20 proposal for 2008. Its decision to maintain the customer
21 service charge at the six dollars and twenty-four cents
22 (\$6.24), represents an acceptable balance between trying
23 to recover a reasonable, fair share of the customer
24 related costs, and trying to send -- send a signal
25 through the usage price -- prices on a per energy basis;

1 that reflects the value of consumption.

2 The selection of the 900 kilowatt hours
3 for the first block is a reasonable -- is reasonable as a
4 first step. It results in a reasonable number of
5 customers being exposed to the second energy block. And
6 the lower block size -- in a lower block size you reduce
7 it below the nine hundred (900), would mean that while
8 more customers would be exposed to the rate, the rate
9 itself would have to be reduced and there's not a lot of
10 room to do that.

11 If you look at the -- both the first and
12 the second tier rate Manitoba Hydro's proposed, they're
13 not much higher than the existing rates in either event.

14 Also the modest differential proposed
15 between the first and the second blocks starts to send
16 the correct message, i.e., that increased use is more
17 expensive while not imposing significant bill impacts.
18 In my view this issue of bill impacts is important for a
19 couple -- it is important, and there are a couple of
20 reasons why Manitoba -- how Manitoba Hydro can address
21 this going forward. And I think they should address it
22 before they move much further down the line from an
23 implementation perspective.

24 The first it needs to ensure that the DSM
25 programs it has and is developing can -- are focussed

1 fully on supporting those customers who will be impacted
2 by this change, and that is customers who typically use
3 more than 1,500 kilowatt hours a month.

4 Second is is further consideration should
5 be given to the design of that first block so as to
6 improve the perceived fairness of the rate between
7 different customers. But those are issues that I think
8 can be worked on over the coming year, and Manitoba Hydro
9 can come back on in a future rate proceeding.

10 MR. BYRON WILLIAMS: Just to finish, Mr.
11 Harper, on that -- on one (1) small point. You -- you
12 define customers who will be impacted as those who use
13 more than 1,500 kilowatt hours per month, and by that I
14 assume you mean that those are the ones that will tend to
15 see their -- their rates rise or their, excuse me, their
16 bills rise by a bit more than the -- kind of the average.

17 Is that what you're indicating?

18 MR. WILLIAM HARPER: Yes, that's correct.

19 MR. BYRON WILLIAMS: And assume with me
20 for -- well, let's define low income customers for the
21 purposes of this discussion as those earning thirty
22 thousand dollars (\$30,000) a year or less. Could you
23 tell me what percentage of low income -- low income
24 customers use more than on average 1,500 kilowatt hours
25 per month, sir?

1 MR. WILLIAM HARPER: Well, as I noted in
2 my evidence and based on materials that Manitoba Hydro
3 had filed, about 20 percent of low income customers fall
4 into that category of using more than 1,500 kilowatt
5 hours a month.

6 MR. BYRON WILLIAMS: Thank you, Mr.
7 Harper, and you're prepared for cross-examination?

8 MR. WILLIAM HARPER: Yes.

9 MR. BYRON WILLIAMS: And, Mr. Dunsky,
10 you're ready as well?

11 MR. PHILIPPE DUNSKY: Yes.

12 MR. BYRON WILLIAMS: I'm turning them
13 over to My Friend, Mr. Gange.

14 THE CHAIRPERSON: Thank you. Thank you,
15 Mr. Williams.

16 Mr. Gange...?
17

18 CROSS-EXAMINATION BY MR. BILL GANGE:

19 MR. BILL GANGE: Thank you, Mr. Chair,
20 and thanks to all for accommodating me in -- in terms of
21 this timing problem that I have.

22 Mr. -- Mr. Harper, if you turn to page 29
23 of your pre-filed evidence.

24 MR. WILLIAM HARPER: Yes, I've got that.

25 MR. BILL GANGE: You -- and you just went

1 through this with Mr. Williams briefly. You identified
2 three (3) segments of residential customers that -- that
3 may be impacted negatively by the inverted rates.

4 And the first one (1) is rural customers
5 using electricity for space heating. The second one (1)
6 is low income customers who may not have the financial
7 means to undertake standard conservation measures, and
8 the third one (1) is those residential customers who
9 rent. Those are -- those are your three (3) main
10 concerns here.

11 Is that correct, sir?

12 MR. WILLIAM HARPER: I think with the
13 caveat that on that last one (1), I think if you finish
14 reading the sentence, it was residential customers who
15 rent but are directly responsible for paying their bills.

16 MR. BILL GANGE: Yes, thank you. In --
17 in -- there are ways of -- of being able to deal with the
18 concerns that you've got for each of those groups. Would
19 you agree with me that with respect to the rural
20 customers using electricity for space heating, Mr.
21 Chernick's solution for that -- or suggested solution for
22 that is to have -- to identify those customers who use
23 electricity for space heating, and then to give those
24 customers a larger initial block.

25 Do -- do you recall seeing that in Mr.

1 Chernick's evidence?

2 MR. WILLIAM HARPER: Yes, I -- actually I
3 was reading the transcripts, and saw Mr. Chernick
4 discussing that with the Board here, yes.

5 MR. BILL GANGE: And that would be one
6 (1) way of -- of ensuring fairness for those customers
7 would it not, sir?

8 MR. WILLIAM HARPER: I think on a
9 conceptual basis, yes, I think it would be one (1) way of
10 trying to address that. You know, on a -- I think there
11 are sort of pract -- and this is where I was talking in
12 my direct on a practical matter, I think there may be
13 limitations to that, and I think you'd want to -- I don't
14 think you can automatically say that that's going to
15 solve the problem. I think it's one (1) of the things
16 that maybe should be explored.

17 There may be practical issues. There may
18 even be legal issues. I'm not too sure about it, but
19 that's one (1) -- that's probably worth looking at, yes.

20 MR. BILL GANGE: Yes, let's leave
21 legalities out of it -- just in terms of -- that -- that
22 one (1) of the issues probably would be trying to
23 establish what that fairness issue of the initial block
24 would be, but -- but it -- it would be something that
25 would reduce -- certainly under any circumstances, it

1 would reduce the impact upon the rural customers.

2 MR. WILLIAM HARPER: Yes, I think it
3 would not only be what's the size of that space-heating
4 block, but also what you do to define who you give that
5 space-heating block too. You know, Manitoba Hydro's
6 billing system, I think, has got a fairly -- has got one
7 (1) definition as to what a space-heating customer is,
8 and that's how they've put somebody in the standard pot
9 as opposed to the all-electric pot.

10 I think you have to have electric heating
11 in more than 10 kilowatts, but -- you know, so, but
12 whether or not there are people with 9 kilowatts that
13 don't quite fall -- you know, so, so I think there's
14 issues about identification as well as issues about
15 establishing what -- what's the size of the first block.
16 Those are things you -- you'd have to work -- work
17 through.

18 MR. BILL GANGE: Right. Whatever the
19 details are, conceptually it's something that could be
20 done.

21 You'd agree with that?

22 MR. WILLIAM HARPER: It's conceptually
23 something that should be looked -- that should -- should
24 be looked at and considered, yes.

25 MR. BILL GANGE: Yes, thank you. Your

1 second group was the -- the low income customers who may
2 not have the financial means to undertake standard
3 conservation measures. Now, I think that you just said
4 to Mr. Williams that about 20 percent of low income
5 customers, the estimate, from what you see from Manitoba
6 Hydro, is that 20 percent of low income customers use in
7 excess of 1,500 kilowatt hours per month.

8 MR. WILLIAM HARPER: Yes, that was it.

9 MR. BILL GANGE: And -- and that was the
10 -- the threshold at which you indicate that -- that
11 people would start to see an impact above the average
12 rate increase.

13 MR. WILLIAM HARPER: Yes, based on the
14 current design that -- that Manitoba Hydro's proposed.

15 MR. BILL GANGE: Yes. And I -- I take it
16 then that for those low income customers that have
17 smaller houses and are using less than the initial block,
18 the 900 kilowatt hours per month -- those -- those low
19 income customers would see a decrease in their bill,
20 pursuant to this rate design.

21 MR. WILLIAM HARPER: I guess compared to
22 what it would have been otherwise, yes.

23 MR. BILL GANGE: So that the inverted
24 rate may work to -- to certain of Manitoba Hydro's low
25 income customers -- a benefit to them.

1 MR. WILLIAM HARPER: I -- I think it --
2 you know, it would be a benefit to any customer who was
3 consuming on average below that point, whether they be
4 low income or non-low income.

5 MR. BILL GANGE: Right. And one (1) of
6 the things that -- that RCM/TREE has been advocating is
7 that -- is that there ought to be some sort of program
8 whereby those low income customers who are in excess of
9 the 1,500 kilowatt hours per month should be identified
10 by Hydro so that those customers are targeted as -- as
11 the top of the -- of the list for DSM measures.

12 That would be again, a -- a second way of
13 -- of dealing with the -- the potential problems for low
14 income customers, would it not, sir?

15 MR. WILLIAM HARPER: Yes, it would.

16 MR. BILL GANGE: And -- and would you
17 agree with me that -- that -- that those customers should
18 probably be the most high priority of Manitoba Hydro's
19 customers that are targeted for DSM measures.

20 MR. WILLIAM HARPER: I guess you're maybe
21 getting -- you know, there's just lots of reasons why you
22 would target customers for DSM, sort of trying to manage
23 bill impacts is -- is one of them.

24 And I'm -- I'm not too sure if I feel sort
25 of confident enough in knowing what all the other

1 considerations that are taken into account, in terms of
2 to designing programs and who you target, that I'd want
3 to say that these are the ones that should go right to
4 the top of the list.

5 I -- I -- think -- think they should be
6 given sort of significant consideration. I'm willing to
7 go that far with you.

8 MR. BILL GANGE: Okay, thank you. That's
9 -- that's -- that's as far as I need you. Thank you,
10 sir. The -- the -- the third category that you
11 raised are the residential customers who rent, and again
12 would you go with me as far as this, that there may be a
13 significant number of -- of renters because they are in
14 apartments that are -- are generally speaking a lower --
15 a smaller area than -- than most houses -- that their
16 heating requirement is likely to be less than -- than
17 home owners.

18 MR. WILLIAM HARPER: Yes, there could be
19 situations to that extent. I think where this might more
20 primarily arise and again, like Mr. Dunsky, I'm not
21 totally familiar with sort of the demographic face in
22 Manitoba, maybe people who are renting houses. They are
23 probably ones that are probably much, much more likely to
24 be responsible for the bills since the houses are metered
25 and somebody is just renting the house to them, and that

1 could be any size house sort of thing.

2 So I accept your point on sort of lower
3 apartment. I think there's probably still a fair segment
4 of renters here who may well be over the 1500 kilowatt
5 hour mark.

6 MR. BILL GANGE: Thank you. But for
7 those ones that are under it, again, the inverted rates
8 may rai -- may work to the significant advantage of -- of
9 those -- those people who are using less than the 900
10 kilowatts.

11 MR. WILLIAM HARPER: To -- to an
12 advantage depending upon the level of the inversion
13 whether you call it significant or not is in the eyes of
14 the beholder.

15 MR. BILL GANGE: Right, and -- and that
16 is the point isn't it's -- it's the level of inversion
17 that determines whether it's -- it's a significant
18 benefit or simply a -- almost, well, a marginal --
19 nominal -- nominal difference.

20 MR. WILLIAM HARPER: Nominal.

21 MR. BILL GANGE: Yes, thank you.
22 Marginal's a bad word in this hearing. So let me just
23 say, a nominal advantage.

24 The proposal at it stands now though, is -
25 - is not a -- a significant inversion, is it?

1 MR. WILLIAM HARPER: No, it isn't, and
2 that's why as I was saying in my direct and in my
3 evidence, I think it -- it is a step in the right
4 direction. I -- I'd be loathed to see the Board -- to
5 see this Board or a Utility go ahead and sort of approve
6 a significant inversion on the promise or the expectation
7 that there would be programs you know, at some point in
8 time in the future to address the problem. I'd like to
9 see the safety net there before we put the guy on the
10 tight rope wire.

11 MR. BILL GANGE: But I -- I take it, sir,
12 that from that answer that you don't or -- if the safety
13 net were in place and -- and the DSM programs had been
14 designed and implemented and -- and were being effective,
15 that down the line you would see that the inversion has
16 to be increased?

17 MR. WILLIAM HARPER: Yes, I -- I think
18 should be increased. I think there's a matter of --
19 there's a matter of I think, the term Manitoba Hydro
20 uses, and I agree with it to a great extent is
21 "gradualism." I don't think that's something you'd want
22 to sort of move to seven point one (7.1) cents or seven
23 point seven (7.7) cents in 2009, but I think it's -- it's
24 an inversion that -- that should -- should and could be
25 increased over time.

1 MR. BILL GANGE: Thank you.

2

3 (BRIEF PAUSE)

4

5 MR. BILL GANGE: And -- and one (1) of
6 the suggestions that Mr. Chernick had during his --
7 during his oral testimony was that one (1) of the things
8 that could be considered, for with respect to low income
9 users that -- that are being affected by the inversion,
10 would be the implementation of a voucher system whereby
11 energy costs were -- were handled through the vouchers.

12 Do you recall reading that as well, sir?

13 MR. WILLIAM HARPER: I may have read
14 about it. I -- I apologize, it -- it's been a few weeks
15 going on --

16 MR. BILL GANGE: Sure.

17 MR. WILLIAM HARPER: -- that part doesn't
18 -- doesn't resonate with me, but I -- I can accept the
19 idea as being something we would have said, yes.

20 MR. BILL GANGE: Again, it would be
21 something that -- that ought to be considered by Hydro in
22 terms of how to minimize the -- the negative impact of
23 the inverted rate?

24 MR. WILLIAM HARPER: I guess there are
25 lots of ideas that are probably worthy of consideration.

1 Just from a personal perspective, I wouldn't put that one
2 (1) anywhere near as top of the list as some of the
3 issues that we've -- ideas that we've talked about
4 already. I think we're getting more -- I think this
5 introduces more administrative type issues and practical
6 issues. I'm uncertain about exactly how it would work.

7 MR. BILL GANGE: And -- and the -- one
8 (1) of the other issues that has been raised by -- by Mr.
9 Wiess in his testimony was the -- the consideration of a
10 -- a limitation with respect to payments based on
11 percentage of income.

12 MR. WILLIAM HARPER: I guess on -- to be
13 quite frank in this and my personal view on general issue
14 -- on a general nature, that's -- that's not something
15 that I favour. I can see circumstances where the need
16 could arise, but I think it'd have to be very specific
17 circumstances. I think the issue we're dealing with here
18 can be addressed in more positive ways such as the DSM
19 initiatives we've been talking about.

20 MR. BILL GANGE: Yes. Mr. Dunsky, one
21 (1) of the things that you talked about in your testimony
22 was the -- the difficulty in selling these programs. And
23 that no matter how well designed they are, no matter how
24 free they are, whether they're free or free, sometimes
25 it's difficult to get people to -- to buy into it for

1 whatever reasons that are -- are difficult to comprehend
2 from the designer's perspective.

3 Have -- have you given consideration to
4 the idea of -- of the idea of vouchers for assistance in
5 payment of energy being provided to low income customers?

6 MR. PHILIPPE DUNSKY: I have not at all.

7 MR. BILL GANGE: Okay, thank you.

8 Now, Mr. Harper, one (1) of the things
9 that -- that is a -- is a concern is the potential for
10 fuel switching where -- and -- and we've seen this in
11 Manitoba that the -- the evidence has been that with
12 respect to new home construction, the home builders are -
13 - are moving away from gas heaters -- gas water heaters
14 to electric heaters.

15 Would you agree with me, sir, that -- that
16 again that kind of a trend has potential -- a potential
17 negative impact in -- in terms of the relationship
18 between the -- the natural gas division of Hydro and the
19 electrical division?

20 MR. WILLIAM HARPER: I'm trying to
21 understand what you mean by potential impact between the
22 divisions of the two (2). I'm sorry.

23 MR. BILL GANGE: The -- the fact that as
24 -- as the price of gas increases that there are many
25 people in terms of the building trade here who believe

1 that it's more economical for them to be installing gas,
2 pardon me, electric heaters, water heaters and -- and
3 reducing the use of gas in Manitoba.

4 MR. WILLIAM HARPER: I guess, it --
5 you're saying it's more economical for the contractors or
6 the contractors believe it's more economical for the
7 customers who would be buying their houses?

8 MR. BILL GANGE: Well, I think it's both.

9 MR. WILLIAM HARPER: Okay, no, I guess if
10 -- I'm just sort of trying to follow down -- follow down
11 the logic of that and if the view is is that the -- that
12 as a result of that you have more electric heating, let's
13 say, and what the -- which to some extent is using
14 electricity that might otherwise have been -- which has a
15 certain opportunity cost involved in it.

16 Now the difference between the opportunity
17 cost of electricity and the price of electricity to a
18 residential customer, there is a difference there, but
19 it's not as big as it is for some customer classes.

20 So I think the -- I can appreciate where
21 yes, there could be a tension there. It's a tension that
22 to some extent you could say the inverted rate will try
23 and address. It's also a tension that can be minimized
24 to the extent you're getting sort of -- if they're going
25 to be electrically heated homes and the envelopes as in -

1 - as sort of as insulated to the best you can, therefore,
2 they're using the least amount of electricity possible.

3 MR. BILL GANGE: And -- and, sir, in --
4 has your experience, in -- in terms of testimony at these
5 various hearings, ever caused you to consider the -- the
6 impact upon greenhouse gas admissions in -- in terms of
7 the switching from natural gas for things such as water -
8 - water heating to -- to electricity?

9 MR. WILLIAM HARPER: Well, I think ones
10 perspective probably depends a lot on where one is, if I
11 can put it that way sort of thing. You know, the
12 perspective in Manitoba as to impacts on greenhouse gas
13 using electricity versus gas would be quite a bit
14 different than, say, they are in Ontario, where, you
15 know, where electricity is -- at the margin is expected
16 to -- will be coming from gas itself sort of thing. So
17 you're asking yourself is it more efficient just burning
18 the gas in the home or is more efficient to burn gas to
19 produce electricity?

20 In Quebec, it's much different again since
21 virtually all the power is coming from Hydro, so I -- I
22 can't -- and I can't say to be quite honest with you. I
23 have seen the -- and maybe -- maybe that's a plus -- plus
24 for Manitoba, but I have seen the concern about
25 greenhouse gases sort of because of these choices coming

1 up to the same extent when we've had these debates as --
2 as been -- been coming up here.

3 So no, I -- I can't -- I -- the concern is
4 different everywhere, and it hasn't been actually
5 expressed nearly as often or as vocally as it's been
6 expressed here.

7 MR. BILL GANGE: Thank you, sir, it was
8 an unfair question, and I -- I -- but -- but thanks for
9 your answer. The -- the...

10

11 (BRIEF PAUSE)

12

13 MR. BILL GANGE: At page 38 of your pre-
14 filed testimony, sir...

15 MR. WILLIAM HARPER: Yes, I've got the
16 page.

17 MR. BILL GANGE: At the top of that page
18 you state that pursuant to the inverted rate proposal
19 that is currently before the Board from Manitoba Hydro,
20 roughly 75 percent of the bill increases seen by
21 customers will be less than the average rate increase and
22 less than 5 percent of the bills will involve increases
23 in excess of 3.5 percent.

24 And -- and the conclusion that you arrive
25 at with respect to that is that overall the bill

1 dispersion arising from Manitoba Hydro's current proposal
2 is reasonable.

3 That's -- that's the conclusion to which
4 you've arrived, sir?

5 MR. WILLIAM HARPER: Yes, it is.

6 MR. BILL GANGE: What strikes me from
7 that is that you're saying that by -- for -- for the vast
8 majority of people, the inverted rate proposal that is
9 currently before this Board will have no effect,
10 certainly no -- no -- well, in fact it -- it -- your --
11 your comment is that it'll be less than the average rate
12 increase that would be applied?

13 MR. WILLIAM HARPER: Yes, in terms of the
14 number, the bill impacts will be less than average.

15 MR. BILL GANGE: So that the -- the --
16 for 75 percent of the people, there will be no positive
17 price signal. When I -- and when I say "positive" I'm
18 meaning -- I'm meaning in terms of sending people a price
19 signal to reduce consumption?

20 MR. WILLIAM HARPER: Actually I -- I
21 wouldn't agree with that. I think you have to make a
22 distinction between bill impacts which is what's the
23 change in the total bill, and the impact that one sees at
24 -- at the margin, if I can put it that way, in terms of
25 what -- what is one paying for one's incremental use?

1 And -- and there will be a lot of
2 customers far -- you know, there will be a lot of
3 customers who may see a bill reduction overall, but they
4 will be using electricity in that second tier for their
5 incremental use.

6 And to the extent, you know, when they
7 look at their bill and they say, Gee whiz, you know,
8 that's higher, it may only be nominally higher, but as I
9 said, it's -- it's a move in the right direction.

10 It will be nominally higher, and that will
11 be telling them that, you know, on average you're using
12 more -- isn't on average the same as less. If I use
13 more, there -- there is a nominally higher increase
14 associated with that so I don't accept your premise that
15 it's, you know, that 75 percent of the people aren't
16 getting -- aren't getting sort of the correct price
17 signal.

18 MR. BOB MAYER: You assume, Mr. Harper,
19 that people actually read their bills other than the
20 bottom line, right?

21 MR. WILLIAM HARPER: Yes, you know, and
22 that may be a -- that -- that may, you know, sort of may
23 -- may be a bit of a theory on my part but, you know, but
24 -- but people do -- I know from talking to my relatives --
25 -- they read their bills, and I think -- and I think if --

1 if people are reading the newspaper and understanding
2 that Manitoba Hydro is changing its rates and its rate
3 structure, maybe they will be looking at their bills and
4 seeing what it means to them.

5 MR. BOB MAYER: Mr. Harper, I can
6 understand if I were your relative, I'd probably be
7 reading my bills too. Interestingly enough I sit here,
8 and I don't read my bill.

9 I have some concern when we talk about
10 price signals. I'm not sure that the bill does it for
11 them. Be it, inverted rate or otherwise -- but I know
12 that the issue of elasticity has always been a problem
13 because when it turns to be forty (40) below, my furnace
14 has to come on, and I only have one (1) way of heating my
15 house.

16 MR. WILLIAM HARPER: You know, I think
17 you -- you raise a good point and perhaps, to some extent
18 you know, is Manitoba Hydro -- if they want people to
19 understand the issue of inverted rates and what it means
20 to them, perhaps there is an education -- consumer
21 education component to introducing inverted rates as well
22 as just putting it in the bill.

23 MR. ROBERT MAYER: And something other
24 than a bill insert.

25 MR. WILLIAM HARPER: Yeah.

1 MR. ROBERT MAYER: Thank you.

2

3 CONTINUED BY MR. BILL GANGE:

4 MR. BILL GANGE: Mr. Dunsky, earlier
5 today you were here when Mr. Bowman was asked about the
6 use of the RIM test for DSM. And, I'm not sure if you
7 reviewed Mr. Chernick's testimony, but Mr. Chernick had
8 said that he was not in favour of the RIM test being used
9 for an analysis of DSM.

10 Wonder what your thought is on that, sir?

11 MR. PHILIPPE DUNSKY: Well, I -- excuse
12 me, first of all, I apologize, I have not reviewed Mr.
13 Chernick's evidence but certainly, I agree with that
14 conclusion. I'm -- I think the RIM test is -- is a test
15 that, by design, leads to greater economic inefficiencies
16 and is not a desirable test to be used for energy
17 efficiency programs in any region that is seriously
18 considering energy efficiency as an option.

19 In fact, I mean, I'll go a little step
20 further. I don't think that there's any -- if you look
21 at the -- at the regions in North America that use
22 different tests, I don't think there's a region on the
23 continent that does use the RIM tests as a screen -- as a
24 go, no go screen, that is among the regions that takes
25 energy efficiency seriously.

1 I mean, there are exceptions. There's
2 Georgia and Wyoming and a few states like that that still
3 use the RIM test, but they're generally not considered
4 states that are very interested in energy efficiency.

5 MR. BILL GANGE: And what's a -- what is
6 a better method, in your opinion, on that?

7 MR. PHILIPPE DUNSKY: You know, that's a
8 -- that's an interesting one (1) and a tough one (1).
9 Maybe I can speak to that theoretically and then I can
10 speak to it practically. Theoretically, there are a
11 couple of tests that have always been held as the
12 standard bearers for what you should do for energy
13 efficiency, and that would be the TRC test and its -- its
14 cousin, if you will, the societal cost test. And those
15 are tests that are designed to maximize economic
16 efficiency.

17 So certainly most regions -- most leading
18 regions use some of form of TRC or societal cost test and
19 sometimes there are variances, but those tend to be the
20 tests that are used.

21 That said, here -- here's my caveat to
22 that, and, in fact, I have to say I -- I only caught the
23 tail end of Mr. Bowman's evidence this morning -- or
24 testimony, but Mr. Bowman made a very important point
25 which I'll take the liberty of repeating perhaps. The

1 TRC isn't very -- in many ways, a little bit Soviet sort
2 of approach to this sort of thing. It's very high level
3 planning, you know.

4 We -- we, the experts, decide what is --
5 what is cost-effective and what isn't. And when
6 something isn't, we say, you know, customers shouldn't be
7 doing that, and we certainly will not encourage customers
8 to do that in any way. That's problematic and it doesn't
9 account for the real world in which, as Mr. Bowman said,
10 I think very eloquently this morning, many people -- many
11 people have many different reasons for investing in
12 energy efficiency; investing including measures that are
13 deemed not cost-effective according to our theoretical
14 calculations.

15 I think it behooves us, as Mr. Bowman
16 said, to help those -- to help those people within the
17 bounds of cost-effectiveness for us to pursue those
18 measures that they want to pursue, even if we determine
19 that they are not cost-effective for a society. Frankly,
20 it's a limitation of our cost-effectiveness analysis,
21 more than it is of their analytical capabilities.

22 So what does all that mean? I think what
23 it means is that the TRC test should remain the primary
24 test for what -- what passes. But there are measures
25 that will fail the TRC test that you should still pursue,

1 if you can pursue them positively through another test
2 that we typically call the utility cost tests.

3 In other words, if Manitoba Hydro can
4 generate kilowatt hour savings that, according to our
5 TRC, don't pass, but that would be cost-effective for
6 Manitoba Hydro to -- to generate, they should absolutely
7 do that. That's my long-winded answer.

8 MR. BILL GANGE: That's very helpful to
9 all of us. You've -- you, in your testimony, you
10 identified the com -- the community-based organizations
11 as one (1) of the methods by which the DSM programming
12 could be delivered.

13 And -- and I'm just curious, sir, in terms
14 of -- of that is -- is the community-based organization
15 in your model there in terms of recruitment and -- and
16 the initial delivery of the program, so that it's -- they
17 -- they are part of the turnkey -- turn-key operation.

18 MR. PHILIPPE DUNSKY: Certainly, in -- in
19 the model where we're using CBOs, absolutely they play a
20 very important function in terms of what I'll call sales,
21 but yeah, outreach and -- outreach and what not, yes.

22 MR. BILL GANGE: Right. Once -- and --
23 and I guess, sir, that again in looking at this, one (1)
24 of the primary features, in terms of what you testified
25 about this morning, was how in your view if -- if

1 Manitoba Hydro is the one (1) that is doing the
2 contracting, they're more likely to be able to get
3 favourable rates than -- than low income customers
4 because of the -- well, because of the buying power and
5 because of the reluctance of -- of contractors to be --
6 to be dealing with low income customers.

7 Is that correct, sir?

8 MR. PHILIPPE DUNSKY: Yes, and -- and
9 I'll add to that and because of Manitoba Hydro's
10 analytical capabilities. Manitoba Hydro can study the
11 market and understand the actual costs of measures in the
12 market better than I personally can as a -- as a home
13 owner. You can actually devote resources to that and
14 therefore be in a better negotiating position.

15 MR. BILL GANGE: And again, in terms of
16 the CBO model, Hydro would be the one that would be doing
17 the negotiating with respect to the -- to the contractors
18 and -- and delivering the contractors to the CBO which is
19 arranging for the ultimate delivery of the product.

20 Is that correct?

21 MR. PHILIPPE DUNSKY: Well, not
22 necessarily. It can be that way, and it can also be done
23 through CBOs again depending on the capacity of the CBOs.
24 And I don't want to come here and pretend you know, one
25 size fits all, and I know exactly the capacity of CBOs

1 here. I don't.

2 If the CBOs here are large enough,
3 organized enough and know this well enough, they may be
4 able to take that function on. If not, then indeed it's
5 important that either Manitoba Hydro does so or -- or a
6 contractor to Manitoba Hydro does so.

7

8 (BRIEF PAUSE)

9

10 MR. BILL GANGE: Thank you. Thank you
11 Mr. Chair, those are my questions. Again I'd like to
12 thank you for your assistance, Mr. Chair and the
13 cooperation of the other members of --

14 THE CHAIRPERSON: Thank you, Mr. Gange.

15 MR. BILL GANGE: Thank you.

16 THE CHAIRPERSON: Speed you on your way.

17 MR. BILL GANGE: I'll be excusing myself
18 and see you in three (3) weeks.

19 THE CHAIRPERSON: Very good, sir.

20 Ms. McCaffrey...?

21

22 CROSS-EXAMINATION BY MS. TAMARA MCCAFFREY:

23 MS. TAMARA MCCAFFREY: Good afternoon,
24 gentlemen. I'll be asking -- I won't be too long with
25 either of you. I represent the Manitoba Industrial Power

1 Users Group, so we have somewhat different issues, and I
2 don't want to overlap on the work that's already been
3 done by others.

4 But Mr. Harper, nice to see you again as
5 -- as always, sir.

6 Getting into your -- your evidence, just
7 sort of from an overview perspective, and you indicated
8 it again in your direct today, at page 10 of your
9 evidence, sir, you -- you can turn there if you like --
10 but essentially you noted the change in financial outlook
11 of Manitoba Hydro in recent years.

12 And you noted, with respect to the two (2)
13 key drivers of capital spending and OM&A expenses, that
14 the outlook shows an increase which can contribute to a
15 deterioration in Manitoba Hydro's financial position.
16 I'm just reading from your evidence here. You also add:

17 "Indeed if it were not for favourable
18 developments related to a number of
19 external factors outside Manitoba
20 Hydro's control, the projected
21 financial position would have
22 deteriorated."

23 Would you like to elaborate on that, sir?

24 MR. WILLIAM HARPER: Well, I think it was
25 just fundamentally the fact that, you know, if -- if OM&A

1 costs are higher and capital spending is higher and
2 everything else was held the same, then I think all other
3 things being -- all other things being equal, then net
4 income would -- would be lower and the retained earnings
5 would be lower.

6 I think it's -- I think it's that -- it's
7 -- that's all I was trying -- trying to say in -- in that
8 sentence.

9

10 (BRIEF PAUSE)

11

12 MS. TAMARA MCCAFFREY: And, sir, with
13 respect to the Table 9 of your evidence on page 12, when
14 you're comparing forecast OM&A spending per customer with
15 actual spending, again per customer, can you tell us,
16 sir, why you think that a OM&A per customer indicator is
17 a reasonable benchmark for tracking Hydro's performance
18 on OM&A spending?

19 MR. WILLIAM HARPER: Well, I think one, I
20 think given that different forecasts have different
21 underlying drivers to them, it's important to try and
22 benchmark them in -- in some fashion as opposed to -- I
23 mean, you can compare just the raw numbers. But that --
24 of OM&A, but that would be just the most simplistic way
25 of all. So you want to try and ben -- benchmark them in

1 -- in some way.

2 I acknowledge that there are other cost
3 drivers involved besides number of customers. But when
4 Manitoba Hydro is developing its own performance targets
5 in its strategic plan, it's using number of customers --
6 cost per number of customer as -- as the way it looks at
7 it. So I thought it was a reasonable way for me to -- to
8 look at it as well if I had to try and use just one (1)
9 metric.

10 MS. TAMARA MCCAFFREY: In your experience
11 with other utilities, is this commonly done, a OM&A per
12 customer sort of benchmark?

13 MR. WILLIAM HARPER: Well, I think it's
14 fair to say. And I believe in -- in my Interrogatory
15 Responses to -- to MIPUG actually, I made reference to a
16 number of benchmarking -- number of benchmark studies
17 that have been done for other utilities that when sort of
18 more detailed benchmark -- benchmarking studies are done,
19 they don't use just one (1) metric.

20 They may look at OM&A per customer or OM&A
21 per kilometre of line, OM&A per kilowatt or kilowatt hour
22 delivered. There -- there's a number of different
23 metrics that they use.

24 And then part of the reason they're doing
25 that is because one, if you look at it on a per kilometre

1 basis it recognizes the service area or the -- sort of
2 the breadth of the ser -- service area that you've got as
3 opposed to having customers densely put together.

4 And the fact that to some extent the --
5 the dispersion or the kilometres of line that you have to
6 support is going to have a impact on your costs as well.
7 Adding new customers system typically means more lines.

8 So -- so there are some relationships
9 between them. I mean each of them aren't totally
10 independent. But they look at things in a slightly
11 different perspective. And people that are trying to get
12 a more holistic look at things will use more than one (1)
13 metric.

14 You know, for -- for simplicity purposes
15 and because, like I said, Manitoba Hydro was just
16 focusing on -- on the one (1) metric, I thought it was a
17 reasonable thing to look at in my evidence.

18 MS. TAMARA MCCAFFREY: Thank you for
19 that, sir. Just following up on that, you also go on to
20 -- to note in your -- in your table that outside of the
21 -- the drought year, only one (1) of the remaining actual
22 values of the OMA spending is -- is less than any of the
23 forecasts for the same year.

24 And you indicate this suggests that
25 there's issues regarding Manitoba Hydro's ability to

1 either adequately forecast future OM&A requirements or
2 manage its OM&A costs to a set budget or both.

3 And -- and that's still your view today?

4 MR. WILLIAM HARPER: Yes, it is.

5 MS. TAMARA MCCAFFREY: And in your view,
6 sir, what would you suggest in terms of things that Hydro
7 might do to improve their -- their forecasting or ability
8 to manage their costs?

9 MR. WILLIAM HARPER: Well, I guess I'm
10 not too sure. You know, like I said if there's a
11 departure here, there's either a problem with the
12 forecast or a problem with the actuals in terms of how
13 you marry the two (2) up. And so I -- I think the
14 conclusion wasn't that sort of -- isn't that sort of
15 outlound -- outlandish, if you want to put it that way.

16 I think, you know, I think I've tried to
17 identify in my -- in -- in my evidence concerns about
18 whether Manitoba Hydro is -- is pursuing sort of various
19 productivity opportunities to the -- to the extent they -
20 - that they have indicated that -- that they would. And
21 that's one area they -- they could be doing.

22 I think the other thing is, like I said --
23 and we get into this in another part of the evidence. We
24 set performance targets through the corporate strategic
25 planning process on a dollars per customer basis. And

1 typically in the last few years we've seen that -- that
2 those -- that those performance targets haven't been --
3 haven't been met. So I -- I think -- I think that there
4 are -- that there are issues there in terms of managing
5 to -- trying to manage to a set level of performance.

6 MS. TAMARA MCCAFFREY: Yes, and from the
7 regulat -- for the regulators' benefit, just with your
8 experience on -- on utilities that use a -- a return on
9 rate base method of regulation, are there consequences
10 for these utilities in other jurisdictions that a
11 regulator could impose that might increase the
12 effectiveness of the utility or provide them more
13 incentive to manage or forecast a little more tightly?

14 MR. WILLIAM HARPER: Well, I think it --
15 well, and the Board's probably fully aware, because I
16 understand that the Board regulates Centra Gas on more --
17 a rate of return basis as opposed to the approach we're
18 using here. So I'm not too sure if I'm saying anything
19 new or innovative.

20 But I think on -- on a rate of return
21 basis you basically regulate the utility based on the --
22 so as to -- so the utility will be allowed, based on the
23 rate base, to -- to obtain a -- an approved rate of
24 return on equity through -- through their net income.
25 That's after they have -- after you've taken through and

1 reviewed their costs and assume that the costs that are
2 underlying that and before you get the net income are all
3 prudent and reasonably incurred. The rates are set on
4 that basis.

5 Apart from issues that -- that are managed
6 through deferral accounts or -- or whatever, whether the
7 utility actually gets that level of net income or not
8 depends on how -- how -- one how their sales goes on the
9 one hand and, two, how they manage their costs on the
10 other hand.

11 And to the extent their costs are less
12 than what was built in their approved rates, all other
13 things being equal, their net income will be higher. If
14 their costs are higher than what was in their approved
15 rates, all other things being equal, their net income
16 will be lower.

17 When we move into the next year for a
18 typical utility being regulated on a rate of return
19 basis, we don't sort of go back and look at what happened
20 the previous year and be concerned about levels of
21 retained earnings like -- like sort of you are on the
22 cost of service type of approach we're using with
23 Manitoba Hydro. You start all over again almost with a
24 clean slate. What are the costs for that year? What's
25 the rate base for that year? And you add it all up

1 again.

2 So if -- if you've done well -- poorly or
3 very well in a previous year, that really falls more --
4 more directly to -- to -- it's a consequence for -- for
5 the shareholder as opposed to being revisited on
6 ratepayers in future years.

7 MS. TAMARA MCCAFFREY: Thank you for your
8 -- your thorough answer, sir.

9 Are you familiar with performance-based
10 regulation? I'm not, so perhaps you could start by
11 explaining briefly what that is.

12 And then with respect to the question that
13 you just answered for me earlier, what would the
14 consequences be that a regulator would look at?

15 MR. WILLIAM HARPER: Probably even
16 sometimes I feel I'm more familiar with it than I want to
17 be but know less about it than I should, if I can -- if I
18 can put it that way in answering the question.

19 Traditional -- maybe to -- taking it back
20 a step, traditional rate of return regulation requires
21 that the utility -- basically the regulator go through
22 the utility's costs. You have to assess, is the OM&A
23 reasonable and prudent? Is the depreciation reasonable
24 and prudent? It gets into sort of trying to assess the
25 costs of -- of the utility.

1 There's a fair regulatory burden on --
2 administrative burden on the body to do that. There's an
3 administrative burden on the company to do that. The --
4 and, you know, but you do that because the prices are
5 directly linked to costs. And if you don't approve the
6 costs, then, you know, the prices aren't -- aren't coming
7 out right.

8 Performance regu -- performance-based
9 regulation tries to, I could say, break that link between
10 costs and -- and price and say, We are going to set the
11 price that -- easiest way would be we're going to set the
12 price so that it escalates with inflation, let's say.
13 And if -- and if the comp -- you know, with the
14 expectation that maybe that's a -- you know if -- if the
15 utility's costs went up with inflation, that would be
16 reasonable. And to the extent they can control their
17 costs so they're less -- go up than less inflation.

18 It's -- you know, that's done through the
19 utility trying to find efficiency measures and perhaps
20 spend capital to do that. Perhaps they should be allowed
21 to keep those -- those savings. If -- if -- you know --
22 and they've got a real incentive to do it, because it
23 just sets the price.

24 You could argue that for the period -- I
25 think we were talking with you, Mr. Mayer -- through the

1 mid to late '90s, you could argue Manitoba Hydro was
2 under a price cap -- regulate -- performance regulation.
3 There was no change in price. They lived with -- they
4 lived with the consequences of what happened with that
5 price and whether they earned more or less. You know,
6 the only distinction being that, at the end of the day,
7 there's a debt/equity ratio we still have to worry about,
8 which -- which doesn't come back in rate-based
9 regulation.

10 So that -- you know and there -- there are
11 various mechanism of doing this. You know, you can think
12 about, Well, we can increase with inflation. But then,
13 yes, the -- how do you account for growth in the utility?
14 If it's tied to price, that's fine. But there are forms
15 of revenue cap performance regulation where the revenues,
16 they increase every year by num -- by number of
17 customers. And you know -- so, but again, it -- it's a
18 formulate basis FortisBC uses a formula similar to that.

19 So that by -- but in those cases as well,
20 the prices are set. The shareholder ends up having to
21 deal with the consequences in terms of whether they may
22 be able to manage their business with -- within the set
23 price and the level of net income that -- that drives
24 from those prices and the costs that they -- that they've
25 incurred. And that's the return they give their

1 shareholders, be it more or less than what the
2 shareholders expected or thought they were going to get.

3 MS. TAMARA MCCAFFREY: Thank you very
4 much for that, sir.

5 And one of the things that you've talked
6 about here is in terms of the growth rate for the OM&A
7 spending. You note, it's close to 4 percent, 3.9
8 percent.

9 And you're recommending -- and said so
10 both in your written and your oral testimony -- that a 3
11 percent growth rate is more in line with the underlying
12 cost drivers.

13 That's your position, sir?

14 MR. WILLIAM HARPER: Yes, it is.

15 MS. TAMARA MCCAFFREY: And then I also
16 noted that you see -- you seem to be recommending that
17 the Board consider setting rates to match -- to match
18 this target as a means of reinforcing the message that
19 OM&A should be managed to within expectations, sort of in
20 -- in line with -- with the kind of principles you've
21 been describing?

22 MR. WILLIAM HARPER: Well, yes. I guess,
23 you know, the issue being that if you believe that --
24 that 3 percent per annum in OM&A is what's reasonable and
25 prudent, I guess the question is -- is that why would you

1 approve a level of rates that allows for more than that?

2 MS. TAMARA MCCAFFREY: And I -- I note
3 your evidence in response to questions from counsel, Mr.
4 Williams, this morning that in terms of translating that
5 into a rate increase that you'd be recommending to this
6 Board, arising from this Hearing it would go down by
7 about 1 percent to about a 1.9 percent rate increase?

8 MR. WILLIAM HARPER: Well, I was noting
9 that if you compound those savings and OM&A over two (2)
10 years, it amounts to about 14 million, which is, on my
11 rough calculations, is a little over a 1 percent on the
12 rate increase. I think I said, you know, whether the --
13 you know, which if you took it down, would be less than
14 inflation when the Board thought that was too far to go.

15 I mean, there's still -- there's still
16 issues about sort of managing the financial position of
17 the companies, whether you wanted to recoup all of it
18 through lower rates. And then I said something in the
19 order about 1 -- 1 percent seemed reasonable. That would
20 bring us down -- down to the order of inflation.

21 MS. TAMARA MCCAFFREY: Yes, I understand
22 that, sir.

23 And following along with this line with
24 respect to your observations about capital spending being
25 the second factor that's within Manitoba Hydro's control

1 but also has the potential to negatively impact the
2 utility's financial position, it -- is it fair to say,
3 sir, that your conclusion overall is that Hydro's capital
4 spending is increasing relative to previous forecasts?

5 MR. WILLIAM HARPER: Yes, I think in --
6 you know, in reality, the conclusion is there. I mean,
7 I'm not saying that that's good or bad in terms of this
8 point in times, in terms of the dollars they're spending.

9 I'm just saying because it's increasing,
10 and particularly because it's impressing -- increasing
11 for things like future generation, perhaps for exports,
12 it's putting more -- more pressure on rates than what
13 we've seen capital spending put on rates in the past
14 which means, I think, there's a sort of more -- more
15 reason to -- to be acutely aware of -- of and conscious
16 of why -- why we're spending those dollars and whether
17 they're necessary to spend.

18 MS. TAMARA MCCAFFREY: I appreciate you
19 making that distinction. It's an important distinction.
20 It's -- it's not that you're here second-guessing the
21 capital program of the utility.

22 But you're noting that for -- for the sake
23 of the regula -- regulator and those of us that have an
24 interest in this, it's important to be aware of the -- of
25 the relationship between capital spending and -- and

1 rates.

2 And you've indicated that it can put
3 pressure on rates?

4 MR. WILLIAM HARPER: Yes, I think that
5 that was the point I was trying to make.

6 MS. TAMARA MCCAFFREY: And, sir, I think
7 you've also noted the concern in your evidence that the
8 increase in O&MA and the increase in capital spending had
9 the ability to erode Manitoba Hydro's financial position,
10 and specifically debt/equity targets and their ability to
11 achieve those targets.

12 Is that fair? Is that a concern that you
13 noted in your evidence?

14 MR. WILLIAM HARPER: Yes, I think, well,
15 you know, I think both in terms of increased O&MA
16 spending, all things being equal, will mean reduced
17 retained earnings, which leads to a higher debt/equity
18 ratio.

19 Higher capital costs, since it goes in
20 both the numerator and denominator, the calculation will
21 lead to a higher debt/equity ratio. Most -- most capital
22 spending is financed initially through debt, all other
23 things being equal. So higher capital spending means
24 more debt.

25 So both those things, just by nature of

1 the way they work themselves through to Manitoba Hydro's
2 financial indicators, are going to lead to a degradation
3 somewhat in the -- in the financial ratios.

4 MS. TAMARA MCCAFFREY: Sure. And with
5 respect to the debt/equity target in this -- in this
6 jurisdiction you've noted that this is something that's
7 been used as a driver for rate increases.

8 And one of the reasons that it's been
9 accepted as -- as an important thing is that Manitoba
10 Hydro argues that it's important for the purposes of
11 managing the risks that they have sufficient equity in
12 the Corporation.

13 Would you -- would you agree with that?
14 Is that a fair summary?

15 MR. WILLIAM HARPER: Yes, I think the --
16 the argument is -- and there's validity to it -- that,
17 you know, that having an adequate level of retained
18 earnings will -- will soften the subsequent -- soften the
19 subsequent financial impacts and perhaps rate impacts, in
20 terms of how immediately and how much you have to
21 increase rates in the short term. Then if you have very
22 low levels of retained earnings, it allows you to manage
23 -- manage those events.

24 I think there -- there's a question about
25 how much insurance you -- you need, you know, so that I

1 think there's still a question about whether you have to
2 reserve yourself up for absolutely every contingency at a
3 100 percent probability. But I -- I think there, you
4 know, there is a justification for that.

5 MS. TAMARA MCCAFFREY: Sir, does your --
6 will you walk with me just a little further down the road
7 then with respect to your concer -- your concern here?

8 How much would you need? You'd want to
9 make sure that -- that the resources were available to
10 cushion rate payers against the -- an adverse -- a
11 significant, adverse risk, such as a drought
12 materialising.

13 Does the increases in capital spending
14 from that perspective cause you some concern, and their
15 impact on the debt/equity ratio?

16 MR. WILLIAM HARPER: Well, I think, and
17 as I tried to outline in my direct evidence here, to some
18 extend we're trying dance to two (2) different masters at
19 the same point in time, if I can put it this way.

20 We were originally having a conversation
21 about using -- using this sort of -- the equity portion
22 of the debt/equity ratio as a means of cushioning the --
23 the impacts of adverse events, which is one way of
24 looking at the need for retained earnings.

25 You know, I'm not too -- you know, capital

1 spending doesn't impact on the level of retained
2 earnings. It just -- it impacts on the level of debt,
3 which impacts on the debt/equity ratio, which to some
4 extent impacts on the metrics that the other master we're
5 -- we're dancing to -- which to some extent is -- is the
6 financial community and the concerns over -- over the
7 financial soundness of the company and therefore, what --
8 what lending rates they're willing to sort of advance to
9 -- to the company.

10 And -- and that's a different issue. But
11 I think we're sort of trying, like I said, dancing to two
12 (2) masters at the same -- same point in time.

13 MS. TAMARA MCCAFFREY: Well, the tune
14 that I'm dancing to is one of risk management.

15 MR. WILLIAM HARPER: Okay, and that's --
16 and that's the first one. And I guess you know, I -- and
17 I was trying to link that in terms of a need for retained
18 earnings to the comments you were asking me about capital
19 spending.

20 And that's why I was saying I think in
21 terms of when it comes to financial performance, I'm not
22 too sure -- and -- and there may be. But sort of at the
23 moment there's not as much of a direct link between
24 capital spending and sort of the need -- the need for
25 retain -- the need for retained earnings.

1 I'm trying to remember, and correct me if I'm wrong. I
2 can't remember whether the deferral account is just left
3 there or whether actually there's some planned recovery
4 of the deferral account over time, that second step I
5 can't recall at this point.

6 MS. TAMARA MCCAFFREY: You're referring
7 to -- is it the Heritage Deferral Account?

8 MR. WILLIAM HARPER: Yes.

9 MS. TAMARA MCCAFFREY: You're familiar
10 with that?

11 MR. WILLIAM HARPER: Yes.

12

13 (BRIEF PAUSE)

14

15 MS. TAMARA MCCAFFREY: Let's look at
16 Hydro Quebec then in this context.

17 Would you agree, sir, there's a heritage
18 pool of electricity available at a fixed volume and
19 price, 165 terawatt hours at two point seven nine (2.79)
20 cents per kilowatt hour?

21 MR. WILLIAM HARPER: Yes, that's made --
22 that's made available to the regulated entity that serves
23 the customers. And in Quebec it's called Hydro Quebec
24 Distribution. It's the regulated entity. There's an
25 unregulated entity called Hydro Quebec Production. They

1 make that -- that pot of energy available to -- to Hydro
2 Quebec Distribution at that -- at that fixed price.

3

4

(BRIEF PAUSE)

5

6 MS. TAMARA MCCAFFREY: Would you agree
7 with me, sir, that the effect of the mechanisms in Quebec
8 and BC that we've been talking about is to largely
9 inflate customers from rate pressures due to short-term
10 fluctuations in water levels?

11 At least as far as the Heritage volume of
12 energy goes?

13 MR. WILLIAM HARPER: I don't know if I
14 would, actually. I think on -- on the Quebec side I
15 think it's more to -- to some extent it insulates the
16 company from -- and -- what its financial performance
17 looks like at year-end from wide fluctuations in water
18 flows from -- from year to year sort of thing, because
19 their -- their performance is normalized back to a normal
20 water flow year, and the difference is put into a
21 deferral account.

22 So at the end of the year their financial
23 statements look much like -- like they would if things
24 had turned out as forecast. And so I think to some
25 extent a lot of the benefit comes to insulating the

1 company, you know, which in terms of how its perfor --
2 how its financial performance looks from year to year as
3 opposed to insulating customers.

4 As I said before, you know, to some extent
5 BC Hydro as well is regulated on a return on rate base.
6 And so if every year you're just forecasting -- if you
7 were to forecast water flows every year based on an
8 average basis and the company had to live with the
9 consequences at the end of the year, their net income
10 statement would -- it would be their net income statement
11 that would vary widely from year depending on actual
12 water flows.

13 When you came to set rates the next year,
14 again the company would just forecast an average. So the
15 forecast would always be based on an average which to
16 some extent would insulate customers, but it doesn't
17 insulate the company.

18 And I think a lot of these stabilization
19 funds are meant as much to insulate the company, because
20 if you didn't insulate the company they'd, to some extent
21 -- they're regulated on a rate of return rate basis.
22 They would say, We've got a lot more risk here. You're
23 going to have to increase our return on equity to account
24 for the risk we're suffering through -- through this
25 variation in water flows.

1 And to that some extent might lead to overall in --
2 higher rates for customers overall.

3 So I -- and it may help keep rates down
4 for customers. I don't know if stabilizes rates for
5 customers. I'm sorry for the long answer, but I was
6 struggling with trying how to portray it.

7 MS. TAMARA MCCAFFREY: That's okay. I
8 like how it ended. No, I liked the whole thing.

9 Let's have a chat about marginal cost of
10 service. You've been following along the transcripts and
11 the hearing, sir, and you're familiar, I think, with the
12 Manitoba Exhibit 68, that marginal Cost of Service Study
13 that was filed.

14 MR. WILLIAM HARPER: Yes. Yes, I am. I
15 think that was the update to the material they -- they'd
16 filed in the -- in the original application?

17 MS. TAMARA MCCAFFREY: That's right.
18 Appendix 11-2, I believe.

19 MR. WILLIAM HARPER: Do I need to turn
20 that up?

21 MS. TAMARA MCCAFFREY: No.

22 MR. WILLIAM HARPER: Okay -- I just --

23 MS. TAMARA MCCAFFREY: No -- just to -- I
24 just like to set context.

25 We provided you earlier with a couple of

1 pages, just an excerpt from your testimony in the
2 Manitoba Hydro cost of service methodology -- methodology
3 review that occurred in 2006.

4 Just with respect to that, did you get a
5 chance to briefly look over that?

6 MR. WILLIAM HARPER: Yes, I -- I
7 previously reminded myself. It's always disconcerting to
8 remind about what one said a few years ago and wonder
9 what we're going to ask about it -- but, yes, I looked at
10 it.

11 MS. TAMARA MCCAFFREY: Don't worry. I'm
12 not trying to impeach you, sir. Actually, I just -- for
13 the sake of discussion, I'm gonna -- going to put to you
14 what you said then and ask you if you still feel the same
15 way.

16 You noted, sir, and I'm looking at the
17 bottom of page 56 -- I can advise I -- this is a brief
18 section, but I do have copies if anyone wants to follow
19 along, but I'll read it to -- to the witness, and then he
20 can confirm. We'll just have a brief chat about it.

21 At the bottom of page 56, sir, you
22 indicated that:

23 "As Manitoba Hydro has noted, most
24 utilities utilized embedded Cost of
25 Service Studies to support the relative

1 allocation of the revenue requirement
2 to customer classes."

3 Would you agree -- that's still correct in
4 your view?

5 MR. WILLIAM HARPER: Yes, that's my
6 understanding.

7 MS. TAMARA MCCAFFREY: And then you go on
8 to state:

9 "The use of marginal cost information
10 is generally reserved for rate design."

11 And would you still agree with that
12 statement, sir?

13 MR. WILLIAM HARPER: I think -- you know,
14 yes -- I think -- I think the qualifier is generally. I
15 think there's been discussion in this hearing about a few
16 places that use marginal costs based -- costs -- Cost of
17 Service Studies -- I think four (4) different situations
18 were highlighted.

19 Again, in the context of the number of
20 jurisdictions that set electricity in -- in North
21 America, that's probably a small number so on the cost of
22 service side, very few use marginal costs. I think when
23 you get into looking at rate designs, whether they be
24 inverted rates, whether they be time-of-use rates, all
25 those sort of rates tend to start trying to use marginal

1 costs to figure out how we're going to set the price
2 differentials by period or by -- by different energy
3 blocks and, so, yes, marginal cost is used much more in
4 rate design.

5 MS. TAMARA MCCAFFREY: And that's really
6 where I was going with this -- that there's a distinction
7 in terms of the use of -- of marginal costs. It's not
8 something that you're recommending that would flow into a
9 Cost of Service Study, but it's rather something that's -
10 - that is used when it is used more to -- in the rate
11 design box. And that's the distinction I'm hearing you -
12 - you make.

13 MR. WILLIAM HARPER: No, I was commenting
14 on here -- on where, you know, I think the context was
15 where it is being used and the fact generally it's not
16 used for cost of service. Generally, it is used a lot
17 more for rate design. That isn't to say that it -- you
18 know, even at the Cost of Service side, it doesn't give
19 you useful insight.

20 That's not to say you maybe want to put a
21 100 percent weighting on the marginal costs results or
22 even 50 percent weighting on the marginal costs results.
23 I think, to a large extent, most weighting go -- goes to
24 the embedded cost of service results.

25 MS. TAMARA MCCAFFREY: Would it be --

1 would you agree, sir, that if you did set rates a 100
2 percent based on marginal cost results, you'd -- you'd be
3 over-collecting, relative to your revenue requirement, by
4 quite a bit?

5 MR. WILLIAM HARPER: In most utilities,
6 yes. And in Manitoba Hydro's case, yes.

7

8 (BRIEF PAUSE)

9

10 MS. TAMARA MCCAFFREY: If I might just
11 have a moment.

12

13 (BRIEF PAUSE)

14

15 MS. TAMARA MCCAFFREY: Sir, in that
16 portion of the 2006 evidence, you also indicated, that
17 undertaking:

18

19

20

21

22

23

24

25

"An embedded Cost of Service Study
requires the utility to justify and
defend the cost allocation
methodologies in its embedded Cost of
Service Study. However, undertaking a
marginal Cost of Service Study would
require the same utility to not only
have a defensible cost allocation

1 methodology but also prepare and defend
2 its estimate of marginal costs."

3 You recall that evidence? You found
4 that --

5 MR. WILLIAM HARPER: Yes, I do.

6 MS. TAMARA MCCAFFREY: Is that still your
7 view today, sir?

8 MR. WILLIAM HARPER: Yes, and I think the
9 distinction is is that, you know, really through normal
10 rate setting processes, the regulator already approves
11 and has to establish the level of costs that are being
12 used in an embedded Cost of Service Study so all -- the
13 only additional work is the methodology you are going to
14 apply.

15 The regulator, as a natural course,
16 doesn't go through a process of reviewing and approving
17 marginal costs, and so therefore, if you want to do a
18 marginal cost study you have to add that extra step to
19 the whole process. You have to approve the marginal
20 costs as well as approving the methodology you're going
21 to use to allocate them to customers.

22 MS. TAMARA MCCAFFREY: Right, and -- and
23 that's -- that would be a practical issue or -- or a
24 problem when we're looking at the marginal cost
25 determination box.

1 Is that right, sir?

2 MR. WILLIAM HARPER: Well, I guess it's
3 another step you have to go through. To the extent it's
4 a practical issue or not, I guess depends -- depends on
5 the -- on the methodologies that are used to develop
6 those marginal costs, how clear they are, how
7 understandable they are, and how transparent they are.

8 MS. TAMARA MCCAFFREY: Well, I think that
9 in your evidence in that cost of service proceeding in
10 2006, sir, you did make a comment that the Ontario Energy
11 Board had concluded that there are major practical issues
12 and problems regarding the definition and determination
13 of -- of marginal costs.

14 And I -- would you agree that -- that that
15 is the case and -- and also in the context of following
16 the discussions we've had around marginal costs in this
17 proceeding?

18 MR. WILLIAM HARPER: Yes, I think there
19 are. You know, I think I mentioned in my direct there's
20 issues, there's a short-run, long-run, how long is long-
21 run, how short is short-run to be clear.

22 You know, like -- like there are practical
23 issues. You know, I -- I think we've -- there are
24 fundamental concerns if -- if you're going to base on --
25 if you're going to base on -- it's probably much easier

1 to base things on actual results because know what an
2 actual number is as opposed to base things on twenty (20)
3 year forecasts. You get into much bigger debates in
4 terms of what's -- what's the right number if you're
5 trying to forecast something out over an average long-
6 term cost for twenty (20) years, let's say.

7 So I -- I think there are both -- there
8 are practical and definitional issues involved.

9 MS. TAMARA MCCAFFREY: And just bringing
10 this -- this point home in the context of these
11 proceedings, sir, and the marginal cost information
12 that's been provided to date have you, as an analyst,
13 struggled in terms of your ability to test and -- and
14 review those projections?

15 MR. WILLIAM HARPER: Well, I -- I think,
16 you know -- you know, to -- to be quite candid since --
17 since we're provided with the numbers and a general
18 understanding of how they're developed but sort of --
19 sort of not -- not the specifics of the methodology in
20 terms of generation, which I think is the major part of
21 the overall marginal cost, then clearly we're not in a
22 position to sort of understand fully how they're
23 developed and -- and then the methodology that's used, so
24 to some extent that -- that is an issue, yes.

25 MS. TAMARA MCCAFFREY: Thank you, sir.

1 Just in the context of when a regulator's looking at
2 approving a rate, would you agree, sir, at a -- at a high
3 level, that it's important to look at the whole picture,
4 not -- not only the impact on revenue requirement and
5 financial performance but also to have enough information
6 to understand the potential impact on customer class
7 particularly, in terms of when a new type of rate is
8 being proposed?

9 Would you agree that information as to the
10 impact on a customer class would be a relevant thing that
11 a regulator might want to look at?

12 MR. WILLIAM HARPER: When you say
13 considering approving a rate I guess I was just wanting
14 to -- you know, there's -- you're talking about sort of a
15 general level of rate increase or sort of a specific rate
16 design for a specific customer class?

17 MS. TAMARA MCCAFFREY: You know, I -- I
18 appreciate your -- you helping me to clarify my question
19 because it wasn't very clear, and I apologize but the
20 latter.

21 MR. WILLIAM HARPER: Okay.

22 MS. TAMARA MCCAFFREY: Yeah. With
23 respect to -- we talked about the new industrial rate
24 proposal which at this point is going to be looked at at
25 a second proceeding, in a subsequent proceeding, but one

1 (1) of the things that MIPUG had argued was that one (1)
2 of the difficulties with respect to such a new rate
3 proposal is that there was a dearth of information in
4 terms of impact that a rate would -- the potential new
5 type of rate design was going to have on a customer
6 class, and I just wondered, sir, generally, whether you
7 would agree that impact on a customer class would be a
8 relevant consideration that one would want to look at
9 when considering going in a different direction with
10 respect to a new type of rate design?

11 MR. WILLIAM HARPER: I -- I think
12 definitely, and I think that's reflected in the comments
13 I made on the residential inverted rate when I was making
14 -- both in my evidence and in my opening comments that
15 you know, you can look at it from the Utility's
16 perspective in terms of reflecting the costs. You also
17 have to consider it in terms of what are the impacts on
18 -- on customers, and that may either impact how you
19 design the rate, how fast you implement the rate or what
20 other things you do to support and complement the
21 introduction of the rate.

22 MS. TAMARA MCCAFFREY: And part of that,
23 looking at the impact, ties nicely in -- into the
24 discussions that we've heard with respect to elastic and
25 inelastic use and how to get the right price signal. And

1 the -- the concepts that -- that you've talked about in
2 your evidence are in the context of a residential class,
3 and looking -- you looked at the first and the second
4 block. And -- and you indicated that you wanted to
5 capture in the second block the -- the more elastic form
6 of the usage.

7 Am I -- am I accurate there?

8 MR. WILLIAM HARPER: Well, in -- in
9 principle, it -- it -- you know, and I think you have to
10 look at what the intent of the rate -- I mean, different
11 rate designs have different intents. I mean, they try to
12 serve a number of masters, if I can put it that way, but
13 -- but typically there's one (1) or two (2) primary
14 objectives.

15 And in this particular case, you know, my
16 understanding, and I concur with it is -- is that sort of
17 the -- the primary objective is linked to sort of
18 encouraging energy efficiency which is one (1) of the
19 overall rate -- standard rate design objectives.

20 So within that context, if that's your
21 primary objective, then really what you want to do is try
22 and make sure that the rate is designed in a way that
23 gets at that. So if you're -- and if you're realizing
24 that you're setting a rate so that second tier -- second-
25 tiered use is going to be facing a higher rate, then

1 ideally the break point between the two (2) should
2 somehow try and ensure that, to the extent possible,
3 subject to other things like impacts and things like
4 that.

5 You know, more inelastic uses, those that
6 are going to be more price responsive are exposed to --
7 to the second-tier rate because that's where you're going
8 to get the biggest bang for the change, if you want to
9 put it that way.

10

11 (BRIEF PAUSE)

12

13 MS. TAMARA MCCAFFREY: And you noted that
14 there are a number of potential rate design objectives.
15 Would you agree, sir, that perhaps the top two (2) would
16 be fairly apportioning the cost of service between
17 customers within classes and among the different classes,
18 and encouraging the efficient use of the -- of the
19 electrical resource.

20 MR. WILLIAM HARPER: I might agree. I
21 think the utility might agree. The primary one (1) is
22 recovering the revenue requirement, but -- but if we
23 accept that one (1) as a given to some extent, you know,
24 you know, I think, you know, I think yes, I'd -- I'd
25 agree that those are -- those are usually the two (2) --

1 the two (2) main considerations if one's looking at how
2 one's designing rate. I mean, because the other
3 objectives typically relate to things like simplicity,
4 administratively practical, understandable, public
5 acceptable.

6 Those are probably more difficult to
7 measure in themselves sort of thing and to some extent
8 you might propose a rate structure that sort of goes at
9 one (1) -- goes at one (1) of those two (2) -- goes at
10 one (1) or two (2) of those objectives that you mentioned
11 and then try and see to what extent can it be -- can it
12 be sort of tweaked or adjusted so that it meets those --
13 those other objectives, and that's where the issue we
14 were talking about earlier -- let's say the bill impacts.

15 Year-to-year bill impacts is part of what
16 you would consider as being a metric to look at in terms
17 of looking at customer -- customer acceptability for that
18 matter.

19 MS. TAMARA MCCAFFREY: And these are --
20 these are principles that aren't unique to a particular
21 class of rate design. I mean, these are general, broad
22 principles that could be applicable to any class?

23 MR. WILLIAM HARPER: Or applicable to any
24 -- any particular rate, yes, and rates are applied to
25 different classes, so I guess indirectly to any class,

1 yes.

2 MS. TAMARA MCCAFFREY: Thank you.

3

4 (BRIEF PAUSE)

5

6 MS. TAMARA MCCAFFREY: Thank you very
7 much. And with respect to -- to you, Mr. Dunsky, I -- I
8 really enjoyed your presentation, but given the -- the
9 interests that I represent and -- and I think everyone --
10 it's Friday afternoon, so in the interest of being
11 concise I'll just say good afternoon to you, sir.

12 No questions. Thank you.

13 THE CHAIRPERSON: Thank you, Ms.
14 McCaffrey. So I think right now what we will do is we
15 will move onto Hydro and Ms. Fernandes.

16 MR. BYRON WILLIAMS: Mr. Chairman, just
17 -- my witnesses have been here for about an hour and a
18 half, if we could have like a -- a five (5) minute -- I
19 know we're time pressed but a five (5) minute stretch
20 break if that --

21 THE CHAIRPERSON: Okay. Well, we will
22 take --

23 MR. BYRON WILLIAMS: I don't even think
24 we need a long break but just --

25 THE CHAIRPERSON: Fifteen (15) minutes is

1 fine and then we'll just go through to completion.

2 MR. BYRON WILLIAMS: Okay, thank you.

3

4 --- Upon recessing at 2:10 p.m.

5 --- Upon resuming at 2:35 p.m.

6

7 THE CHAIRPERSON: Okay. Sorry for the
8 delay.

9 Ms. Fernandes...?

10 MS. ODETTE FERNANDES: Thank you, Mr.
11 Chairman. We have handed out some documents which we are
12 going to be referring to throughout our cross-
13 examination.

14

15 (BRIEF PAUSE)

16

17 MS. ODETTE FERNANDES: The first one is
18 Figure 2, Manitoba Hydro Operating and Administrative
19 Expense Per Customer Increase. And this is taken
20 directly out of Appendix 12.12 of Manitoba Hydro's
21 filing.

22 THE CHAIRPERSON: Okay.

23 MS. ODETTE FERNANDES: The next one is
24 entitled "The Regulator's Dilemma Part 2" and we've sort
25 of taken this from Mr. Williams' book and just posing

1 some questions to Mr. Harper on that.

2 MR. BOB MAYER: No, hair stuff?

3 MS. ODETTE FERNANDES: No hair. I won't
4 be referring to hair.

5 THE CHAIRPERSON: We should probably give
6 that an exhibit number.

7 MS. ODETTE FERNANDES: Yes.

8 THE CHAIRPERSON: Is it eighty-three
9 (83)? You'll have to trust us with that. We'll find the
10 right exhibit number.

11 MS. ODETTE FERNANDES: All right. I
12 believe it was 93 but --

13 THE CHAIRPERSON: Okay. Subject to
14 check --

15 MS. ODETTE FERNANDES: Ninety-three (93).

16 THE CHAIRPERSON: Ninety-three (93).

17

18 --- EXHIBIT NO. MH-93: Document entitled "The
19 Regulator's Dilemma Part 2"

20

21 MS. ODETTE FERNANDES: Okay. The next
22 one is entitled "Canadian Electric Utilities With
23 Inverted Residential Rates" and I believe that can be
24 Manitoba Hydro Exhibit 94.

25

1 --- EXHIBIT NO. MH-94: Document Titled "Canadian
2 Electric Utilities With
3 Inverted Residential Rates"
4

5 THE CHAIRPERSON: Mr. Peters is slower
6 than Mr. Gaudreau.

7 MS. ODETTE FERNANDES: I believe that's
8 in the package that is paper-clipped.

9
10 (BRIEF PAUSE)

11
12 THE CHAIRPERSON: Okay, ninety-four (94).

13 MS. ODETTE FERNANDES: All right. And
14 then the next two (2) are just -- the first one that's
15 stapled together is just an extract of Mr. Paul
16 Chernick's evidence, and the last page is an extract of
17 Mr. Harper's evidence.

18 THE CHAIRPERSON: Okay. We'll give them
19 both exhibit numbers just for ease of finding them. So
20 the first one will be ninety-five (95) and the last one
21 ninety-six (96).

22 MS. ODETTE FERNANDES: All right. Thank
23 you.

24
25 --- EXHIBIT NO. MH-95: Extract of Paul Chernick's

1 evidence

2

3 --- EXHIBIT NO. MH-96: Extract of William Harper's
4 evidence

5

6 MR. BYRON WILLIAMS: Without -- Mr.
7 Chairman, if I might. Just in terms of what we've -- I
8 think we're calling Hydro 94, which is the data in terms
9 of inverted residential rates. Certainly, Mr. Harper's
10 prepared to accept it, subject to check.

11 It might be helpful to -- for Hydro
12 Offline would be fine -- just to give us the sources for
13 that so that we can just double check it afterwards.
14 But, we have no objections. We just -- we'll -- if we
15 get -- there's no footnotes so it will be helpful just to
16 find out where it was sourced from.

17

18 (BRIEF PAUSE)

19

20 MS. ODETTE FERNANDES: Mr. Wiens has
21 provided me with references for you. The Ontario
22 information is, I believe, provided in Mr. Harper's
23 evidence. The Hydro Quebec is from Hydro Quebec's
24 website. The BC Hydro is -- is also from the BC Hydro
25 website. And then the Manitoba Hydro proposed is from

1 our application.

2 MR. BYRON WILLIAMS: Thank you.

3

4 CROSS-EXAMINATION BY MS. ODETTE FERNANDES:

5 MS. ODETTE FERNANDES: Mr. Harper.

6 MR. WILLIAM HARPER: So sorry.

7 MS. ODETTE FERNANDES: Mr. Harper, you
8 mentioned that you are following the proceedings from
9 Toronto, and I am wondering whether you noted that
10 Manitoba Hydro placed on the record that the single
11 largest contributing component to its higher than
12 forecast net income for 2007/'08 is under expenditures in
13 OM&A.

14 Do you recall that?

15 MR. WILLIAM HARPER: I recall being
16 stated that was one (1) of the contributing factors.
17 Whether it was the single most, I'll -- I'll accept they
18 said that -- I don't recall that specifically. But I
19 remember there were discussions about lower OM&A being
20 one (1), I think primarily because of unfilled vacancies
21 and also some positive on -- on export revenues. I don't
22 remember which -- which one (1) had the most weight, but
23 we can proceed from that.

24 MS. ODETTE FERNANDES: Just for your
25 reference so that you can take a look at it. It's on

1 page 83. I believe it's the first day of the hearing,
2 and it's direct evidence provided by Mr. Warden, and he
3 indicates -- and I'll just read this into the record:

4 "But the single most favourable
5 variance from the forecast is in
6 operating maintenance and
7 administrative which is 16 million
8 before forecast for the ten (10) month
9 period and 9 million lower than the
10 same ten (10) months last year."

11 MR. WILLIAM HARPER: Okay, so -- so that
12 was 16 million below forecast?

13 MS. ODETTE FERNANDES: And 9 million
14 lower than the same ten (10) months last year.

15 MR. WILLIAM HARPER: Right. And that was
16 16 million for -- up to the period in time -- or 16
17 million forecast for the year?

18 MS. ODETTE FERNANDES: For the ten (10)
19 month period.

20 MR. WILLIAM HARPER: Okay.

21 MS. ODETTE FERNANDES: Now taking
22 Manitoba Hydro's reduced expenditures and OM&A for
23 2007/'08 into account, Manitoba Hydro's average annual
24 increase in OM&A over the past five (5) years is 2.8
25 percent.

1 Do you accept that, subject to check?

2 MR. WILLIAM HARPER: I'll accept your
3 arithmetic, subject to check. I'm sorry, I don't have
4 any reason -- when you say -- which period were you then
5 talking about? We said eight (8) years -- that will be
6 from 2002?

7 MS. ODETTE FERNANDES: No, 2007/'08.

8 MR. WILLIAM HARPER: But you were going
9 backward --

10 MS. ODETTE FERNANDES: For five (5)
11 years, sorry.

12 MR. WILLIAM HARPER: I was trying -- '08
13 and going back so that would be 2002/2003 then. Okay.

14 MS. ODETTE FERNANDES: Now do you accept
15 this historical average annual increase as reasonable
16 based on Manitoba Hydro's load growth over the past five
17 (5) years and normal inflationary cost increases?

18 MR. WILLIAM HARPER: Well, this was your
19 -- this is the 2.8 percent is the increase -- annual
20 increase in electric OM&A?

21 MS. ODETTE FERNANDES: Yes.

22 MR. WILLIAM HARPER: On an overall basis
23 -- I'd have to -- I...

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: I think it's kind of
2 difficult --

3 MR. WILLIAM HARPER: Yeah --

4 THE CHAIRPERSON: --to get into the
5 calculations right now.

6 MR. WILLIAM HARPER: -- I'm trying to --
7 I'm trying to --

8 THE CHAIRPERSON: I'm sure --

9 MR. WILLIAM HARPER: -- I'm trying to
10 sort of -- sort of -- I -- I had enough trouble getting
11 my inputs right on the inter -- interrogatory and
12 unfortunately, Mr. Wiens, I'm not as quick on the
13 calculator as you are. I'm not too sure if a calculator
14 would help me.

15 You know, I think you've -- you've got it
16 a 2.8 percent increase normally. I was just trying to
17 find out what -- what that -- I'm sorry to take long on
18 this, but I was just trying to check what how that
19 differed from the increase in OM&A that had been observed
20 historically over the same period -- you know. I -- I
21 think we'd observed an increase in OM&A of 4 percent
22 coming up to from 2002/2003 to 2006/'07, and so what --
23 so what you're saying is when I include this much lower
24 year at the end it's 2.8 percent.

25 I guess you know, the -- that probably

1 seems a bit on the low side which would be accounted for
2 by the -- by the lower vacancies given that as we know,
3 salary increases have been running a little bit higher
4 than inflation, and when I add that with the -- with the
5 customer growth -- even allowing for product activity and
6 the fact that the other costs have been increasing
7 faster.

8 So I think that's -- I think that's
9 probably -- well that's lower than what we've put in your
10 evidence, and I think that's in part, as you said,
11 because of the -- because the fact there's sort of,
12 basically fewer people being paid through -- through
13 '07/'08 than what had been expected in the IFF.

14

15 CONTINUED BY MS. ODETTE FERNANDES

16 MS. ODETTE FERNANDES: Am I correct in
17 saying that your concern is primarily related to Manitoba
18 Hydro's forecast of OM&A?

19 MR. WILLIAM HARPER: Well, I -- I looked
20 at, I really just looked at two (2) things when I was
21 looking at it. I looked at the OM&A and I looked at the
22 capital and to a large extent the rate increase or the
23 need for a rate increase in 2000 -- '08/'09 is more
24 driven by -- by the OM&A than by the capital spending, so
25 I think at the end of the day, my evidence was focusing

1 primarily on OM&A.

2 So since I was focusing primarily on OM&A,
3 I can't say relative to other factors. I didn't spend
4 time looking at your export price forecast or other
5 things like that, primarily because to a large extent
6 the, you know, we're arguing over forecasts done by third
7 parties or different people's views of the market as
8 opposed to something that's sort of more under the direct
9 control of Manitoba Hydro.

10 MS. ODETTE FERNANDES: And following
11 along with that, you have indicated your concerns with
12 respect to OM&A costs forecasts, and now in those
13 concerns, you talked about aging infrastructure?

14 MR. WILLIAM HARPER: Well, I think
15 Manitoba Hydro talked about aging infrastructure. I
16 think -- I acknowledged, and I think I said in my direct
17 that I -- I have yet to see a utility that doesn't talk
18 about aging infrastructure, and I think that's something
19 that Mr. Bowman acknowledged as well.

20 I think the question is, is that-- one has
21 -- one can't say aging infrastructure and then ask for
22 whatever number one thinks is reasonable. One has to be
23 able to demonstrate that the aging -- what the aging
24 infrastructure's actually doing to -- to your costs and
25 substantiate the need for any costs changes.

1 MS. ODETTE FERNANDES: But you're not
2 discounting that this is not a cost driver that is really
3 being experienced by utilities and other capital
4 intensive organizations?

5 MR. WILLIAM HARPER: No, it's a cost
6 driver that's experienced in the future. It's a cost
7 driving -- cost driver utility's have been experiencing
8 over the last few years so to some extent I would
9 anticipate aging infrastructure as also reflected in the
10 increasing OM&A needs you've had over the five (5) years
11 as well.

12 MS. ODETTE FERNANDES: Now with respect
13 to benchmarking, another method I believe you discussed
14 this morning, you indicated that Hydro had provided some
15 high level benchmark comparisons with other comparative
16 utilities in it's Appendix 12.12?

17 MR. WILLIAM HARPER: Yes.

18 MS. ODETTE FERNANDES: And I provided you
19 a copy of Figure 2. Now this appendix shows that
20 Manitoba Hydro's cost per customer has grown at a lower
21 rate than the other comparable utilities during that
22 period.

23 Do you see that?

24 MR. WILLIAM HARPER: Yes, that's what the
25 figure shows.

1 MS. ODETTE FERNANDES: And can I get you
2 to agree that in some cases the cost growth has been
3 substantially lower than the others?

4 MR. WILLIAM HARPER: The costs, whether
5 deserved -- I assume this material like your debt/equity
6 information was taken from the annual reports of the
7 various utilities?

8 MS. ODETTE FERNANDES: It's just cost per
9 customer.

10 MR. WILLIAM HARPER: But having --
11 defining cost per customer, one has to have costs, and
12 one has to have customers in order to do the ratio. So,
13 I guess, what I was asking was whether or not the OM&A
14 costs and the number of customers were simply extracted -
15 - I'm not sure what the source of this was, whether they
16 were simply extracted from the annual reports of the
17 various utilities or whether any attempt was made to try
18 and standardize them further.

19 MS. ODETTE FERNANDES: They're just from
20 the annual reports.

21 MR. WILLIAM HARPER: Okay, well, then I
22 guess on that basis that's what the information shows is
23 that the costs are changing. It's similar to the
24 discussion we had on round debt/equity ratio and have to
25 look at different definitions perhaps used by different

1 utilities, and that's why people go to more extensive
2 efforts on benchmarking to try and compare costs.

3 MS. ODETTE FERNANDES: Now if we look at
4 western economic conditions, the situation has been
5 represented as heated.

6 MR. WILLIAM HARPER: I think that's fair,
7 yes.

8 MS. ODETTE FERNANDES: Now I understand
9 that you work with BC Hydro, so I believe it wouldn't be
10 a surprise to you that they are seeking a substantial
11 rate increase. I believe it's approximately 25 percent
12 from 2009 to 2011.

13 MR. WILLIAM HARPER: Well, I think the 25
14 percent's probably what you read off a headline in the
15 newspaper. And that was a function for residential
16 customers of both rate rebalancing, rate redesign, and
17 average cost increases. Reading between the lines,
18 that's probably what led to the change in legislation,
19 but that's just my personal opinion.

20 You know, the average rate increases that
21 Manitoba Hydro is, excuse me, that BC Hydro is proposing
22 are not that -- that was a cumulative effect of rate
23 design changes, cost allocation changes, and average
24 changes which is part of the reason why I mentioned in my
25 direct that it's all those things cumulative you have to

1 look at 'cause they all impact on customers.

2 I think it's fair to say that BC Hydro's
3 applied rate increases for the next two (2) years are
4 higher than what Manitoba Hydro is applying for, and
5 that's partially because they're having to incorporate
6 into their rates, basically right now, the results of
7 calls for tender they have made for IPPs over the last
8 few years where the power's costing them -- well, let's
9 put it this way, the power's costing them more than what
10 you're quoting as your opportunity cost for exports.

11 MS. ODETTE FERNANDES: And according to
12 their rate application, their cost drivers are similar to
13 the ones that Manitoba Hydro has represented. I believe
14 labour and training costs, commodity costs increases, and
15 aging infrastructure?

16 MR. WILLIAM HARPER: Well, I think those
17 -- that application is currently before the BCUC.
18 Actually it won't be considered until August of this year
19 when they're going into the negotiated settlement
20 process. So I think that's what they're saying it's yet
21 to be fully tested.

22 MS. ODETTE FERNANDES: As well, according
23 to their application, are you aware that they are seeking
24 an increase in operating costs of about 6.5 percent
25 between 2009 and 2010?

1 seeking an increase in
2 operating costs at the rate
3 of 6.5 percent between 2009
4 and 2010

5

6 CONTINUED BY MS. ODETTE FERNANDES:

7 MS. ODETTE FERNANDES: Now moving to
8 another western utility, Sask Power, I note that in their
9 latest annual report they are showing a year-over-year
10 operating cost increase of 15.5 percent.

11 Are you familiar with that?

12 MR. WILLIAM HARPER: No, I haven't looked
13 at -- I'm not familiar at all with the operation of Sask
14 Power.

15 MS. ODETTE FERNANDES: So you wouldn't be
16 familiar that they cite labour and benefit costs amongst
17 other things as reasons to support this?

18 MR. WILLIAM HARPER: I'm sure they're
19 probably part, you know -- I'm not surprised that some of
20 the reasons that they've cited to support it. I'm
21 surprised -- unless they have -- unless they have just
22 finished a recent pension reevaluation and that is what
23 is leading to a significant increase in pension costs.
24 I'm surprised that labour costs would be contrib -- would
25 be contributing to a 15 percent increase in OM&A on

1 itself.

2

3

(BRIEF PAUSE)

4

5 MS. ODETTE FERNANDES: But you wouldn't
6 dispute that labour is likely a significant factor?

7

8 MR. WILLIAM HARPER: It could be a
9 contributing factor. I mean, just like as we've seen in
10 -- with -- with Manitoba Hydro's past in -- past sort of
11 OM&A cost pressures, labour costs have been going up
12 faster than inflation.

12

13

(BRIEF PAUSE)

14

15 MS. ODETTE FERNANDES: Now, according to
16 Stats Canada, are you aware that Manitoba had one (1) of
17 the highest average wage increases in Canada in 2007, and
18 that for the first two (2) months of 2008, Manitoba led
19 all provinces in wage increases?

20

21 MR. WILLIAM HARPER: No, I'm not directly
22 aware of that.

22

23

(BRIEF PAUSE)

24

25 MS. ODETTE FERNANDES: Would it surprise

1 you that according to the news release provided in the
2 Winnipeg Free Press -- I'm not sure whether you read that
3 or not -- but the overall average increase was 4.3
4 percent with industry-specific jobs showing increase of
5 7.5 percent in technical/ professional, and 7 percent in
6 construction?

7 MR. WILLIAM HARPER: I'm sorry. Actually
8 until I got here, I hadn't read a Winnipeg Free Press in
9 two (2) years so -- until I got here today so no, I
10 haven't read that.

11

12 (BRIEF PAUSE)

13

14 MS. ODETTE FERNANDES: These type of
15 increases would impact Manitoba Hydro, and it would
16 constitute evidence that Hydro's experiencing and will
17 likely continue to experience wage pressures?

18 MR. WILLIAM HARPER: Yes, I think that's
19 fair, and I -- I would expect that what Manitoba Hydro
20 has included in its -- in its forecast is an expectation
21 as to the wage pressures it's going to be facing. And
22 it's -- from what I understand, in their forecast for
23 that '07/'09 period, they were talking about labour costs
24 per FTE were forecast those increasing about 2.6 percent.

25

1 I haven't seen Manitoba Hydro say anything
2 that's going to suggest that that is an -- that -- that
3 they won't update or change that particular forecast for
4 average cost of labour in their submissions so I assume
5 the 2.6 percent is still a valid number.

6

7 (BRIEF PAUSE)

8

9 MS. ODETTE FERNANDES: Mr. Harper, do you
10 agree that another alternative to periodic asset
11 condition assessment is an ongoing preventative
12 maintenance program as utilized by Manitoba Hydro?

13 MR. WILLIAM HARPER: I think they're two
14 (2) different things. I think that, you know, I guess if
15 you say an ongoing preventative maintenance program is
16 something that would, to some extent, in the extent to
17 which it's ongoing or has to be escalated or not
18 escalated, it's something that would be justified by a
19 asset -- asset assess -- asset condition assessment.

20 You know, I think the whole thing is is
21 one doesn't do prevent -- one doesn't do ongoing
22 preventative maintenance on all types of assets,
23 different types of maintenance programs and different
24 approaches to maintenance supplied to different types of
25 assets and how frequently you do maintenance is -- on

1 certain assets is going to depend upon the condition of
2 those assets.

3 So I -- I don't think a preventative
4 maintenance program ongoing or otherwise is -- is a
5 replacement for an asset condition assessment.

6

7 (BRIEF PAUSE)

8

9 MS. ODETTE FERNANDES: Isn't a
10 preventative maintenance program more likely to avoid
11 surprises and provide a higher level of system
12 reliability?

13 MR. WILLIAM HARPER: I guess as I was
14 trying to say, I'm not too sure of one, and I'm no
15 engineer, but I've listened to people talk in this area
16 that you -- you approach maintenance for different types
17 of assets in different ways. And some assets you do
18 regular maintenance, and some assets you would check
19 their condition and do maintenance only when you had
20 tested that the condition had deteriorated to a certain
21 point and then you were going to do maintenance.

22 So it wouldn't be worthwhile doing
23 maintenance every year. You would do it when the
24 conditions warranted that maintenance to be doing.

25 There -- and, you know, and the same thing

1 with the replacement. There are certain assets that you
2 would replace on a fairly regular basis. There are other
3 assets, such as line transformers, you basically run to
4 failure and then you go out and replace it then because
5 that's the most cost-effective way to do.

6 So I don't think it's fair to say that a
7 preventive maintenance program is going to solve all your
8 problems. There are multiple approaches to maintenance,
9 and part of what drives those multiple approaches is
10 understanding your assets.

11 MS. ODETTE FERNANDES: Do you agree that
12 in Manitoba's sometimes harsh climate, that system
13 reliability is critically important?

14 MR. WILLIAM HARPER: I think if -- if
15 what you're saying is that because of the harsh climate,
16 certain customers rely on -- on electricity basically --
17 I just -- I hate to use the term life and death, but you
18 know, sort of -- for -- for -- but a very fundamental
19 basic need and that having reliability -- adequate
20 reliability is important, yes, I think to a varying
21 extent that probably exists with all utilities. If I'm
22 on a -- if I'm on an iron lung, reliability is important
23 to me regardless of what utility I'm living in.

24 MS. ODETTE FERNANDES: So in Manitoba we
25 can't take chances.

1 MR. WILLIAM HARPER: Well, I think
2 everybody -- everybody takes chances. You -- like maybe
3 just as an example, the reliability criteria that
4 utilities use including Manitoba Hydro for installing
5 generation meets a certain criteria. One (1) outage in
6 every ten (10) -- one (1) outage in ten (10) years is
7 usually the standard criteria that's used.

8 You're taking a chance. It -- it's a
9 small chance. The reason you take -- you take that small
10 chance is because to build a system that would guarantee
11 you would absolutely never have a failure would be
12 astronomical in cost.

13 The same with transmission lines. You
14 build them either to -- in one (1) planning criteria or
15 in two (2) planning criteria, and one (1) being they can
16 suffer one (1) fault and still everybody gets power, and
17 two (2) means two (2) faults can occur anywhere on the
18 system, and you -- and you can still -- can still get
19 power.

20 You would never plan a system to the point
21 where, you know, umpteen threats could -- umpteen faults
22 could occur on your transmission system, and you would --
23 everyone would still get power, because the -- the system
24 you would have to build would have wires all over
25 Manitoba for one (1) thing, and cost an astronomical

1 amount of money.

2 So everyone takes chances. It's a matter
3 of how much chance you take.

4 MS. ODETTE FERNANDES: Mr. Harper, I
5 believe you stated that Hydro should restate its
6 financial targets to match those of the bond rating
7 agencies. Now do Standard & Poor's, Moody and DBRS all
8 use exactly the same formula for debt/equity and interest
9 coverage?

10 MR. WILLIAM HARPER: I -- I didn't say
11 they should. I said they might consider; if you want to
12 go back and check -- check out the transcripts at the end
13 of the day. And I -- I don't know that -- that for --
14 for a case, but -- but I think it, you know, if we're
15 going to use those standards, you might want to consider
16 trying to align yourselves with them.

17 That might involve looking at the
18 different bond rating agencies and seeing to what extent
19 they do use different definitions or not. That -- that
20 would be one (1) of the considerations you'd have to take
21 into account.

22 MS. ODETTE FERNANDES: Now, Mr. Harper, I
23 would like to ask you some questions on the matter of
24 inverted rates for residential customers.

25 If we look at the handout marked Manitoba

1 Hydro Exhibit Number 94, it's a table which shows in the
2 first line the size of energy in the first block per
3 kilowatt hour. And the second and third lines the rates
4 for both the first and second blocks in cents per
5 kilowatt hour. And these are for Canadian utilities
6 whose residential rates are now or are proposed to be
7 inverted.

8 Subject to -- to check, do these numbers
9 look correct to you?

10 MR. WILLIAM HARPER: Yes, they do. And I
11 -- I -- the only thing I would qualify is that you've got
12 the Ontario summer and the Ontario winter energy prices
13 being exactly the same. I assume that's because --
14 actually what happens here is the prices change every six
15 (6) -- six (6) months, based on a reevaluation of what's
16 -- what's the cost of supply.

17 And the reevaluation leading up to -- the
18 May 1st change indicated there was no need to change the
19 numbers, which is really why the summer values look the
20 same as the winter values, but that's not to say in the
21 future they -- they won't change.

22 So I didn't want anybody to get the
23 impression that the winter and summer rates are -- are
24 exactly the same. That's just a happenstance of the
25 forecast that -- that was most recently done.

1 MS. ODETTE FERNANDES: Thank you. One
2 thing I notice about this is that except for Ontario
3 during the summer months the first block size is in the
4 pretty tight range of 800 kilowatt hours to 1,000
5 kilowatt hours per month.

6 Now, in your opinion is this just
7 accidental, or is there something more underlying the
8 choice of the size of the first block?

9 MR. WILLIAM HARPER: Well, I -- I think
10 Hydro Quebec's 900 kilowatt hours is basically reflective
11 of what they've -- the way -- way they expressed it is 30
12 kilowatt hours per -- per day. And that's basically
13 based on what's the average use of a non-space heating
14 customer.

15 To a large extent, that's somewhat similar
16 to the definition I think that Manitoba Hydro has used.
17 I think they calculated a value of 877 kilowatt hours as
18 being the average use of standard electric customer.

19 I can't recall off the top of my head. I
20 think -- I think the BC Hydro -- exactly how the BC Hydro
21 one was defined, but it was probably in a somewhat
22 similar vein.

23 So I -- I guess utilities have probably
24 generally taken -- those utilities, including Manitoba
25 Hydro -- I think, about the same approach to establishing

1 the first block. And maybe what it says that on average
2 the consumption, you know, when you take into account and
3 in various provinces, comes out about the same, because
4 the non-standard is non-electric heating. So basically
5 you're excluding the fact that there may be variations in
6 electric heating across these provinces and just looking
7 at the non -- average non-electric heating in -- in these
8 various jurisdictions. And so you're coming up with
9 numbers that aren't that much different across the
10 different provinces.

11 The Ontario ones are basically meant to
12 sort of -- I guess they're -- they're sort of based on an
13 average use of about 10,000 kilowatt hours a year, and
14 then with the winter and summer blocks sort of designed
15 one (1) higher and one (1) lower than that. But I think
16 10,000 kilowatt hours a year probably doesn't work out
17 that much different than the typical types of numbers
18 you'd be seeing -- you'd be seeing for the other
19 provinces.

20 So I -- I think it's -- it's more -- it's
21 more than just circumstance. It's a long answer to your
22 short question. I apologize.

23 MS. ODETTE FERNANDES: Good answer.

24 Looking at the province of Ontario, I note
25 that the -- that's the only province that -- where a

1 decision has been made to differentiate the first block
2 size between the two (2) main seasons, summer and winter.

3

4 Can you tell us the reason this decision
5 was made?

6 MR. WILLIAM HARPER: Well, I think -- I --
7 - I think it was made in part to recognize the higher
8 heating requirements, the higher electricity requirements
9 that are required for electric heating in -- in the
10 province in the wintertime and to try and offset the
11 impact of that on the -- on the customers that -- that
12 are facing the -- that are facing the inverted rate.

13 I think if you read the materials that
14 have been -- that have been posted in conjunction with --
15 with the rate, you'll find that explanation.

16 MS. ODETTE FERNANDES: Looking at the
17 next utility shown, Hydro Quebec, doesn't the Province of
18 Quebec also have a high proportion of residential
19 customers with electric space heating?

20 MR. WILLIAM HARPER: Yes, yes, it does.
21 And maybe it's worth noting that this rate here, which
22 probably has the largest differential between peak and
23 off-peak, has probably in -- been in existence for --
24 progressing for about four (4) -- about four (4) years
25 now, I think -- and it's been evolving so that the

1 differential has been increasing a little bit every year.

2 And I must admit, we just finished --
3 we've been going through debates before the Regie for the
4 last two (2) or three (3) years now, I guess, in terms of
5 whether or not there should be either a seasonal
6 differentiation or whether there should be a third block
7 as opposed to just two (2) energy blocks.

8 And the Regie just, in its most recent
9 decision that it issued, basically concluded that I think
10 while there was merit to seasonal rates, it was an added
11 level of complexity they didn't think they wanted to
12 introduce at this time. And the same sort of issue with
13 the -- with -- with the third block.

14 MS. ODETTE FERNANDES: And looking at BC
15 Hydro do you have any comments on why the BCUC would not
16 have made a similar seasonal differentiation?

17 MR. WILLIAM HARPER: No, I don't.
18 Actually, this, as you've noted here, this is a proposal
19 that just came out I believe in February, if I'm not
20 mistaken, and is currently before the BCUC. Actually, I
21 have another round of IRs due on this on Monday.

22 And -- and so -- so that we're still to
23 sort of go through a discovery process with them to
24 understand the -- sort of the -- the basics and a lot of
25 the rationale underlying the particular proposal they put

1 forward.

2 MS. ODETTE FERNANDES: Now, moving on to
3 Manitoba Hydro Exhibit 95.

4 On pages 21 and continuing to pages 22 of
5 Mr. Chernick's evidence, he indicates that he disagrees
6 with Manitoba Hydro's choice of 900 kilowatt hours for
7 the first block.

8 Have you had a chance to review this?

9 MR. WILLIAM HARPER: Yes, I -- I reviewed
10 it over the break when it was given to me.

11 MS. ODETTE FERNANDES: And do you agree
12 with Mr. Chernick's conclusions?

13 MR. WILLIAM HARPER: Well, no, I don't.
14 No, I don't, actually. I -- I guess in part -- there are
15 a couple of pieces to this.

16 And that is -- that -- I mean -- he's gone
17 through and identified here a number of usages which he
18 claims, if you have 900 kilowatt hours as a first block,
19 people won't do anything to save electricity in these --
20 in any of these end uses.

21 I would suggest that people won't do
22 anything only if their electricity usage in total is
23 below 900 kilowatt hours per -- per month. If I happen
24 to be using more than 900 kilowatt hours per month, and
25 even if it's because maybe space heating pushes me in

1 total into the over 900 kilowatt hour category, it --
2 it's cost-effective for me to pursue any and all of these
3 measures, because every kilowatt hour I save gives me the
4 same saving, whether it's from an efficient -- efficient
5 computers, efficient refrigerators, or more efficient --
6 or more efficient use of electricity for space heating.

7 So I don't think that the high cutoff
8 necessarily precludes pursuing energy efficiency areas in
9 these -- in these particular topics, for those that --
10 that are in excess of 900 kilowatt hours.

11 I think the more fundamental question,
12 which I think I raised in my direct is the question of,
13 you know, clearly if you pick a threshold, anybody whose
14 total consumption is below that won't -- won't see that
15 second tier and won't see the same price signal.

16 But there -- there you're caught in the
17 bit of a catch 22. The only way you can -- if you have
18 to close on the same average revenue requirement
19 recovery, the only thing you can do if you lower the
20 first energy block is either to reduce the rates in the
21 first energy block or reduce the rates in the second
22 energy block. And if you reduce the rates in the second
23 energy block, then people are seeing lower prices there.

24 And so it's a matter of what's the
25 relative level the price signal people see versus how

1 many people see it. And there's a tradeoff there. And I
2 -- I think that's something that's missing in his
3 discussion. He's assuming you can have your cake and eat
4 it too, I guess is the question. And I don't think we
5 can.

6

7

(BRIEF PAUSE)

8

9 MS. ODETTE FERNANDES: If you turn to
10 pages 23 and 24, Mr. Chernick provides his own
11 recommendations for the design of a residential rate.

12 And rather than distinguish between the
13 seasons, he wants Manitoba Hydro to distinguish between
14 customers on the basis of whether or not they use
15 electric heat.

16 He further wants to provide an additional
17 allowance of 6,400 kilowatt hours annually to electric
18 heat customers and even to differen -- differentiate
19 among the different winter months with respect to the
20 size of the first block.

21 Now do you have any comments as to whether
22 or not this is superior to the approach taken in Ontario
23 by the Ontario Energy Board?

24 MR. WILLIAM HARPER: I guess I'd have to
25 qualify my comments by saying I think it's a matter of

1 superior in what way.

2 I think, as I said in my opening comments,
3 this may be one way of trying to fine tune things in
4 order to get at -- in order to get at this issue and try
5 and have -- sort of make the rates fair and make sure
6 that more people are exposed to the -- to the second
7 tier. But as you go through the process, there are a
8 fair number of steps and decisions and administration
9 that -- that is -- is attached to that.

10 So it -- it might be superior in some ways
11 in terms of more effective, I don't know. Superior from
12 an administrative perspective, probably not.

13 I think in Ontario you have roughly eighty
14 (80) utilities that have to implement this rate every six
15 (6) months. And some of them, as I said, have only three
16 (3) or four hundred (400) customers. And they all have
17 to go out and change their billing systems.

18 So I think there -- there are practical
19 issues you have to take into account when you're looking
20 at implementing rates like this.

21

22 (BRIEF PAUSE)

23

24 MS. ODETTE FERNANDES: Mr. Harper, do you
25 have any specific recommendations for Manitoba Hydro as

1 to measures it could take to facilitate such an approach
2 should this Board decided that Mr. Chernick's
3 recommendation is the way to go?

4

5 (BRIEF PAUSE)

6

7 MR. WILLIAM HARPER: I think we'd have to
8 -- I think you'd have to start off by sort of trying to
9 accumulate a lot more data and understanding of what are
10 the consumption characteristics of your customers. As
11 you said, Mr. Chernick came up with 6,400 kilowatt hours.
12 And how you would distribute that over the months, I
13 really -- I don't recall seeing any specific
14 recommendations on that.

15 But I think the first thing we'd have to
16 do is try and to -- and whether it be through your
17 billing system or through some of the -- the research
18 programs that perhaps Manitoba also runs -- is get a much
19 better understanding of what are the consumption
20 characteristics on a monthly basis of space heating
21 customers and non-space heating customers, and maybe even
22 partial space heating customers, and how that -- there's
23 also another issue about how do you manage the fact that
24 space heating is very much a matter of weather sensitive,
25 which changes from year to year.

1 So I can set these blocks, but then
2 there's a whole question of, What do I do? I could have
3 a small block for March. March can be a really mild
4 month or it can be a really cold month.

5 And so I think you'd have to get some more
6 information understanding your customers, make sure
7 understanding sort of what could be the changes and
8 sensitivity around weather, and try it on that basis, to
9 do a lot more analysis before you could come up with any
10 sort of definitive feeling that you were coming up with
11 values that were going to result in a fair approach.

12 That would be my first step, is I think
13 you need a lot more information. And I'm sorry, beyond
14 that, I'm not too sure where to go. You'd have to look
15 at the information and decide where to take it from
16 there.

17 MS. ODETTE FERNANDES: Thank you for
18 that.

19 Turning now to the extract from your own
20 pre-filed evidence, Manitoba Hydro Exhibit 96, it's page
21 39, and beginning at line 16, you state that:

22 "Before taking this rate
23 differentiation further, Manitoba Hydro
24 should ensure that its DSM programs
25 provide the necessary tools,

1 particularly for those segments
2 identified above to respond."

3 Is this still your advice?

4 MR. WILLIAM HARPER: Yes, it would be.

5 MS. ODETTE FERNANDES: And am I correct
6 in saying that this would mean gradualism in terms of
7 increasing the gap between the first and second blocks
8 until such time as Manitoba Hydro's low income DSM
9 measures are sufficiently evolved?

10 MR. WILLIAM HARPER: I think it would --
11 it would interpret it -- I think you have perhaps
12 misinterpreted what I was saying.

13 I think I -- I think it would perhaps
14 extreme gradualism until the programs were there and then
15 maybe gradualism after that. I would not be -- I would
16 not be proposing that simply because you had the programs
17 in place, you would automatically move the second tier to
18 seven point seven (7.7) cents the next year.

19

20 (BRIEF PAUSE)

21

22 MS. ODETTE FERNANDES: Now, I just have a
23 question here on marginal costs. Even if we don't have a
24 detailed agreement about the precise level of marginal
25 costs -- and we'll assume that it's well understood that

1 the marginal cost of energy is significantly higher than
2 the embedded costs.

3 Now would you agree with me that this is
4 an issue that a regulator should at least consider in
5 examining allocation of overall revenue requirement among
6 customer classes, particularly if those classes differ
7 significantly with respect to energy costs as a portion
8 of their total costs?

9 MR. WILLIAM HARPER: I think I was having
10 a bit of a conversation with this with the counsel for
11 MIPUG, I think.

12 If I understand your question correctly,
13 what you're talking about is to what extent do I look at
14 embedded -- just embedded cost of service results, or do
15 I look at other results, such as marginal costs? And I
16 think the answer I gave there was that -- was that there
17 was -- there was some merit in looking at other results.

18 I don't think you, you know, you don't,
19 you know, I think you want to give a substantive
20 waiting to -- to your, excuse me, to your embedded cost
21 study. But I think if you're -- if there's other
22 information like the marginal cost study, it can be used
23 to supplement that.

24 I think I was saying, you know, something
25 maybe, you know, if one was wanting to be quantitative

1 about this, maybe something less than 50/50 on the
2 weighting. But the PUB has already indicated once to
3 look at three (3) -- three (3) -- at least three (3)
4 different approaches. So I'm stuck with somewhere around
5 a third/a third/a third, or some weightings there, I
6 don't know.

7 But so I guess what I'm saying is that,
8 yes, you might -- might want to consider -- I don't think
9 you give it the same weighting as you would the embedded
10 costs study, but it's something you'd want to consider.

11 MS. ODETTE FERNANDES: And finally, I'd
12 like to take you to Manitoba Hydro Exhibit Number 93 --

13 MR. WILLIAM HARPER: Oh, sure.

14 MS. ODETTE FERNANDES: -- the regulators'
15 Dilemma, Part 2.

16 MR. WILLIAM HARPER: Oh, I thought you
17 forgot about this one.

18 MS. ODETTE FERNANDES: I wouldn't do
19 that.

20 So in this document we make some
21 assumptions, and I'll just take you through them.

22 The first one is that we have a Crown-
23 owned monopoly utility regulated under Cost of Service
24 model. And this utility advises that it requires a
25 2.9 percent rate increase to continue progress towards

1 the debt/equity target and to provide increased source of
2 cash to fund capital projects and reduce borrowing
3 requirements.

4 Now the second assumption we'll make is
5 that the regulator believes that forecast OM&A costs are
6 reasonable, necessary, and prudent. But it is aware that
7 input costs for commodities, fuel, and labor -- labour
8 are increasing at unprecedented rates.

9 And let's also just assume that the
10 regulator is of the view that current reserves should be
11 enhanced at a quicker pace to protect against certain
12 risks and to achieve the financial objectives of the
13 utility.

14 And, finally, let's assume that the
15 regulator recognizes that while RCCs for all customer
16 classes are within or close to the zone of
17 reasonableness, the export subsidy distorts price signals
18 and a marginal cost approach to determining the zone of
19 reasonableness may be more relevant to contemporary
20 considerations of cost recovery, energy efficiency, and
21 environmental impacts.

22 I see Mr. Williams smiling.

23 MR. WILLIAM HARPER: It sounds like
24 you've written their decision.

25 MS. ODETTE FERNANDES: Just assumptions.

1 MR. WILLIAM HARPER: Well, but -- but
2 unfortunately, you know, I guess the bottom line is that,
3 you know, if -- if a regulator believes that the forecast
4 OM&A forwarded is reasonable, necessary, and prudent,
5 that -- that translates into particular determination.
6 So that, you know, I -- I think as we go through, all --
7 all of these assumptions are fairly critical in terms of
8 how -- what the regulator considers a dilemma at the end
9 of the day. That's all I'm saying.

10 MS. ODETTE FERNANDES: Yes, and I agree
11 with you on that.

12 Now, we've listed the three (3) options
13 there that -- can I -- would you agree with me that these
14 are three (3) options that a regulator could consider
15 under these circumstances?

16 MR. WILLIAM HARPER: Yes, there's -- I --
17 I guess there's more options than the three (3) that the
18 regulator -- you're saying they can deny the rate
19 increase or they can approve the two point nine (2.9).
20 There's lots of -- there are lots of numbers between zero
21 and two point nine (2.9) that the regulator could equally
22 decide they want to approve.

23 I guess that would come down to, we've
24 talked about OM&A costs. There are a lot of other costs
25 that make up the determination of the revenue

1 requirement. I assume you're making in your assumptions
2 that the regulator believes all of those are sound and
3 appropriate and reasonable as well.

4 And then -- then really in that case, you
5 know, we've also got an assumption in here that the
6 regulator believes that the current reserves need to be
7 enhanced. If -- if that is the regulator's view and
8 decision, then it's an -- and that's part of what I
9 understand, the number one (1) is driving the two point
10 nine (2.9). It's -- it then, you know, it's a matter of
11 how -- how fast you want to make that improvement would
12 be a question of whether it's two point nine (2.9) or
13 something less than two point nine (2.9).

14 Maybe to go on, you've got a number of
15 options here. I don't -- I don't buy into Number 2 at
16 all, to be quite honest with you. I don't think it --
17 it's a valid option. I think you're -- got an assumption
18 that the regulator is aware that input costs for
19 commodities are increasing. There's a lot of difference
20 between awareness and a demonstration that that's
21 actually going to -- what that's actually going to do to
22 costs the next year or the year after that.

23 If I was this regulator, having made this
24 decision, I'd say, If you're concerned -- if you're
25 concerned enough about costs for the next year, you come

1 back and make another GRA filing and demonstrate to me
2 what those costs are doing to your revenue requirement
3 and prove to me that you need a further increase.

4

5

(BRIEF PAUSE)

6

7

MS. ODETTE FERNANDES: Thank you, Mr.

8

Harper,

9

10 Mr. Chair and the Board. I am now just
11 going to pass the mic over to Ms. Ramage. She just has a
12 few questions for Mr. Dunsky.

12

13 CROSS-EXAMINATION BY MS. PATTI RAMAGE:

14

15

MS. PATTI RAMAGE: Yes, Mr. Dunsky, we
16 didn't want you to feel slighted.

16

MR. PHILIPPE DUNSKY: Thank you.

17

18

MS. PATTI RAMAGE: You've come a long
19 way.

19

20

21

And I just wanted to clarify that you were
20 retained to review Manitoba Hydro's lower income DSM
21 programs and offer suggestions for improvement.

22

Is that correct?

23

MR. PHILIPPE DUNSKY: Yes, indeed.

24

25

MS. PATTI RAMAGE: And you did not
25 perform any calculations or analysis as to the impacts on

1 rates that would flow from the program as presently
2 designed or that would flow from your suggested
3 improvements other than perhaps a theoretical or
4 directional likely outcomes.

5 Is that correct?

6 MR. PHILIPPE DUNSKY: Yes, that's
7 correct.

8 MS. PATTI RAMAGE: And you're not
9 recommending that Manitoba Hydro's rate request be
10 reduced because of the alleged -- or the program design
11 improvement potentials that you've discussed today?

12 There's no recommendation in terms of the
13 rate impact, is there?

14 MR. PHILIPPE DUNSKY: Well, no. I mean,
15 I wasn't asked to -- to address that in terms of the
16 consequences of -- of the conclusions.

17 I mean, I think, the -- the critical thing
18 is making sure that the program works well. And how you
19 get there and what the Board should do to get you to get
20 there is -- is a question that I didn't examine.

21 MS. PATTI RAMAGE: Now, I've heard you
22 use the term "cost-effective" a few times today. And I
23 wanted to clarify, whose point of view are you using?
24 The low income consumers? The ratepayers in general? Or
25 another point of view?

1 Whose -- whose are we looking at that
2 from?

3 MR. PHILIPPE DUNSKY: Typically, when I
4 talk about cost-effectiveness in these cases, talking
5 about the TRC, total resource cost tests, which -- which
6 remains the standard test, whether I like it or not.

7 And there is an exception to that in --
8 excuse me -- in my reference to the refrigerator
9 replacement program, where there we're talking about a
10 cost that -- it's a little bit difficult, frankly,
11 because I was very conservative in my -- in my
12 assumptions.

13 But assuming these very conservative
14 assumptions, you end up with a cost that is probably not
15 going to hit your TRC straight on. If it -- if you count
16 for non-energy benefits, it may well. But, in any case
17 though, for that particular measure, it's -- the cost-
18 effectiveness really is more in the sense of the total
19 impact on the program's average cost. That would be the
20 exception to the rule.

21 MS. PATTI RAMAGE: When you're referring
22 to the refrigerator program -- just to confirm, that's --
23 if I recall correctly -- that was in the realm of nine
24 (9) cents per kilowatt hour and the -- where the low
25 income program was more in the area of eleven (11) cents.

1 Is that correct?

2 MR. PHILIPPE DUNSKY: That's right.

3 MS. PATTI RAMAGE: If those nine (9) cent
4 kilowatt hours are being sold on the export or domestic
5 market for roughly six (6) cents a kilowatt hour, would
6 you consider that cost-effective still?

7 MR. PHILIPPE DUNSKY: Well, yes and no.
8 Again, it comes back to your original question about
9 perspective, right.

10 There's the question of whether and to
11 what extent non-energy benefits are being accounted for
12 in this perspective. Obviously, in my analysis, I didn't
13 count for any at all. I alluded to non-energy benefits.
14 And I suggested that I think it's extremely important,
15 especially for a low income program, to begin to account
16 for non-energy benefits. I didn't quantify them.

17 So, you know, the question is, would your
18 -- when you add in those benefits, does your six (6) or
19 seven (7) cent avoided costs go up beyond nine (9) or
20 fall short of nine (9)? That's where I'm not sure, to be
21 perfectly honest.

22 That said, it's -- it's pretty standard
23 fare for low income programs by and large not to hit the
24 TRC. And that's, of course, why you're suggesting a
25 program that costs eleven (11) cents, even though your

1 benefit is six (6) or seven (7).

2 MS. PATTI RAMAGE: In terms of the cost-
3 effectiveness note there, we would though want -- as a
4 utility, you'd agree it's our responsibility to -- to
5 completely -- to be aware and test that cost-
6 effectiveness from the ratepayer's perspective.

7 Is that correct?

8 MR. PHILIPPE DUNSKY: Oh -- well, from the
9 ratepayers -- the RIM test? Are we going back to that?

10 MS. PATTI RAMAGE: No, perhaps I
11 misspoke. When I say ratepayers -- I -- I use ratepayers
12 and the utility as the same, because I see the -- the
13 impacts is -- as going -- as that being the same body.
14 So maybe I'll -- I'll change my question to the utility -

15 MR. PHILIPPE DUNSKY: The utility cost
16 test?

17 MS. PATTI RAMAGE: Yeah.

18 MR. PHILIPPE DUNSKY: Mm-hm. Okay. So
19 -- so if the question is -- excuse me -- is it Manitoba
20 Hydro's responsibility to -- to examine the measure based
21 on the utility cost test. I think it's a very important
22 thing to do, absolutely.

23 You know, I think the -- the next question
24 after that is, well, what do we do with that? And
25 clearly for the other -- for the rest of the program, you

1 know, I think the answer was, well, the rest of the
2 program largely fails both tests, both the TRC and the
3 utility cost test. But you're going ahead anyhow for
4 reasons essentially of non-energy benefits that we're
5 implicitly accepting.

6

7 (BRIEF PAUSE)

8

9 MS. PATTI RAMAGE: Okay, Mr. Dunsky,
10 thank you. I have my trio of mics here. And if I could
11 get my backup singers, we could -- there, we could end
12 Friday in a proper manner.

13 But anyways, thank you, Mr. Dunsky and Mr.
14 Harper, for coming out and traveling to Manitoba to
15 assist us in this Hearing.

16 And I think now we can maybe turn the mic
17 over to Mr. Peters for the rest of the afternoon.

18 THE CHAIRPERSON: Thank you, Ms. Ramage,
19 Ms. Fernandes.

20 MR. ROBERT MAYER: You're assuming the
21 Chair and the Board aren't going to have something to
22 say.

23 MS. PATTI RAMAGE: Oh.

24 THE CHAIRPERSON: And, yes, we have
25 reached that blessed moment. Mr. Peters, it is 3:30. It

1 is your turn.

2 MR. BOB PETERS: Thank you, Mr. Chairman.

3

4 CROSS-EXAMINATION MR. BOB PETERS:

5 MR. BOB PETERS: Mr. Harper, you've told
6 the Board that next time they gather to review Manitoba
7 Hydro's next GRA, there should be a test that they're
8 held to for their OM&A forecast, correct?

9 MR. WILLIAM HARPER: I think -- I think
10 what I -- what I've suggested is that it would be useful
11 to have the information presented in -- in a different
12 way that gave -- that gave us a better -- gave us and the
13 Board a better understanding of what -- what was the
14 genesis for -- for the cost changes we were seeing.

15 And they should be -- and the test should
16 be, is -- is there a clear explanation as to what those
17 cost changes are that ties back to either cost escalation
18 or changes in work requirements, yes.

19 MR. BOB PETERS: Well, and you also told
20 the Board that there were maybe -- there were four (4)
21 ways to test their OM&A forecast.

22 And one of them was to look at the
23 elements individually.

24 A second would be the envelope basis,
25 which is what you've done in this proceedings.

1 The third was to benchmark it, which I
2 think you panned that idea and said it's really not
3 determinative of much.

4 And the fourth was to use -- get an
5 understanding of how the utility develops and reacts to
6 its forecast, including the use of an asset condition
7 assessment report.

8 Those were the four (4) options you threw
9 out?

10 MR. WILLIAM HARPER: Yes, they were. And
11 I -- I think they -- as I said in my direct I don't
12 think they're necessarily exclusive of each other. I
13 think if you were going to be trying to explain how work
14 -- changes in work requirements led to differences in
15 changes in costs, that -- that would get into a utility
16 explaining to some extent how it did it -- how it did its
17 planning and its work planning.

18 MR. BOB PETERS: I take from that answer
19 that -- that if -- and you told the Board they could use
20 more than one (1) of these measures, correct?

21 MR. WILLIAM HARPER: That's correct.

22 MR. BOB PETERS: And if the Board was to
23 start the one measure that you've mentioned now twice in
24 your answers, would be to understand how the utility
25 develops its forecast and what happens along the way as

1 they try to see what their actuals do in terms of
2 matching their -- their forecast?

3 MR. WILLIAM HARPER: That'd be correct.

4 MR. BOB PETERS: And one of the tools to
5 do that is the Asset Condition Assessment Report?

6 MR. WILLIAM HARPER: Well, that -- that
7 is one piece of information that I guess -- one piece of
8 information that most utilities do use in terms of going
9 in -- in -- use in -- in their planning process. And
10 that -- that -- yes, so that was one -- one example I
11 guess was what I was drawing as a type of thing that you
12 would draw on as part of that planning process.

13 MR. BOB PETERS: I took from your answers
14 to other counsel, including those who showed you coloured
15 graphs and the like, that benchmarking is not something
16 that you think the Board should spend a lot of time on?

17 MR. WILLIAM HARPER: Yeah, I think -- I
18 think that's a fair comment. And I'll be frank with you.
19 We -- as -- as Mr. Williams had shared with the Board,
20 there have been benchmarking studies done in Ontario. I
21 think I indicated some that were done in Quebec. And I
22 -- I think they show varying -- varying results.

23 It's difficult sometimes at the best, even
24 if you can understand the differences, to figure out how
25 that translates into -- what that would meaningfully

1 translate into in terms of a prudent level of OM&A.

2 I think to some extent -- and the reason
3 -- maybe I could step back a bit. The reason why we --
4 we started looking at Hydro One is because, as I said
5 before we have eighty (80) distributors in Ontario. And
6 to some extent the Ontario Energy Board there has been
7 trying to look at costs across the utilities in terms of
8 comparing them to see whether, if they're comparable.

9 Hydro One basically said, We're the
10 biggest utility in the province, you can't possibly
11 compare us to anybody else here, that's totally
12 inappropriate. And so the Board said, Well, okay, let's
13 go out and benchmark you against other big utilities.

14 I think they've done that twice, and while
15 it's useful -- some information -- I'm not too sure
16 whether it -- how much it's really managed us to inform
17 the decision the regulator has to make about what's the
18 level of OM&A that should be approved for Hydro One. So
19 as a tool, I'd put it down towards the bottom of the
20 list, yes.

21 MR. BOB PETERS: This asset condition
22 assessment report, if I've said that right, that you're
23 advocating is something different than you've seen
24 Manitoba Hydro prepare to date?

25 MR. WILLIAM HARPER: Well, I guess it's,

1 yes, I hadn't seen one (1) prepared by Manitoba Hydro,
2 no.

3 MR. BOB PETERS: And it goes well beyond
4 a depreciation study?

5 MR. WILLIAM HARPER: Yes, a depreciation
6 study is really just looking at what's the, -- you know,
7 I shouldn't say what a depreciation study is. I'm not --
8 I've never done one (1) up, but I understand it tries and
9 look at what's the expected remaining life of your assets
10 and tries, on that basis, to determine what should we be
11 using as the amortization period to amortize the
12 remaining value of the assets.

13 It doesn't talk at all about what can I do
14 to extend the life of those assets, or should I be
15 spending money to extend the life of those assets, or
16 issues like that which is really what you get into when
17 you're looking at the physical condition of the assets.

18 MR. BOB PETERS: Do you know how much it
19 costs to undertake such a study?

20 MR. WILLIAM HARPER: No, I'm sorry, I
21 don't.

22 MR. BOB PETERS: And you've recommended
23 that it be done by somebody external to the Corporation,
24 but under the guidance of the Utility.

25 MR. WILLIAM HARPER: Well, I think

1 frequently it's often done by somebody externally simply
2 because, to some extent, each of the people in the
3 utility are busy doing their own job, and it's useful to
4 have somebody come in and just sort of help them collect
5 all the information and put it together in one (1) place.

6 It perhaps also adds a little bit more
7 credibility to the result at the end of the day if it was
8 pulled together by a third party. And it's probably
9 always good to have your -- have your sort of assumptions
10 tested and probed by a third party. It sort of makes you
11 think about the things you maybe haven't thought about
12 before.

13 MR. BOB PETERS: Turning to productivity
14 improvements, did I take from your evidence that you're
15 not convinced from anything you've seen from Manitoba
16 Hydro that they can demonstrate any productivity
17 improvements?

18 MR. WILLIAM HARPER: No, I think what
19 I've seen is that they've dem -- I think from looking at
20 the changes in OM&A costs and even -- and say cost
21 drivers such as number of customers that their contention
22 that there's been a roughly a 1 percent improvement in
23 productivity over the past is something that I can see
24 bearing out in the numbers I looked at for the period
25 2003 to 2007. I think I noted that in my evidence

1 actually.

2 So I think there is demonstration in the
3 numbers we've seen in the past, looking at changes in
4 cost on a per customer basis and, etcetera, that there
5 has been productivity improvements in the past.

6 MR. BOB PETERS: If the incremental
7 annual costs for Manitoba Hydro's new headquarters are to
8 be accounted for by productivity improvements and
9 efficiency improvements, what are some of the options
10 that the Board can consider in terms of how to address
11 that through this Hearing in terms of measurement and
12 checking to see whether that, in fact, does happen?

13 MR. WILLIAM HARPER: I guess the reason
14 I'm pausing is because the first thing I was uncertain
15 about, at this point in time in the juncture of the
16 proceeding, is whether there is a view -- or what the
17 view is in terms of what the productivity savings are
18 from the new head office if any, I guess.

19 And so I guess you're -- this is really a
20 two (2) part question. Is -- is -- the first part of it
21 is, does one believe it's reasonable to assign a level of
22 productivity savings to the new head office? And if that
23 is the case, how do we ensure it's in the IFF? And I
24 guess the third question which is the one (1) you're
25 asking is would be the question of, how do we

1 demonstrate, after the fact, that it occurred?

2 To be quite honest I have some sympathy
3 for Mr. Warden's view that at the end of the day with
4 everything else that's going on that may be very
5 difficult to demonstrate that they have occurred. I
6 think what's probably more fundamental is if you -- if
7 the contention is there are savings that they actually be
8 -- be built into the forecast that we're -- that we're
9 using to -- to set the rates with the expectation that
10 those savings will -- will be derived.

11 You know, I -- I remember going through
12 the status update, and I don't in -- afterwards what
13 we're -- the status update proceeding we're going through
14 a lot of contention about savings because of the joining
15 of Centra Gas and Manitoba Hydro, and can we -- what are
16 the savings going to be, and can we document those
17 savings over time.

18 And -- and after a while I wasn't too,
19 too, too sure if -- even if I was doing the calculations
20 whether everyone was getting the right number at the end
21 of the day anyway, sort of thing. We were basing it on
22 forecasts that probably -- maybe were out of date a
23 couple years later. So I'm too sure if it's a useful
24 exercise to try and get into again re -- Mr. Peters.

25 MR. BOB PETERS: Oh, does that answer

1 suggest to the Board then that if there's a suggestion or
2 an expectation by the Corporation that there could be a
3 10 percent efficiency in certain areas that you simply
4 reduce the amount of allowed revenue to them by that
5 amount and let them -- let the Corporation find it
6 internally so they can demonstrate that it -- it was
7 there?

8 MR. WILLIAM HARPER: Yes, I think that --
9 that would be one (1) way to proceed.

10 MR. BOB PETERS: Well, was that what your
11 suggestion was aiming at, in terms of your second last
12 answer to me?

13 MR. WILLIAM HARPER: Yes, it was. And I
14 guess -- like I said, at this point in time, I'm not too
15 sure were the numbers 10 percent or 2 or 3 percent, to be
16 quite honest with you. I think the Board would have to
17 make a determination in terms of what it believes is a --
18 if it believes that some -- some efficiency savings
19 should be built in, what -- what's a reasonable amount to
20 incorporate.

21 And if I want to sort of pre -- pre-guess
22 your next question, unfortunately I really don't have any
23 suggestions at this point.

24 MR. BOB PETERS: All right. Thank you
25 for asking and answering -- answering those.

1 Mr Harper, you went to some length in your
2 answer to Mr. Williams to try to convince the Board that
3 differentiated rate increases dealing with the 1.9
4 percent that you think would be a reasonable amount
5 allowed maybe shouldn't be allowed in this application.

6 Or was your -- or was your position that
7 differentia -- differentiated rate increases should not
8 occur if the Board was more inclined to award an overall
9 2.9 percent?

10 MR. WILLIAM HARPER: Well, I guess there
11 -- there is a couple thing -- just strictly on the face
12 of it in customer impacts, if you were awarding a 1.9
13 percent increase as opposed to a 2.9 percent increase
14 then clearly, you know, just on that one (1) piece of
15 evidence alone then that one (1) concern about customer
16 impacts there is more room, if I can put it that way, to
17 have a differentiated rate and still have the -- the same
18 -- the same range of overall customer impacts.

19 That -- that speaks to the point of what's
20 the implementation impacts on having differentiated
21 rates? The -- the first question is, is whether or not
22 the evidence is sufficient to -- to suggest that -- that
23 differentiated rates are warranted, and that goes, to
24 some extent, to the consideration of the embedded Cost of
25 Service Study. It also goes to what weight the Board

1 wants to put on the other issues that it has said it also
2 wants to consider in -- in that determination.

3 MR. BOB PETERS: Well, I have you answer.
4 I thank you for that. Let's make the assumption that
5 instead of 1.9 percent the overall average rate increase
6 was 2.9 percent, and then for the reasons that you told
7 Mr. Williams you would not recommend the Board go to
8 differentiated rate increases.

9 Did I hear you correctly on that?

10 MR. WILLIAM HARPER: Well, I -- I said I
11 don't -- I don't attach -- I don't attach a very -- a high
12 priority to it, so it's not something that I would rec --
13 that I would recommend, no. You know, there is -- as I
14 said, there is not a lot of classes that are outside of
15 the -- that are outside of the zone, they're just barely
16 there. If I look at these other considerations, there's
17 few -- there's fewer still.

18 You know, you might want to pick it for
19 one (1) or -- for one (1) or two (2) classes, but it
20 would be a very small variation. I'm not too sure
21 whether it would be worth it or not, so I wouldn't
22 recommend it.

23 MR. BOB PETERS: Well, if -- if 2.9
24 percent average increase is too large to consider for
25 differentiated rate increases, for the reasons you told

1 Mr. Williams, then would you agree with me that it's not
2 likely that differentiated rate increases could occur
3 during IFF '07-1 planning horizon because for each and
4 every year there's a 2.9 percent assumption included.

5 MR. WILLIAM HARPER: No, that would
6 depend to some extent on how your revenue-to-cost ratios
7 were changing over time as you went forward. They
8 basically -- the sort of the mix of loads will change.
9 the -- maybe the mix of costs will change. The results
10 of the Cost of Service could well change as well sort of
11 thing.

12 MR. BOB PETERS: All right, I've got your
13 point on that. And in answer to one (1) of My Friends
14 earlier, you were indicating that you understand this
15 Board wants to look at not only the embedded Cost of
16 Service but also some -- some both on a pre-export and on
17 a post-export basis, but also marginal costs, and
18 environmental impact basis. You were throwing numbers
19 around in terms of percentages or weightings.

20 And I'm not sure you've given it much
21 consideration, but do you have a considered view as to
22 what the appropriate weightings would be?

23 MR. WILLIAM HARPER: No, I don't, and I
24 think it probably would be inappropriate -- and that's
25 why I was having some struggle, because, I mean, maybe I

1 got going down a line of an answer that I probably should
2 have never started, because I don't think it's something
3 one can mechanistically apply numbers too.

4 So when I was saying maybe 10 percent, 90
5 percent, or 50/50, I was just trying to give an
6 indication that, you know, that considerable weight
7 should be given to the embedded Cost of Service Study but
8 that given out, you know, I was trying to reflect to some
9 extent what the Board itself had said in its previous
10 reports that some weight should be given to these -- to
11 these other considerations.

12 As soon as I say some weight you
13 automatically jump to the conclusion, well, what weight.
14 And maybe I should have stopped talking at that point in
15 time. But I guess my view was probably more weight
16 should be given to the embedded Cost of Service than to
17 the other considerations.

18 MR. BOB PETERS: All right, I'll take
19 that. Thank you, Mr. Harper. Mr. Dunsky, you indicated
20 in your opening comments to Mr. Williams that one (1) of
21 your clients I understood to be the Quebec Energy
22 Efficiency Agency.

23 Is that correct?

24 MR. PHILIPPE DUNSKY: Yes, it is.

25 MR. BOB PETERS: Is that a government

1 agency, sir?

2 MR. PHILIPPE DUNSKY: Yes, it is.

3 MR. BOB PETERS: Is it under the auspices
4 of the same government department responsible for the
5 Hydro utility?

6 MR. PHILIPPE DUNSKY: Yes, it is. I'm
7 sorry, I -- you can imagine jurisdictional issues and
8 debates.

9 MR. BOB PETERS: I can, and you -- you
10 went ahead of me on that. Can you tell this Board, is
11 that funded by the utility or through general revenues of
12 the province?

13 MR. PHILIPPE DUNSKY: Sorry, "that" being
14 the agency itself or...?

15 MR. BOB PETERS: I'm sorry, is the Quebec
16 Energy Efficiency Agency funded through any direct
17 proceeds from the utility or is it by the general
18 revenues of the province?

19 MR. PHILIPPE DUNSKY: That's a good
20 question. Up until recently it was -- its operating
21 costs were funded by general revenue by the province.
22 Whereas, yet some of its programs were funded directly by
23 the utilities. This -- this has recently changed and the
24 bulk of -- the bulk of their, excuse me, of their funding
25 now is -- is paid for by the utilities.

1 MR. BOB PETERS: That's both operating
2 and program?

3 MR. PHILIPPE DUNSKY: Yeah, it's a --
4 it's a funny sort of mix, and to be perfectly honest with
5 you it's -- it's in transition as well. There's still a
6 fair amount of discussion.

7 MR. BOB PETERS: All right. What --
8 what's the ballpark cost -- the operating costs of that
9 agency as you understood them?

10 MR. PHILIPPE DUNSKY: Boy, I could tell
11 you a year ago.

12 MR. BOB PETERS: I'll take that. At
13 least we know it was large enough to pay your bills, but
14 what would be the ballpark -- ballpark figure a year ago?

15 MR. PHILIPPE DUNSKY: A year ago I think
16 it was -- is somewhere in the range of a million.

17 MR. BOB PETERS: And then the program
18 costs were contained in the -- were proposed through the
19 -- the utility, and the cost to fund them largely came
20 from the utility?

21 MR. PHILIPPE DUNSKY: Yeah, exactly and
22 -- and so the programs were funded by the -- the electric
23 and gas utilities and even within there, to be perfectly
24 honest with you, there was some heated discussion and
25 there was a part of the gas -- of one (1) of the gas

1 utilities that paid into it and a part that didn't.

2 Certainly if you're looking for model for
3 clarity, that's maybe not the one (1). Today it's --
4 it's very different. Just to give you the -- the big
5 picture. The budget actually hasn't been released yet,
6 the new budget. And I think we'll see that probably by
7 August or September, but we're looking at a budget that's
8 going to be significantly greater, many fold greater than
9 what it's been up until recently.

10 MR. BOB PETERS: Program budget or
11 operating budget?

12 MR. PHILIPPE DUNSKY: Both.

13 MR. BOB PETERS: Are you familiar with a
14 -- with a similar type organization in New Brunswick?

15 MR. PHILIPPE DUNSKY: Yes, Efficiency New
16 Brunswick, yes.

17 MR. BOB PETERS: Another client?

18 MR. PHILIPPE DUNSKY: Yes, a former
19 client, hopefully a future one as well.

20 MR. BOB PETERS: And their structure, was
21 it similar -- it was a government agency similar to the
22 Quebec Energy Efficiency Agency?

23 MR. PHILIPPE DUNSKY: Yes, in many ways
24 very similar.

25 MR. BOB PETERS: And what was the size of

1 its operating budget?

2 MR. PHILIPPE DUNSKY: I could not tell
3 you.

4 MR. BOB PETERS: And its program budget
5 you wouldn't know either?

6 MR. PHILIPPE DUNSKY: I wouldn't know
7 either, to be honest with you. I -- I gave a few days of
8 training to their staff on energy efficiency program
9 design but -- but I was not involved in looking at their
10 budgets.

11 MR. BYRON WILLIAMS: Mr. Peters, if it's
12 of considerable interest we could at least do -- do a bit
13 of exploration about it if it's of interest to you.

14 MR. BOB PETERS: I -- I think it may be
15 of interest just because it's emerging on the Canadian
16 marketplace and it may be of -- of interest to the Board,
17 so I will ask it ask it as a soft undertaking then, Mr.
18 Williams, to use your best efforts to provide that
19 information through to the Board if you would.

20 MR. BYRON WILLIAMS: Soft undertaking...

21

22 --- UNDERTAKING NO. 95: Coalition to provide Board
23 with details on Efficiency
24 New Brunswick

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Mr. -- Mr. Dunsky, you
3 understand Manitoba Hydro uses the TRC test as the
4 primary test --

5 MR. PHILIPPE DUNSKY: Yes, I do.

6 MR. BOB PETERS: -- for their -- and they
7 also then use the RIM test as an overall or secondary
8 test for the program?

9 MR. PHILIPPE DUNSKY: To be perfectly
10 honest with you, that -- the role of the RIM test in
11 Manitoba Hydro is not clear to me.

12 MR. BOB PETERS: All right. If a -- if
13 the RIM test was used against a series of initiatives
14 such that collectively the series of initiatives had to
15 pass the RIM test, and if Manitoba Hydro did that, that
16 wouldn't surprise you?

17 MR. PHILIPPE DUNSKY: If that's what they
18 do, I mean, I would neither be, you know, surprised nor -
19 - nor expect it. It certainly would -- it would -- I
20 would have cause for concern if that were the case.

21 MR. BOB PETERS: Because some tests may
22 not on their own pass the test but they're being put in a
23 basket of others that have passed it by a lot?

24 MR. PHILIPPE DUNSKY: If -- if you're
25 doing that -- and I understand the basket approach that -

1 - that you're speaking of -- you are still going to be
2 rejecting a very large basket of opportunities that would
3 otherwise be cost-effective.

4 MR. BOB PETERS: At least cost-effective
5 in the eyes of the consumer --

6 MR. PHILIPPE DUNSKY: Well --

7 MR. BOB PETERS: -- when we have non-
8 energy benefits attached to the -- to the steps taken.

9 MR. PHILIPPE DUNSKY: Yeah, I mean
10 certainly cost-effective from the TRC perspective, which
11 is the -- the total perspective.

12 MR. BOB PETERS: Could you just put on
13 the record the societal test that you referenced earlier
14 in your evidence --

15 MR. PHILIPPE DUNSKY: Mm-hm.

16 MR. BOB PETERS: -- with your definition
17 of it?

18 MR. PHILIPPE DUNSKY: Well, the societal
19 is -- is, in a nutshell, is very much like the TRC test
20 but it's expanded really at three (3) levels. One is --
21 the primary level is that it tries to account for non-
22 energy benefits to varying degrees.

23 Historically it was focussed largely on
24 environmental benefits or environmental externalities,
25 trying to internalize those in the test. And

1 increasingly regions that are using a societal test are
2 trying to account for a wider range of NEBs or non-energy
3 benefits. So that's -- that's one (1) aspect of the
4 change.

5 A second aspect, somewhat more -- somewhat
6 less important but still there, is it adopts a societal
7 discount rate as opposed to the utility weighed average
8 cost of capital as the discount rate to apply to -- to
9 future savings and the value of future savings and costs.

10 And -- and the third is it treats taxes
11 differently when it's looking at the cost component of --
12 of measures and programs.

13 MR. BOB PETERS: And can you provide a
14 similar synopsis of the utility cost test that you
15 referenced earlier?

16 MR. PHILIPPE DUNSKY: Okay, that one's a
17 lot simpler. Utility cost test is very simply the money
18 that the utility puts into the program as compared to the
19 value of the energy savings to the utility.

20 MR. BOB PETERS: Put another way, if --
21 if the residential customer's rates in Manitoba are
22 approximately six (6) cents a kilowatt hour, Manitoba
23 Hydro shouldn't be spending more than six (6) cents a
24 kilowatt hour to provide a DSM measure?

25 MR. PHILIPPE DUNSKY: I wouldn't say

1 that. One of the important distinguishing pieces between
2 the TRC and as well as the utility cost test and the RIM
3 is that the latter two (2), including the utility cost
4 test, are focussed on avoided costs, not rates.

5 And sometimes I know that here it seems
6 avoided costs are a fair bit lower than they are
7 elsewhere and I'm not sure what the reasons for that are,
8 but assuming that's the case then maybe that's a little
9 more academic. But typically, there's a pretty large
10 difference there and -- and that matters.

11

12 (BRIEF PAUSE)

13

14 MR. BOB PETERS: What -- you mentioned in
15 the societal test the societal discount rate or -- can --
16 how different is that from the utilities discount rate?

17 MR. PHILIPPE DUNSKY: Well, it -- you
18 know, different regions look at that differently. A sort
19 of typical societal discount rate that's been applied
20 elsewhere is something in the range of 3 percent. So you
21 can compare that with Manitoba Hydro's cost of capital.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: I want to turn to the --

1 the two (2) measures for which you gave Manitoba Hydro
2 failing grades, and that was the fridge. It was an
3 incomplete. They didn't even have it on their roster and
4 you think that's an error by omission, correct?

5 MR. PHILIPPE DUNSKY: Yes.

6 MR. BOB PETERS: Is it a fridge
7 replacement program or is it a fridge retirement program?

8 MR. PHILIPPE DUNSKY: It's a fridge
9 replacement program when we're talking about low income
10 -- low income energy efficiency programs. When we're
11 talking about the broader population, I would certainly
12 encourage very serious consideration of a fridge retire
13 program, but that was not the purpose of my evidence.

14 MR. BOB PETERS: All right. It was the
15 fridge replacement in the terms of a low income setting
16 that you were looking at?

17 MR. PHILIPPE DUNSKY: That's right.

18 MR. BOB PETERS: If you take one (1)
19 fridge out, you gotta bring one (1) new fridge in.

20 MR. PHILIPPE DUNSKY: You would hope so.

21 MR. BOB PETERS: Who pays for the fridge?

22 MR. PHILIPPE DUNSKY: Manitoba Hydro.

23 MR. BOB PETERS: And what is the useful
24 life of a refrigerator?

25 MR. PHILIPPE DUNSKY: What did we use?

1 MR. ROBERT MAYER: Judging from my beer
2 fridge, about thirty (30) years.

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: We won't -- we won't
6 swear in that witness but -- well -- did you use in your
7 test -- is it ten (10) year, fifteen (15) years?

8 MR. PHILIPPE DUNSKY: It's closer to ten
9 (10). I'm just saying because I know I actually wrote
10 that in here. Oh, it seems I didn't. Well, it's --
11 it's, I mean, typically it's somewhere in the range of --
12 of ten (10) or twelve (12) years, I believe it is.

13 MR. BOB PETERS: All right. Let --

14 MR. PHILIPPE DUNSKY: And I can double-
15 check on that.

16 MR. BOB PETERS: No, that's fine. But
17 let's just use ten (10) years because others know that I
18 struggle with math.

19 In your evidence and in your oral -- in
20 your written evidence and your oral evidence, I detect a
21 little bit of a difference on this, maybe not significant
22 but if we assume -- if we assume useful life of a
23 refrigerator is ten (10) years and Manitoba Hydro buys
24 this -- the -- what would be the cost of the -- the
25 average cost of this new refrigerator that would be in

1 your programs?

2 MR. PHILIPPE DUNSKY: And, sorry, just --
3 while you were asking the question, I did check and it's,
4 in fact, twelve (12) years that was used. So the -- the
5 assumed costs of purchasing and installing the
6 refrigerator.

7 Is that the question?

8 MR. BOB PETERS: Yes, please.

9 MR. PHILIPPE DUNSKY: We put it at eight
10 hundred dollars (\$800) for the total costs. That's where
11 I'm being rather conservative, I'll say, because often
12 other programs have found that they've been able to do it
13 more in the range of six hundred/six hundred and fifty
14 dollars (\$600/\$650), all things included.

15 MR. BOB PETERS: You expect to save 1,000
16 kilowatt hours in Manitoba by -- by doing this fridge
17 replacement?

18 MR. PHILIPPE DUNSKY: Yeah, a hair under
19 that when -- when I adjust for a number of factors
20 including interactive effects and a little bit of free
21 ridership, I come down to 927 kilowatts.

22 MR. BOB PETERS: Let's round it to a
23 thousand (1,000). Lawyers do that.

24 MR. PHILIPPE DUNSKY: Economists don't.

25 MR. BOB PETERS: 1,000 kilowatt hours a

1 year at six (6) cents a kilowatt hour. There's a savings
2 there of -- of sixty dollars (\$60) a year that you've
3 identified?

4 MR. PHILIPPE DUNSKY: At six (6) cents a
5 kilowatt hour, sure.

6 MR. BOB PETERS: And, five dollars (\$5) a
7 month to put it into the monthly perspective?

8 MR. PHILIPPE DUNSKY: Sure.

9 MR. BOB PETERS: And if it was sixty
10 dollars (\$60) a year and this fridge lasted for ten (10)
11 years, the payback to Manitoba Hydro is they would save
12 six hundred dollars (\$600) for having put in an eight
13 hundred (\$800) dollar fridge?

14 MR. PHILIPPE DUNSKY: Right. Well, and
15 assuming a twelve (12) year life, it's more like seven
16 hundred and twenty (720) but --

17 MR. BOB PETERS: Now you want some of
18 those adjustments your way.

19 MR. PHILIPPE DUNSKY: All right. Fair
20 enough.

21 MR. BOB PETERS: You know where I'm
22 going. My point is -- at what point is it not economical
23 from even that level, for Manitoba Hydro to do it and I
24 won't say because our rates are lower than other
25 jurisdictions you may be familiar with but because of the

1 low embedded rates currently used.

2 MR. PHILIPPE DUNSKY: Yeah. Well, okay,
3 so a couple of things here. The first is just again to -
4 - to clarify. We always use avoided costs, not rates, as
5 the -- as the benefit side so I wouldn't use that six (6)
6 cents, but I would use the avoided costs, maybe the -- is
7 that it, sir, I'm --

8 MR. WILLIAM HARPER: I think, you know,
9 residential avoided costs are somewhere high -- seven (7)
10 up range, you know, seven point seventeen (7.17) I think
11 I saw. Seven point seven (7.7), something in that order.

12 MR. PHILIPPE DUNSKY: Okay. So we'd use
13 something like seven (7) cents and so if we're using the
14 seven (7) cents and, you know, we're coming out I guess
15 somewhere close. I think the -- the important thing here
16 really is the aspect of non-energy benefits; because they
17 exist, we have not calculated them yet for Manitoba
18 Hydro.

19 I think it's extremely important to do so
20 for low income programs because any energy that you save
21 in a low income program does generate these non-energy
22 benefits which are why our low income programs don't
23 screen everywhere. I mean I can't point to a single low
24 income program anywhere that actually passes, you know, a
25 standard cost-effectiveness test, and that's because

1 implicitly, we account for these non-energy benefits.

2 So, yeah, I mean the -- the -- and I see
3 -- I see where you're going with the question, you know,
4 and the answer is implicitly if you're assuming some
5 level, even some minor, very conservative level of non-
6 energy benefits compared to what the studies say --
7 suggest it is which is far more, then you start, you
8 know, looking at something that's a lot more interesting.

9 The other piece of it though comes back
10 to the point of comprehensiveness that was in my -- my
11 presentation this morning.

12 There is a tremendous cost just to getting
13 into the home and getting participants involved. And
14 once you do that, if you have a measure that's borderline
15 cost-effective, I'll be honest with you even if it's just
16 barely on the other side of it, I think you want to get
17 at that because otherwise you've lost that opportunity
18 for ten (10) years.

19 And when you go back to get it again,
20 you're going to have a whole series of upfront costs that
21 are going to make it less cost-effective. And you'll
22 regret not having gotten that fridge when you were in
23 there in the first place.

24 MR. BOB PETERS: Maybe in a lighter vein
25 -- the knock on the door. When it's answered by the low

1 income homeowner and it's Mr. Warden there saying, Hi,
2 I'm here from Manitoba Hydro and I have a new
3 refrigerator for you, will you let me in and -- and that
4 would be your way to get in the door?

5 MR. PHILIPPE DUNSKY: To get in.

6 MR. BOB PETERS: That's what -- that's
7 the -- that's the upshot of what you're suggesting is
8 when you're comprehensive, if you can offer them a new
9 fridge, you're more likely to get in and be able to do
10 the other parts of it?

11 MR. PHILIPPE DUNSKY: Well, and it's --
12 it's two (2) sides of the same coin. I mean certainly
13 that helps you get in and the other side of it is once
14 you're in, if you don't get that measure, that measure's
15 going to cost you more later on to get, and you'll have
16 lost it otherwise.

17 MR. BOB PETERS: Let's turn to the
18 furnace replacement program or the furnace program.

19 MR. PHILIPPE DUNSKY: Sure.

20 MR. BOB PETERS: Your main criticism on
21 this one is that it's not free?

22 MR. PHILIPPE DUNSKY: No.

23 MR. BOB PETERS: And rather than -- while
24 -- while free would be good, you also recognize that
25 there may be a -- an economic restriction on -- on giving

1 away furnaces?

2 MR. PHILIPPE DUNSKY: Yeah, I mean let me
3 just go back to the initial point because my main
4 criticism is not that it's not free. I just want to be
5 really clear about that, and if I'm not -- not
6 recommending that it be free, I certainly wouldn't
7 criticize them for not making it free.

8 No, the main criticism is that -- that
9 it's simply not going to generate early replacement
10 opportunities because it doesn't address these -- the
11 very acute barriers that low income customers face.

12 MR. BOB PETERS: Well, and that barrier
13 is that if a furnace is working in a low -- in a person's
14 home, a person with low income's home, they're not likely
15 going to want to rip out a perfectly -- what they see as
16 a perfectly good furnace and -- and -- unless it's for
17 free and put in a new one?

18 MR. PHILIPPE DUNSKY: Yeah, except for
19 the "unless it's for free part," because again I mean if
20 they're paying -- if they're paying the bills, and we're
21 talking about moving from a 60 percent efficient furnace
22 to a 92 percent efficient furnace, there's significant
23 benefits there. The problem is of course that one (1) of
24 the key barriers that they have is -- is very low or zero
25 access to capital.

1 MR. BOB PETERS: I didn't think I was far
2 off the mark with the word "free" but you're saying make
3 the capital available to them but at a much reduced
4 interest rate from what Manitoba Hydro presently has --

5 MR. PHILIPPE DUNSKY: Yes.

6 MR. BOB PETERS: -- in their proposal?

7 MR. PHILIPPE DUNSKY: Indeed.

8 MR. BOB PETERS: You won't go so far as
9 to say make it free because why -- why shouldn't it be
10 free like the refrigerator?

11 MR. PHILIPPE DUNSKY: Well, frankly I
12 think there's going to be a lot more free ridership in a
13 furnace program than there is in a -- in a fridge
14 replacement program and that's something that you can't -
15 - you can't really control for the way you can for a
16 fridge program. A fridge program you can go in, you can
17 meter the thing, and -- and you can identify whether that
18 fridge is worth -- is worth replacing and oftentimes that
19 fridge, a beer fridge, is going to be there for a long
20 time still a -- furnace people need to replace and -- and
21 so in many cases you're going to have a higher free
22 ridership rate for that particular measure.

23 There's frankly a second piece to it which
24 is optics and, you know, you don't want to -- this is
25 leaving the analytical perspective a bit, but you do not

1 want to -- you don't want to do something in a program
2 that is going to create such bad press or optics that it
3 destroys your program.

4 Now, low income programs are already
5 difficult on that level because they're essentially
6 offering everything for free. And, you know, that's what
7 Manitoba Hydro is proposing, you know, albeit in a
8 stepped process, but they're proposing that basically all
9 the measures, with the exception of furnace, cost nothing
10 to the homeowner, and that's a good thing. But there is
11 a -- there is a perception that needs to be managed.

12 And the experience that I've seen is that
13 frankly fridges will tend to fly under the radar much
14 more easily than a furnace will.

15 MR. BOB PETERS: Got your point. In
16 terms of your three (3) recommendations, you -- you've
17 spoken about the turn-key operations, and I think your
18 points were clear. In terms of using a community-based
19 organization to deliver them, you've made it clear that
20 that's, from your perspective, much more preferable than
21 even allowing the individual to do it because individuals
22 generally don't do these things?

23 MR. PHILIPPE DUNSKY: Yes. It's
24 certainly more -- it's certainly more preferable than
25 just leaving it up to the individual. You need -- you

1 need someone taking ownership of this. I -- I wouldn't
2 say that it's necessarily preferable than let's say a
3 private contractor or Manitoba Hydro taking it on.
4 That's another question.

5 MR. BOB PETERS: Okay. Well, my next
6 question is, have you seen in other jurisdictions where
7 the Utility will go out for proposals for community-based
8 organizations to take on this project in a certain
9 geographic region?

10 MR. PHILIPPE DUNSKY: Absolutely.

11 MR. BOB PETERS: And the Utility screens
12 them and selects one CBO to say you will handle -- you
13 will handle the low income programs in this geographic
14 region?

15 MR. PHILIPPE DUNSKY: Well, yes, but let
16 me just put a caveat on that. In reality what ends up
17 happening often times is -- and especially -- especially
18 in the US, you have organizations that -- that deliver
19 similar services already and there's not a duplication,
20 there's not a competition, in other words, per territory.

21 So the Utility isn't actually going out
22 and let's say putting out a call for tenders among
23 community-based organizations. They're pretty much
24 taking the -- the organizations that exist, as is.

25 MR. BOB PETERS: All right. I think

1 that's a -- a good point. What about the situation where
2 the Utility goes out with proposals looking for
3 contractors to do the installation to take away one (1)
4 of the barriers that you mentioned where contractors
5 don't usually like to get involved in low income
6 installation.

7 MR. PHILIPPE DUNSKY: Mm-hm.

8 MR. BOB PETERS: Have you, in other
9 jurisdictions, seen the Utility go out and find
10 contractors?

11 MR. PHILIPPE DUNSKY: Yes, absolutely.

12 MR. BOB PETERS: And it's a condition of
13 the CBO that they use the contractor engaged by the
14 Utility?

15 MR. PHILIPPE DUNSKY: Well, you know, I
16 mean, there are different things, and maybe I can just
17 clarify the different options that are available to us.
18 You know, one (1) is going through the CBO. One (1) is
19 Manitoba Hydro doing things themselves.

20 The third is a private contractor managing
21 the program, and the private contractor going out and
22 finding contractors, you know, installation contractors
23 and whatnot to actually do the work.

24 And that's a model that's worked very well
25 in -- in a number of places. So I wouldn't want to -- I

1 wouldn't want to neglect that -- that option as well.

2 MR. BOB PETERS: Can you tell the Board
3 whether it has been more effective to go either to the --
4 the CBO through the contractor engaged by the utility or
5 the -- alternatively, I guess, the private contractor
6 managing the program that you just mentioned versus the
7 utility doing it themselves?

8 MR. PHILIPPE DUNSKY: You know, I have to
9 be honest with you, I can't. And -- and the reason I
10 can't is that I don't think that there is an answer to
11 that, for -- for the -- for the following reason.
12 There's some utilities that do this very well, and
13 there's some utilities that, you know, really are not in
14 a good place to do this because -- because of their -- of
15 their own cost structures or their hiring freezes or
16 whatnot.

17 There's some CBOs that do this really
18 well, and there's some CBOs that are really not going to
19 be able to do this well despite their best intentions.
20 So it really does depend on the specifics, and -- and
21 that's why I'm -- I know I've shied away from making a
22 clear recommendation on this.

23 And I've done that very deliberately
24 because the only recommendation I can make is that
25 Manitoba Hydro and/or the Board take a really, you know,

1 clear, cold, hard look at these different options
2 understanding the -- the pitfalls and dangers that befall
3 them.

4 MR. BOB PETERS: Mr. Dunsky, on that
5 note, I'd like to thank you for your answers to my
6 questions. And, Mr. Chairman, Board Members, that does
7 conclude my questions of the Coalitions panel, Mr. Dunsky
8 and Mr. Harper. I thank them for their answers.

9 THE CHAIRPERSON: Thank you, Mr. Peters.
10 Mr. Williams, do you have any redirect?

11 MR. BYRON WILLIAMS: I don't think so.
12 I'll just, if you'll give me a second.

13

14 (BRIEF PAUSE)

15

16 MR. BYRON WILLIAMS: No questions, Mr.
17 Chair.

18 THE CHAIRPERSON: Thank you, Mr.
19 Williams. Thank you, Mr. Dunsky, Mr. Harper, appreciate
20 your testimony and coming to Manitoba.

21

22 (WITNESSES STAND DOWN)

23

24 CLOSING COMMENTS:

25 THE CHAIRPERSON: Ladies and gentleman,

1 reflecting on seventeen (17) days of sitting through this
2 GRA proceeding; nine (9) days in March, six (6) days in
3 April, and two (2) so far in May. The Board wants to
4 thank Manitoba Hydro, RCM/TREE, MIPUG, MKO, and the City
5 of Winnipeg, and the Coalition for the evidence that has
6 been filed and attested in this general rate application.

7 In addition to the parties filing
8 evidence, the Board also appreciates the efforts of the
9 other parties testing the evidence through information
10 requests and cross-examination. The Board appreciates
11 the evidence and the testimony, and acknowledges the
12 considerable effort to prepare and deliver it.

13 The Board thanks the respective counsels
14 and advisors, all witnesses, and those who have supported
15 the process and the witnesses in relative anonymity.

16 While the evidentiary portion of this
17 hearing is now concluded, there are still two (2)
18 important phases remaining. The next phase is closing
19 submission to be followed by the Board's deliberations
20 and decisions. Parties have an opportunity to
21 participate directly in closing submissions. Intervenors
22 are to be heard on Wednesday, May the 21st, and Manitoba
23 Hydro is to be heard Friday, May 23rd.

24 If parties will be submitting written
25 closing comments, those written comments should be filed

1 with the Board by the close of business the day before
2 that party would otherwise have given oral closing
3 submissions.

4 If a party wishes to rest its case with
5 closing comments instead of making oral submissions,
6 please advise Mr. Peters. And also, of course, all
7 parties are welcome to provide any written material in
8 support of their oral submissions. And an outline of
9 your closing submission would be of assistance to the
10 Board.

11 Likewise, we have received a number of
12 books of documents assembled by various counsel. And if
13 it assists in parties closing submissions, you are
14 certainly at liberty to make reference to the content of
15 those books of documents.

16 And while the Board does not require any
17 party to assemble further books of documents, that option
18 is available to you should you believe it would assist in
19 making your points to the Board in your closing
20 submissions. The Board is keenly aware that the evidence
21 goes beyond those extracts in the books of document.

22 While parties have time to prepare their
23 closing submissions, the Board will use the next two and
24 a half (2 1/2) weeks to review the evidence, and the
25 approximate seventeen (17) volumes of transcripts, and

1 over one hundred (100) exhibits.

2 In terms of issues that the parties
3 address in their closing submissions, the parties will
4 make those decisions without canvassing the panel at
5 length and without restricting the generality of the
6 Board's interest in this application, which is
7 significant. The Board may benefit from the considered
8 views of parties on a number of particular issues. These
9 I list now in no particular order:

10 1. Is the 2.25 percent interim increase
11 provided March the 1st, 2007 warranted?

12 2. Should it be finalized?

13 3. Your views on the merit and timing of
14 the proposed 2.9 percent increase across all rate classes
15 excepting area and roadway lighting for which a 1 percent
16 increase is proposed by Hydro.

17 4. The weight and/or consideration to be
18 given to the approach of IFRS. Mr. Warden has suggested
19 that the implementation of these new accounting
20 standards, in or before physical 2011/'12, may reduce IFF
21 '07-1 annual net income forecasts by as much as 120
22 million a year if we understood the testimony correctly.

23 How is this Board to view this prospect?

24 What are the implications for rates and
25 what are the implications for Hydro's financial targets?

1 5. Is Hydro's expectation that IFRS will
2 be implemented with prospective effects and no
3 retroactive restatements reasonable?

4 6. Is there any views on the possible
5 employment and/or validity of separate regulatory
6 accounting with reconciliation to audited accounts?

7 7. How does Manitoba Hydro's premise that
8 new and expanded load from industry affects all --
9 affects the rates of all customer classes to their
10 detriment, meet with the parties' perspectives? Do you
11 agree? Justifiable? To what degree acceptable?

12 8. In terms of Manitoba Hydro's proposed
13 energy intensive industry rate, above baseline and not
14 subject to exemption, the Board understands that Hydro
15 will not be asking the Board for any approvals flowing
16 from this GRA.

17 Rather, the Board understands Manitoba
18 Hydro will only be asking the Board to prove in principal
19 the date of December 31st, 2007, as the end date for
20 determining any baseline levels that may be operative in
21 any future intensive energy industry rate.

22 While there will be a further process,
23 presumably this year, your comments on necessity options
24 and process to address the matter are requested.

25 9. In past orders, the Board has

1 expressed concern with respect to Hydro's business risk
2 and required Hydro to file detailed analysis, quantifying
3 the risk by item; a request that, though met in part, has
4 not been fully met.

5 Would not consideration of a change to the
6 present reliance on the debt/equity ratio is a test to
7 financial soundness and the levels of equity within that
8 ratio depend on a full understanding and quantification
9 of risks.

10 10. Do the parties accept the
11 recommendation of the MIPUG witnesses as a concept that a
12 dedicated reserve model should be developed to replace
13 the current reliance and retained earnings and a target
14 debt/equity ratio?

15 11. Should capital expenditures play any
16 role in rate setting in an environment when the
17 shareholder is not expected to invest capital to allow
18 for major capital expenditures and the utility's current
19 reserve balance is below the target?

20 12. What is the comfort level with
21 Hydro's load forecast, given the direction and present
22 position of natural gas prices and in recent
23 juxtaposition of the annual space-heating costs of
24 electricity and natural gas?

25 13. What values or what views are held as

1 to the expenditures of utility revenues for charitable
2 community support and/or economic development purposes?

3 14. As a suitable COSS embedded cost
4 model been arrived at with Hydro's recent proposed
5 changes?

6 15. The utilization of the COSS model
7 arising out of Order 117/'06 and whether to incorporate
8 express consideration of marginal and environmental costs
9 in setting rates.

10 16. For the purpose of differentiating
11 rates, views on the weight given -- to be given to
12 embedded costs as opposed to marginal costs.

13 17. Inverted rates. What are the views
14 with respect to Manitoba Hydro's proposal for 2008/'09?
15 Noted by the utility as a starting point and if in
16 agreement with the concept, what would be the next steps
17 in a subsequent GRA?

18 18. Basic monthly charges. Should they
19 remain frozen when the cost of providing service
20 continues to increase? Some here may be aware that the
21 natural gas basic monthly charges were increased after
22 seventeen (17) years of no change through the last Centra
23 GRA.

24 18. (sic) Do the parties accept an
25 interpretation of the Board's determination of the public

1 interests broad enough to take into account that the
2 utility's sole shareholder is a province and that the
3 shareholder's accounts are affected by the utility?

4 20. Lacking the ability to approve
5 capital -- major capital expenditures or direct specific
6 action with respect to operating actions is not the Board
7 left with assuring rates adequate to allow future
8 identified direction to be adequately funded and to
9 making comments as to any concerns?

10 21. Views with respect to Hydro's efforts
11 to restrain OM&A costs and also with respect to capital
12 expenditure transit levels.

13 22. Views with respect to the utility of
14 benchmarking against other utilities accepting
15 jurisdictional, circumstantial and corporate differences.

16 23. If the Government's direction is that
17 the Brandon coal plant is to be reduced to emergency running
18 only, ahead of 2019, should the Utility's estimate of an
19 annual negative impact of, I think it was \$10 to \$20 million
20 of net income, be reflected in current rate considerations?

21 24. Should any tracking of the anticipated
22 operating savings to offset the extra costs associated with
23 the new head office be instituted? And if so, how?

24 25. The Board asked Hydro to provide a two
25 (2) year GRA while the Utility has applied for only one (1)

1 forward year. Should the Board give consideration to
2 provide guidance or direction for a second future year?

3 26. Keeping in mind the Boards more limited
4 jurisdiction compared to the situation with Centra Gas,
5 views with respect to or related to the Utility's approach
6 or possible approach to low income customers, should that
7 approach be revenue neutral to non-low income customers?

8 27. Energy efficiency measures: How
9 important and at what cost?

10 28. Views as to the degree of responsibility
11 Hydro bears with respect to advising customers as to the
12 selection of energy sources for space and water heating.

13 29. Comments, if any, with respect to the
14 revised Wuskwatim plans and forecasts. I'll never pronounce
15 that word right if I do it a hundred (100) times.

16 30. The degree of comfort with the Board's
17 Centra Gas Order that directed that any incremental cost
18 that may end up being associated with new head office
19 resting solely with the electricity account.

20 And 31. Anything that the parties may wish
21 to specifically address that have not been mentioned.

22 Mr. Peters, please ensure that Mr. Anderson
23 and Mr. Buhr are aware of these comments.

24 So with that we stand adjourned until May
25 21st. We look forward to receiving your closing statements

1 and final argument. Thank you.

2

3 --- Upon adjourning at 4:20 p.m.

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5 Certified correct,

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10 Cheryl Lavigne

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