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MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO'S APPLICATION
FOR APPROVAL OF NEW ELECTRICITY RATES
FOR 2010/11 AND 2011/12

Before Board Panel:

Graham Lane - Board Chairman
Robert Mayer, Q.C. - Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
April 7, 2011
Pages 5333 to 5514

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EXHIBITS

No.	Description	Page No.
CAC/MSOS-24	Ten (10) Year History of Water Rentals	5338
MH-111	Response to Undertaking 99	5513

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UNDERTAKINGS

No.	Description	Page No.
122	Manitoba Hydro to provide the directive from Manitoba Hydro-Electric President, as to what was expected of management to do in arriving at budget and cost-cutting measures	5484

1 --- Upon commencing at 9:39 a.m.

2

3 THE CHAIRPERSON: Okay. If we could get
4 going, again the time is a-fleeting, but you've lost your
5 panel, Mr. Williams. We'll wait a minute.

6 MR. BYRON WILLIAMS: Mr. Chairman, I
7 don't think I'll be doing any prejudice to the panel to -
8 - just to let the Public Utilities Board know that the
9 documents I'm -- I'll be referring to this morning are
10 Hydro Exhibit 55, which is the PowerPoint by ICF. So
11 that's Hydro Exhibit 55.

12 Secondly, the Hydro rebuttal evidence.
13 That might be Exhibit 12. I -- I can't re -- recall.
14 And thirdly, the reports of Drs. Kubursi and Magee. And
15 finally, there's an ex -- exhibit that -- that Mr. Singh
16 may have distributed already. And just while we're
17 waiting for the rest of the Hydro panel to return, if
18 that could be marked as CAC/MSOS number 24.

19 THE CHAIRPERSON: It's entitled, "Ten
20 (10) Year History of Water Rentals," and title says,
21 "Manitoba Hydro 2010/'11, 2011/'12 GRA."

22 MR. BYRON WILLIAMS: That's right. Thank
23 you.

24

25 --- EXHIBIT NO. CAC/MSOS-24:

1 Ten (10) Year History of Water Rentals

2

3 MANITOBA HYDRO PANEL:

4 VINCE WARDEN, Resumed

5 DAVID CORMIE, Resumed

6 HAROLD SURMINSKI, Resumed

7

8 CONTINUED CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

9 MR. BYRON WILLIAMS: Yes, thank you, and
10 welcome back, Mr. Cormie, Mr. Surminski, and Mr. Warden.
11 And good morning, panel members.

12 Mr. Chairman, and Mr. Vice-Chair, and to
13 the Hydro panel, there's two (2) primary areas that I
14 wish to canvass with them today. The first relates to
15 risk management and risk mitigation, particularly in the
16 con -- context of drought, and the second one (1) relates
17 to risk quantification, again as it relates to -- to
18 drought.

19 And, Mr. Cormie, just to save a bit of
20 time, if you have Manitoba Hydro Exhibit 55, which is the
21 paper copy of Mr. Rose's direct testimony of February
22 22nd, you might want to turn to page 59.

23 MR. DAVID CORMIE: Yes, I have that, Mr.
24 Williams.

25 MR. BYRON WILLIAMS: And we'll just wait

1 until others in the room gather it.

2

3 (BRIEF PAUSE)

4

5 MR. BYRON WILLIAMS: And, Mr. Cormie,
6 you'll recall that, it probably seems like a long, long
7 time ago now, you were cross-examined at length by my
8 very capable Friend, Mr. Peters, on subjects such as the
9 '03/'04 drought, existing export contracts, and potential
10 export contracts and term sheets. Would that be correct,
11 sir?

12 MR. DAVID CORMIE: Yes.

13 MR. BYRON WILLIAMS: And I don't know if
14 you requa -- recall the specific question, but you would
15 not disagree that at one (1) point in time, and I'm
16 paraphrasing, Mr. Peters asked the Corporation, again
17 paraphrasing, what, if anything -- what, if any, lessons
18 were drawn from the '03/'04 drought.

19 You wouldn't disagree with that
20 suggestion, sir?

21 MR. DAVID CORMIE: Yes.

22 MR. BYRON WILLIAMS: And certainly I
23 think that was a pretty good question, but I'd -- I'd
24 like to think that I can improve upon it just a little
25 bit. And...

1 MR. DAVID CORMIE: I always like
2 polishing up my answers.

3 MR. BYRON WILLIAMS: So I'll refer you to
4 the ICF table. And, first of all, without asking you to
5 elaborate on the table initially, I'll suggest to you
6 that what it does is take a look at how, if at all,
7 Manitoba Hydro's capability to respond to a drought has
8 changed since '03/'04. Would that be fair, sir?

9 MR. DAVID CORMIE: Yes.

10 MR. BYRON WILLIAMS: And what it does is
11 it outlines certain parameters which are list -- listed
12 on the left-hand side, and then essentially takes a
13 snapshot of where things were in 2003 as compared to
14 2010, correct?

15 MR. DAVID CORMIE: Yes.

16 MR. BYRON WILLIAMS: So my different and
17 only slightly improved question, as compared to Mr.
18 Peters', is how, if at all, has the capacity of Hydro to
19 respond to a drought changed since '03/'04?

20 And, Mr. -- Mr. Cormie, I want to restrict
21 your answer to this degree. I don't want you to respond
22 to all those parameters. But if you see in the middle
23 there's four (4), being annual firm export contracts,
24 markets, brokerage capability, and US firm import
25 transmission summer and winter.

1 I wonder if you can take the -- the panel
2 and those in the room through those, how, if at all, this
3 has changed and the impact that -- that these four (4)
4 parameters have had on Hydro's capability to respond to a
5 drought.

6 MR. ROBERT MAYER: Mr. Williams, which
7 document are you referring to now?

8

9 CONTINUED BY MR. BYRON WILLIAMS:

10 MR. BYRON WILLIAMS: I am still looking
11 at the -- Mr. Rose's document, page 59. And what I'm
12 directing Mr. Cormie's attention to are the four (4)
13 parameters in the middle, being export contracts, market,
14 brokerage capability, and transmission. Please proceed,
15 Mr. Cormie.

16 MR. DAVID CORMIE: Mr. Williams, we --
17 when we -- when we prepared that chart we used the red
18 and the green to do exactly what you had suggested. The
19 re -- green to show where there were significant
20 improvements compare -- in -- in -- in 2010 compared to
21 '03/'04.

22 Some of those improvements at the top are
23 having to do with water conditions. And -- and water
24 conditions, we -- can't -- we can't do anything about
25 those. It's the vagary of -- of mother nature and -- but

1 the -- but the bottom section, those seven (7) rows
2 marked in green relate to the financial implications of
3 drought.

4 The first one that I -- you asked me to
5 talk about is the annual firm contracts. Compared to
6 2003 we had 5.8 terawatt hours of firm contracts compared
7 to two point eight (2.8) of firm contracts this year.
8 Now, that looks like an improvement, but when you add it
9 to the Manitoba firm load, so in 2003 we had 22 terawatt
10 hours of firm Manitoba load and you add five point eight
11 (5.8) on the export market, our firm obligation was 27.8
12 terawatt hours.

13 So in -- although the -- the firm exports
14 went down in 2010 to two point eight (2.8), they went
15 down by three (3), you'll notice that the Manitoba load
16 went up by two point two (2.2). So the net of the two
17 (2) is about the same, right? So although the export
18 contracts went down, Manitoba load went up, we were still
19 trying to protect against essentially the same firm load.

20 So it's easier to serve the export market,
21 because you can do that financially if necessary. The
22 Manitoba load, you have to actually protect physically,
23 and we have to have the actual kilowatt hours in the
24 system somewhere. So when the Manitoba load goes up, it
25 makes it -- it makes it -- there -- it's -- it's more

1 complex to serve that load than it is an export contract
2 because in the export mar -- contract, you'd like to
3 serve it physically, but ultimately if you can't, you can
4 go to the market and settle financially. And so although
5 the -- the -- the -- the total of the two (2) is about
6 the same, it becomes more complex to serve a higher firm
7 load when physical delivery is required.

8 The next three (3) items, the market
9 brokerage capability and the transfer capability, the --
10 the market has changed from what was a bilateral market
11 in 2003 to a -- a financial market in -- in -- in 2010,
12 and that occurred in April 1st of 2005 when mi -- when
13 MISO day 2 came in. MISO day 1 was still a -- was still
14 a finan -- was a physical market. MISO was managing the
15 transmissions system, but you still had to arrange for
16 physical delivery and buy transmission service.

17 But what happened in 2005, it -- they
18 opened up a financial market, and the financial market
19 was of great benefit to Manitoba Hydro because we could
20 start managing the financial risks with market mechanisms
21 rather than having to deal with our customers directly.
22 And -- and so that -- that was a -- a -- a huge benefit
23 to -- to Manitoba Hydro.

24 All our legacy contracts, the ones that we
25 are currently in, were written at a time when we were in

1 a physical market, and so they required physical
2 delivery. Even in the case where we were allowed to
3 purchase to serve the sale, it had to be done physically.
4 So I had to go into the market and buy a megawatt hour,
5 and I had to bring it to the point of delivery on the --
6 on the contract and then actually deliver it to the
7 customer. Well, it ended up the point of delivery was
8 controlled by the customer, so the only person that you
9 could actually buy from was the person that you were
10 selling to, and so you were very constrained in how you
11 could arrange those book-outs.

12 Now, with the MISO day 2 market, we don't
13 need to buy from our customers. We can go to the market
14 as a whole. We can do that invisibly and -- and -- and -
15 - and -- and just -- and buy from out of the mar -- out
16 of the market and financially settle because we
17 renegotiated all those legacy contracts to allow for
18 financial settlement, and we don't have to arrange for
19 physical delivery at the point of delivery.

20 So now we're freed from that constraint,
21 which means that we can do financial hedging, we -- it
22 doesn't have to be physically hedged, and we can use all
23 the derivative instruments that are available in the --
24 in -- in -- in the electricity market, instruments that
25 were -- have been available for a long time in the

1 natural gas business. So the -- the -- the MISO day 2
2 market opening up gave us lots of optionality now that we
3 didn't have in 2003, and -- and -- and it has been of a
4 huge benefit for us.

5 The -- the -- the next one was brokerage
6 capability. Given that we're in a financial market now,
7 we can transact through brokers if necessary, and again,
8 brokers allow you to transact and -- and the buyer or the
9 seller in -- in -- depending on whether you're -- when
10 you're -- whether you're importing or you're exporting,
11 doesn't necessarily have to be -- doesn't -- we -- we --
12 we don't have to reveal who we are.

13 We can transact through a broker, and if
14 we want to buy, we buy through a broker, and then our
15 customers don't know, well, who's buying this power, and,
16 you know, they -- whereas when you were doing it in a
17 physical market, they knew exactly who was buying. They
18 -- they knew that Manitoba Hydro was short energy and
19 they were -- they were -- they were trying to cover their
20 positions, and they would have an advantage in any -- any
21 negotiation.

22 So having brokerage capability is -- is a
23 benefit, and allows us to transact in the market
24 anonymously. And the last item that you talk -- asked me
25 to discuss was our firm import capability. Under the

1 2003 conditions, Manitoba Hydro controlled all the
2 transmission, both north and south of the border, in
3 Manitoba, but the transmission on the US side of the
4 border is -- was controlled by our US customers.

5 So if Manitoba Hydro wanted to arrange for
6 the purchase of electricity, and -- we would have to go
7 to our --the owner -- the -- the person who controlled
8 that transmission and make an arrangement with them. And
9 given that they knew that we were buying, and that we
10 needed to buy, the price for using the transmission, you
11 -- again, you're not in a good negotiating position.

12 So since 2003, we've been able to make
13 arrangements to use for a fee, and in some cases not for
14 a fee, the -- the -- most of the transmission coming
15 north and -- and not be at the mercy of the actual person
16 who holds the transmission reservation.

17 And so over the -- the years since 2003,
18 we negotiated and bought the right to use it at -- and --
19 and, in effect, paid a fee to give us that right so that
20 when the -- when a drought would occur again, if we
21 wanted to use that transmission, we just had to exercise
22 our option. And the terms and conditions for the use of
23 the transmission had been negotiated, and -- and -- and
24 we did it at a time when it was advantageous for the
25 Company, not at a time when our backs were against the

1 wall because of -- of drought conditions.

2 So controlling the use of the import
3 transmission on the US side was a significant change for
4 us, and gave us a lot more comfort that if a drought were
5 to occur again, that -- that we wouldn't be held hostage
6 to the circumstances. Well, it's mostly controlled under
7 summer because we haven't completely been able to
8 negotiate the use of the trans -- there are some
9 companies that -- that weren't prepared to -- to settle.

10 MR. BYRON WILLIAMS: Now, Mr. Cormie,
11 you're -- thank you for that. You're -- you're fam --
12 you used the word "held hostage" and -- you're familiar --
13 - you used the word "held hostage" and you're familiar
14 with the -- the concept of the term of shortage pricing?

15 MR. DAVID CORMIE: Yeah, maybe held
16 hostage is a little bit -- nobody likes to --

17 MR. BYRON WILLIAMS: Your -- your words,
18 not mine, sir.

19 MR. DAVID CORMIE: -- nobody likes to pay
20 more than they really think they should, and the issue of
21 shortage pricing is related to that.

22 MR. BYRON WILLIAMS: And let me just stop
23 you there then. I don't mean to interrupt your -- and we
24 can recall in '03/'04, there was a fair bit of trauma, I
25 think, in the regulatory room, and -- and probably

1 financial pain for Manitoba Hydro associated with
2 shortage priceage, would -- pricing. Would that be fair?

3 MR. DAVID CORMIE: Yes, I think in our --
4 in our forecasts of drought costs, we had not, up to that
5 time, included those types of costs in -- in our -- in
6 our financial planning. For example, when you -- you
7 realize that you -- you need to use the firm transmission
8 coming north, and if you have to go and pay a fee for
9 that, and you roll that fee into the cost of the energy,
10 the energy starts looking pretty expensive.

11 And -- and we're not in that situation
12 anymore. We don't have to pay those fees. We've got --
13 we -- we can go through a drought, and buy market priced
14 energy, and not having to pay additional fees that --
15 that could be deemed to be, you know, shortage pricing.

16 But -- but there will still be higher
17 prices under some circumstances at the Manitoba Hydro
18 pricing node than -- than you would normally expect
19 because the transmission system will be -- will be
20 flowing in a manner that it -- that it normally doesn't
21 flow, and so you'll see higher -- higher prices.

22 But those -- those have to do with
23 transmission congestion costs, maybe additional losses,
24 but they won't result from the extraction of additional
25 rents by -- by -- for the use of transmission service or

1 because you have limited negotiating ability. Because we
2 can now fi -- financially settle no one needs to know and
3 -- and be able to take advantage of that when we have to
4 purchase energy, and those costs will then now be avoided
5 in -- in droughts to come.

6 MR. BYRON WILLIAMS: Okay, thank you for
7 that. And maybe just to -- to tie down that point, that
8 -- on that last answer, and I'm going -- I'm going to try
9 and break it into two (2) -- two (2) questions. One (1)
10 of the points you made is that we -- you still would
11 expect prices imported to be somewhat higher rela --
12 primarily in a drought situation, and that would be
13 related to congestion issues at that -- at the particular
14 node closest to Manitoba Hydro. Is that fair, sir?

15 MR. DAVID CORMIE: Yes. So if -- if you
16 imagine the supply and demand balance in MISO on a daily
17 basis, if Manitoba Hydro was normally exporting 2,000
18 megawatts and -- that would tend to depress prices in the
19 market and -- and the -- and the MISO market would --
20 would see a benefit of that happening. And, generally,
21 that's why they like Manitoba Hydro coming to the table
22 because we are -- we -- we lower the price in the entire
23 footprint.

24 But, conversely, when we're buying a
25 thousand megawatts, so there's now a 3,000 megawatt

1 change, prices will be slightly higher, and so there is a
2 very minor change in -- in market prices.

3 MR. ROBERT MAYER: Mr. Cor -- Mr. Cormie,
4 I thought I heard throughout this hearing that our actual
5 portion of contribution to the MISO market was almost
6 insignificant. This seems to be a bit different view of
7 Hydro's effect on that market.

8 MR. DAVID CORMIE: No, I think you're --
9 you're -- we're -- we're still saying the same thing,
10 that the -- the effect will be a slightly higher or low
11 rate, but not significant, that -- that I -- you know, a
12 thousand -- or three (3) -- three (3) -- a 3,000 megawatt
13 swing on 126,000 megawatt market is -- is not gonna --
14 but -- but you'll -- Manitoba Hydro's purchases will tend
15 to raise prices, our selling tends to lower prices, but,
16 incrementally, there -- the changes are very, very small
17 for the market as a whole.

18

19 CONTINUED BY MR. BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: The second part of
21 the -- the answer, where you -- was that given the
22 changes that have evolved, the -- the trauma associated
23 with shortage pricing, whether or not we use the word
24 "held ho -- being held hostage," is -- is much less
25 likely in the -- in the current environment?

1 MR. DAVID CORMIE: Yes. And the one (1)
2 that -- one (1) thing that actually hasn't shown up, I
3 didn't put on this table, was the effect of all the new
4 wind that's being built. The wind tends to -- well, the
5 wind depresses prices because it has low incre -- it has
6 low incremental costs.

7 So you'll have -- we will -- to the extent
8 that -- that -- that there's all this new wind energy
9 available, it'll be available in a drought and it will
10 tend to help lower prices compared to 2003, when there
11 was, you know, essentially no wind in -- in -- in
12 Manitoba Hydro's local generation area. And today
13 there's -- there's thousands and thousands of megawatts
14 of wind, and more is being built every year.

15 So that will be a very -- that will be a
16 resource that Manitoba Hydro will be able to take
17 advantage of. Normally, we -- we would say wind is not
18 good because it tends to depress prices and -- and we're
19 competing with that. But in a drought, having wind is
20 good, so, you know, you always have to look -- there's
21 always two (2) sides to the coin.

22 MR. BYRON WILLIAMS: That might... That
23 last phrase might prove helpful when we -- we come up to
24 our discussion of correlation and independence in just a
25 few minutes, so keep that in mind, Mr. Cormie.

1 I think we can put away ICF. And I would
2 like to -- to -- Hydro and others in the room to pull up
3 Hydro's rebuttal evidence, and also the evidence of
4 Professors Kubursi and Magee, chapter 6. And while
5 people are looking for documents, Mr. Chairman and Mr.
6 Vice-Chair, I'd note that Ms. DeSorcy has kindly joined
7 us again today.

8

9 (BRIEF PAUSE)

10

11 THE CHAIRPERSON: We have it, Mr.
12 Williams. We're just housekeeping. Keep the mice down.

13

14 CONTINUED BY MR. BYRON WILLIAMS:

15 MR. BYRON WILLIAMS: The -- the first
16 place I'd -- I'd ask Manitoba Hydro to turn in their
17 rebuttal evidence is page 62 and -- of 92, and the
18 heading "Hydro's Estimates of the Financial Impact of
19 Drought."

20 MR. DAVID CORMIE: Yes, we have that.

21 MR. BYRON WILLIAMS: And, Mr. Cormie,
22 just by way of intro, you -- and without asking you to
23 elaborate, the -- you -- you recall there's been some
24 discussion in this hearing in terms of the hydro
25 modelling out of SPLASH, and I don't know if it's a

1 concept, but let's use the word concept, perfect
2 foresight. You -- you recall that?

3 MR. DAVID CORMIE: Yes.

4 MR. BYRON WILLIAMS: And certainly -- and
5 you -- you set out, on page 62 and 63 at the top,
6 comments related to that, first of all starting with KPMG
7 suggesting that the SPLASH output tends to underestimate
8 the finan -- financial impacts of drought.

9 MR. DAVID CORMIE: Of the KM report, yes.

10 MR. BYRON WILLIAMS: I think KPMG says
11 that, sir, in --

12 MR. DAVID CORMIE: Oh, okay. Yes.

13 MR. BYRON WILLIAMS: And KM goes farther,
14 and they suggest that the actual costs of a drought would
15 be seriously understated.

16 Do you see that reference, sir?

17 MR. DAVID CORMIE: Yes.

18 MR. BYRON WILLIAMS: And Mr. Wallach, on
19 behalf of TREE or Green Action Centre, also suggests that
20 drought-related costs might be understated, and he
21 attributes that to perfect foresight.

22 Would that be fair? That -- would that be
23 your understanding?

24 MR. DAVID CORMIE: Yes.

25 MR. BYRON WILLIAMS: And as I understand

1 Manitoba Hydro's evidence on these next two (2) pages, at
2 a high level first and then I'll ask you to elaborate,
3 what you suggest here is that it would be unfair to
4 characterize your calculation of the drought, your --
5 your calculation of the actual costs of a drought, as
6 seriously understated.

7 That would be an unfair characterization
8 of your -- your -- your calculation?

9 MR. DAVID CORMIE: Yes, that's Manitoba
10 Hydro's view, yes.

11 MR. BYRON WILLIAMS: And you can probably
12 run this through me more effectively at a high level than
13 I can -- than I can direct you through cross-examination,
14 but what you essentially say, at least on the -- the rest
15 of page 63 and -- and the rest of page -- top of page 64,
16 is that there may be both a -- a possibility of
17 underestimating the costs of a drought and also a
18 possibility of overestimating the costs of a drought
19 within SPLASH, and those tend to offset.

20 Would that be fair?

21 MR. DAVID CORMIE: Yes, and, you know,
22 the fundamental reason is that SPLASH is only -- it's
23 assuming that only firm imports are available. It
24 doesn't assume that non-firm imports are available.

25 And it has to make that assumption because

1 we're talking about providing dependable energy to serve
2 our load obligations. And so we set out a very
3 conservative set of assumptions that -- that -- that --
4 that these are the energy sources that we're going to
5 rely on, and then we allow the model to do the
6 calculations based on those assumptions. If you change
7 the set of assumptions, and now assume that non-firm
8 energy sources can be relied on, you'll get a different
9 answer. But the -- but the puts and the takes between
10 the two (2) tend to offset each other.

11 And -- and what we said in the rebuttal
12 evidence is that when you do the calculations assuming
13 non-firm is -- energy is available, reservoir levels will
14 be -- then be higher, but those reservoir levels will
15 then be able to support generation in subsequent years.
16 And -- and -- and there are factors like that that --
17 that tend to say that, you know, although SPLASH has got
18 conservative assumptions, the -- the financial results
19 are pretty close, and, you know, within, you know,
20 there's a -- there's very small differences.

21 So it is unfair to say that -- that SPLASH
22 underestimates the cost of the drought, and that's what
23 we tried to lay out in that -- in that evidence.

24 MR. BYRON WILLIAMS: Okay, and -- and I -
25 - I just wanted to run through that particular point at a

1 high level. I am going to spend some more time with you,
2 Mr. Cormie, on your comments beginning at page 83 of 92,
3 and running through page 86 of 92, in your rebuttal
4 evidence. Page 83, Mr. Chairman.

5 And, Mr. Cormie, I'm going to -- just
6 before we -- before we get to the -- the meat of this,
7 and you'll also want to have near at hand the report of
8 Professors Kubursi and Magee, page -- starting at page
9 226. And, Mr. Cormie, I -- I'm going to -- you, of
10 course, will answer the questions being a free citizen --
11 two twenty-six (226). And just for clarity, page 83 of
12 the rebuttal, and also from Kubursi and Magee, we're
13 looking at pages 226, which should be Section 62
14 "Quantifying the Risk Exposure."

15 THE CHAIRPERSON: Just give us a second.

16

17 (BRIEF PAUSE)

18

19 THE CHAIRPERSON: Start, and we'll see if
20 we can follow you.

21 MR. BYRON WILLIAMS: I'm reluctant to do
22 so, Mr. Chairman. Just -- I just want to make sure
23 you're on the -- the right page, and so I'm -- I will be
24 starting at the -- under -- in Chapter 6 of Kubursi and
25 Magee. They have a heading "6.2 Qualifying Hydro's Risk

1 of Exposure" -- risks of...

2 THE CHAIRPERSON: Okay. We'll have to
3 stand down for a second. We've got a filing problem
4 here, I think.

5

6 (BRIEF PAUSE)

7

8 THE CHAIRPERSON: We're not the OEB. We
9 don't have the big screens and just the -- we -- but
10 we're past quill pens, anyway.

11

12 (BRIEF PAUSE)

13

14 THE CHAIRPERSON: We have it, Mr.
15 Williams.

16

17 (BRIEF PAUSE)

18

19 CONTINUED BY MR. BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: Thank you. And, Mr.
21 Cormie, before we go too deeply into this, not really a
22 question, your con -- your counsel will permit me a
23 little liberty, I'll just -- I'm just going to tell you
24 how I'm going to -- to approach this.

25

I want to address to a certain degree the

1 -- the thinking underlying Table 6.1 and 6.2 in -- in
2 Professors Kubursi and Magee's evidence. And I'm going
3 to ask you to assist, first of all, by helping us to
4 understand -- or give us Hydro's understanding of at a
5 high level or conceptual level what they're trying to
6 methodologically.

7 I certainly will give you an opportunity
8 to, as we go along, to the extent that there's some
9 criticism -- or not criticism, but rebuttal, we'll
10 discuss that as well. And I'm also trying to introduce a
11 couple concepts which I'm sure will come up in Mr. Wood's
12 direct, such as correlation, serial correlation symmetry.

13 So which -- so, Mr. Cormie, you understand
14 at a high level what I'm -- what we're trying to do?

15 MR. DAVID CORMIE: Yes.

16 MR. BYRON WILLIAMS: And just before we -
17 - we get into the actual meat of it, at a conceptual
18 level --

19 MR. ROBERT MAYER: How does that differ
20 from high level?

21 MR. BYRON WILLIAMS: Mr. -- Mr. Mayer,
22 you've got me so traumatized and intimidated that I'm
23 afraid to use that word.

24

25 CONTINUED BY MR. BYRON WILLIAMS:

1 MR. BYRON WILLIAMS: At a conceptual
2 level, Mr. Cormie, I wonder if you'll agree with me that
3 when -- when we -- we talk about quantitative risk
4 analysis and -- rooted in the statistical concept of
5 risk, I'm going to suggest to you that it involves three
6 (3) distinct steps.

7 So I'm going to suggest to you that when
8 we talk about quantitative risk analysis in -- rooted in
9 the statistical concept of risk, we're -- we have three
10 (3) disti -- distinct steps, and I'll suggest to you that
11 the first one would be the stochastic conception of any
12 specific risk in terms of sum probability distribution
13 for outcomes.

14 Would you agree with that so far, Mr.
15 Cormie?

16 MR. DAVID CORMIE: Yes.

17 MR. BYRON WILLIAMS: Secondly, the
18 application of a specific empirical probability
19 distribution to describe any specific rist -- risk.

20 So far, so good, Mr. Cormie?

21 MR. DAVID CORMIE: Yes, I'm good with
22 that.

23 MR. BYRON WILLIAMS: And third, the use
24 of Monte Carlo simulation techniques to determine risks
25 arising from complex situations involving multiple risks.

1 Would that be fair, sir?

2 MR. DAVID CORMIE: Yes. Mr. Peters -- or
3 Mr. Williams --

4 MR. BYRON WILLIAMS: Yeah. Don't insult
5 Mr. Peters.

6 MR. DAVID CORMIE: Yeah. Sorry, Mr.
7 Peters. You know, Manitoba Hydro has worried about
8 drought risk for -- water risk forever. When I started
9 with Manitoba Hydro and Mr. Surminski started with Hydro,
10 over thirty (30) years ago, we were -- we were -- we were
11 dealing with that issue at the time.

12 And our modelling has always looked at the
13 variability of the water supply. And -- and we found
14 that the best way to deal with that risk was look at the
15 historical record and -- and assume that the future would
16 be like that, and that in each and every year of the
17 future, there was a chance that each one of those
18 historic river flows could occur.

19 And -- and -- but that was at a time when
20 the other variables that affected Manitoba Hydro were
21 relatively constant. Power prices: I remember when I
22 started, power prices was sixteen dollars (\$16) for on-
23 peak firm power and seven dollars (\$7) for off-peak, and
24 that was the price, because cost of coal was that, and
25 once you added on the cost of operating -- so prices --

1 there wasn't price variability. So the only variable
2 that we were worrying about was the water flow.

3 And -- but now we're in a much more
4 complex world. Prices are -- are variable. They --
5 they're change and they're not constant any more. So now
6 we have the water risk, we've got the price risk,
7 Manitoba Hydro is -- has foreign exchange risk; you know,
8 the -- the exchange rate goes up and down independent of
9 what Manitoba Hydro's water conditions are. We have the
10 weather risk. What's the Manitoba load going to do? And
11 it gets cold and warm, regardless of -- of whether the --
12 whatever the exchange rate is doing and whatever the
13 water flows are.

14 So you have all these factors that -- that
15 affect Manitoba Hydro's financial results, and -- and
16 they may or may not be inde -- they may or may not be
17 independent; they may be dependent. For example, weather
18 and power prices may be highly correlated. And when it
19 gets really cold, there's a high demand for natural gas,
20 gas gets drawn out of storage, power traders start
21 jacking up their -- or gas distributors start -- start
22 raising the price of natural gas, and so gas goes up,
23 electricity prices go up. So there's a correlation
24 between weather and power prices.

25 And -- and the modelling that you need to

1 do in order to ca -- ac -- ac -- accurately capture those
2 interrelationships is the type of modelling and -- and
3 the -- the type of other factors that you talked about --
4 about here with regard to quantitative risk analysis.

5 And the -- the industry standard technique
6 for solving these types of problems is the Monte Carlo
7 simulation, where you -- you have a model that has all
8 these inputs, and all these inputs have some type of
9 probability distributions. And the -- the relationships
10 between the variables are -- are -- are -- are -- are
11 known and -- and through some kind of correlation
12 structure. And -- and you run the models a few thousand
13 times and you can see how these variables interact with
14 each other, and now you get an understanding of the --
15 the risk that you might face from a -- from a very
16 holistic perspective, looking at the entire problem, not
17 just focussed on one (1) single variable.

18 MR. BYRON WILLIAMS: Thank you for that
19 very much, Mr. Cormie. And some of the con -- concepts,
20 I'm -- some of the words you used that -- such as
21 "correlation", we're going to come back to that, and
22 alsure -- also for example your comment about weather and
23 power prices, we'll come back to that, as well. So
24 forgive me for not following up immediately, but we will
25 come back to those.

1 If we turn to the evidence of Professors
2 Kubursi and Magee, at page 26 -- and again I -- I will go
3 through these in greater detail, Mr. Cormie -- but -- but
4 at a high level, would it be fair to say that one (1) of
5 the very first steps that they took in Chapter 6 was to
6 develop a profile of Manitoba Hydro's financial
7 statements by considering information from Statistics
8 Canada for the years 2001 through 2007?

9 Would that be fair?

10 MR. DAVID CORMIE: Yes.

11 MR. BYRON WILLIAMS: And I don't want to
12 get your comments about that information just yet.

13 And then towards the bottom of this page,
14 the very last paragraph, I'll suggest to you, and you'll
15 agree if this is your understanding, that what they did
16 was, using that data from Statistics Canada from that
17 seven (7) year period, they prepared a large set of
18 simulations intended to deal with a relevant change in
19 important variables.

20 Would that be fair?

21 MR. DAVID CORMIE: Yes.

22 MR. BYRON WILLIAMS: And they attempted
23 to de -- or they did develop embedded probability
24 distributions, and ultimately they used those multiple
25 thousands, or -- or at least one thousand (1,000)

1 simulations, via Monte Carlo estimates, to get certain
2 final net revenue equations.

3 Would that be fair?

4 MR. DAVID CORMIE: Yes.

5 MR. BYRON WILLIAMS: And I -- I think I
6 should be clear, later on I think they used about a
7 thousand simulations, so if I said multiple, we'll agree,
8 around a thousand?

9 MR. DAVID CORMIE: Yes. It's -- it --
10 it's lots.

11

12 (BRIEF PAUSE)

13

14 MR. BYRON WILLIAMS: And again we're
15 going to get to your comments about it in -- in a few
16 moments, but if you turn to page 228 of the their
17 evidence. And I'm directing you to the second full
18 paragraph starting, "In total."

19 But using -- I'll suggest to you, and
20 you'll confirm that -- if this is your understanding,
21 that they started by defining a base case to benchmark
22 the behaviour of the system under average conditions
23 prevailing between '01 and '07.

24 Would that be fair?

25 MR. DAVID CORMIE: Yes.

1 MR. BYRON WILLIAMS: And again, there's
2 that one thousand (1,000) iterations comment in the next
3 paragraph.

4 Using these averages and selected
5 probability distributions for each of these many
6 variables, they gen -- generated these Monte Carlo
7 simulations, including the mean at the 5 percent and 95
8 percent confidence levels, correct?

9 MR. DAVID CORMIE: Yes.

10 MR. BYRON WILLIAMS: And without dwelling
11 too much upon this, if we look at Figure 6.1 -- and I'll
12 go to --through it with some -- in a -- with a couple
13 more questions in a second -- 6.1 is a portrayal of that
14 base case.

15 Would that be correct -- your
16 understanding, sir?

17 MR. DAVID CORMIE: Yes, that's a
18 histogram that shows the distribution of outcomes of net
19 revenues for -- as a result of the one thousand (1,000)
20 iterations of the calculations.

21 MR. BYRON WILLIAMS: And just -- you'll
22 see that they arrive at an -- under this base case, an
23 average revenue of around 445 million, sir.

24 Do you see that?

25 MR. DAVID CORMIE: Yes.

1 MR. BYRON WILLIAMS: And if I'm looking
2 at this, what you describe as a histogram, that average
3 is captured in that -- that point, the -- the point
4 around the values in million five hundred (1,000,500)
5 near the -- on -- in the -- the middle 90 percent.

6 Is that right, sir?

7 MR. DAVID CORMIE: Yes, you can --
8 there's a little table on the side of the chart, and you
9 can see where it says the -- there's five (5) lines. The
10 third line says, "The mean." The mean of the
11 calculations is \$445.093 million. And that's not
12 necessarily the most frequent result; that's just the
13 average of all the -- the most frequent result would be
14 the highest bar, and -- and the highest bar won't
15 necessarily be the mean.

16 MR. BYRON WILLIAMS: And there a couple
17 of other comments. And just while we're on -- on this do
18 -- this figure, which is unfamiliar to many of us in the
19 room, on -- at the bottom of the pa -- page 228 they talk
20 about net revenue is positive with 199 million at 5
21 percent confidence level.

22 Do you see that reference, sir?

23 MR. DAVID CORMIE: Yes.

24 MR. BYRON WILLIAMS: And if -- if I -- I
25 look at the top of the figure I see on the left-hand side

1 5 percent, and then in -- in the middle 90 percent, and
2 on the right-hand side 5 percent.

3 Do you see that, sir?

4 MR. DAVID CORMIE: Yes.

5 MR. BYRON WILLIAMS: And what this is --
6 is -- when they say that net revenue is positive with one
7 ninety-nine (199) at 5 percent confidence level, if I
8 draw a bar down between the 90 percent and the 5 percent
9 on the right, that figure would -- would be at around 199
10 million.

11 Would that be right, sir?

12 MR. DAVID CORMIE: Yes, that's correct.

13 MR. BYRON WILLIAMS: And so -- at -- and,
14 likewise, when they talk about six hundred and fifteen
15 (615) at the 95 percent confidence level, we would draw a
16 bar down on the right-hand side between 90 and 5 percent
17 on the right, and that's where that 616 million figure
18 would be, sir?

19 MR. DAVID CORMIE: That's correct.

20 MR. BYRON WILLIAMS: And results outside
21 that 90 percent barrier -- or 90 percent, in the middle
22 we would expect to be fairly rare. So outside of one
23 ninety-nine (199) to six fifteen (615).

24 Would that be fair?

25 MR. DAVID CORMIE: Yeah, you would expect

1 that any additional calculation that you would do, let's
2 say you went to the thousand and oneth iteration, that
3 next one, there would only be a 5 percent chance that it
4 would fall in the low end of the range and only a 5
5 percent chance -- but there's a 90 chance that that next
6 one would fall within the -- the middle of the range.

7 MR. BYRON WILLIAMS: Okay. Thank you for
8 that. On page 227 is Table 6.1.

9 Do you see that, sir?

10 MR. DAVID CORMIE: Yes.

11 MR. BYRON WILLIAMS: And, again, your
12 understanding is this is derived from Statistics Canada
13 data for a seven (7) year period, flowing from 2001
14 through 2007?

15 MR. DAVID CORMIE: Yes.

16 MR. BYRON WILLIAMS: And on the left --
17 just one (1) second. And on the left-hand side of that
18 Table 6.1 we can see some of the information that
19 Professors Kubursi and Magee derive from the Statistics
20 Canada information, including exchange rate -- at the top
21 -- load, exports, export price generation, imports, and
22 towards the bottom, long-term debt.

23 Do you see that, sir?

24 MR. DAVID CORMIE: Yes, I see the column,
25 yes.

1 MR. BYRON WILLIAMS: And this is the data
2 flowing from this Table 6.1 that they fed into the -- the
3 Monte Carlos -- Carlo simulations?

4 MR. DAVID CORMIE: Yes, this was the data
5 that the model was calibrated to.

6 MR. BYRON WILLIAMS: And if we turn to
7 page 229, and specifically Table 6.2, we see the results
8 of certain of the calculations performed by the Kubursi
9 and Magee analysis.

10 Would that be fair?

11 MR. DAVID CORMIE: Yes.

12 MR. BYRON WILLIAMS: For example, we see
13 a very high number, going four (4) lines down, associated
14 with drought at 1940 flows and high import prices.

15 Do you see that, sir? We see a -- a minus
16 seven hundred and fifty-five (755) impact on that
17 revenue?

18 MR. DAVID CORMIE: Yes.

19 MR. BYRON WILLIAMS: And before we get to
20 the specifics of your rebuttal, would you agree that,
21 when we look at Table 6.2, that it would be fair to say
22 that there is no analysis to suggest, flowing from this
23 table, whether a particular combination of risks is
24 likely?

25 MR. DAVID CORMIE: No. What they've done

1 is, they had their -- they had their model. Then they
2 changed -- normally, you would change one (1) assumption,
3 and most of the sensitivities that they did were --
4 involved changing one (1).

5 But in this particular example, where it
6 calculates a minus seven hundred and fifty-five (755),
7 they've changed two (2) variables at the same time;
8 they've changed -- they've made the -- the assumption on
9 the flow, and they've made the assumption on the power
10 prices. And there's -- and they've not talked about
11 what's the probability of the flows and the prices being
12 together at the same time in order to calculate that.

13 So there may be only a one (1) in a
14 thousand chance that that scenario would arise, but
15 there's nothing in this table that tells you what the
16 probability of those two (2) events occurring. We know
17 that the probability of the drought occurring, the 1940,
18 is probably about 1 percent. And we know that the
19 probability of high prices is probably -- maybe it's 10
20 percent. I -- I'm not -- I'm just guessing. But what's
21 the probability of both of them occurring in the same
22 year? There's nothing in this table that indicates what
23 the -- the -- the probability of them both occurring at
24 the same time. It's -- it just says, We've taken these
25 two (2) assumptions. We've taken the -- made these two

1 (2) assumptions without regard to their correlation.

2 MR. BYRON WILLIAMS: And I'm going to
3 suggest to you -- and if I'm putting too strong of words
4 into it, you'll correct me -- but to simply add those two
5 (2) results together without insight into their
6 correlation presents a number that is essentially of very
7 little value.

8 MR. DAVID CORMIE: Well, it -- it has
9 value. It has just -- it's just a very low probability,
10 or you don't know what the probability is. It might be
11 high, it might be -- it -- it might be one (1) in a
12 billion. We don't -- we don't know, because we haven't --
13 -- they haven't done the correlation analysis to relate
14 prices to flows.

15 And when you start talking about many more
16 variables than those two (2), it's really important that
17 you -- that you know what -- whether they're correlated
18 or not. And you just can't just pull the random
19 variables, the assumptions, out of the air and say,
20 Here's -- here's a number, because it may not have any
21 meaning.

22 And -- and the normal way of doing that
23 is, you run the model with the distribution of river
24 flows and with the distribution of power prices, and you
25 let the Monte Carlo tell you at, say, the 95 percent

1 confidence level what the result is. And then you that,
2 well, the probability of this event occurring, this loss,
3 which includes the combination of power prices and river
4 flows, has a probability of -- of loss of -- occurring of
5 -- of whatever that amount would be.

6 But you've defined the probability of that
7 event occurring in combination, rather than taking two
8 (2) independent variables, putting them into the model
9 and -- and generating a number, because now you don't
10 know what probability -- what level of confidence you
11 have that number. The level of confidence with the 755
12 million is not indicated in this table. We don't know
13 what the -- that is.

14 And you may be comparing, then, apples to
15 oranges. You're comparing an event that has a one (1) in
16 a hundred year probability to maybe an event that has a
17 one (1) in a thousand year probability, and you -- you
18 really shouldn't be making those comparisons.

19 MR. BYRON WILLIAMS: Thank you. I'm
20 going to turn to your rebuttal, specifically starting at
21 page 83.

22 And in terms of your -- in terms of your
23 rebuttal, sir, at a preliminary level, as opposed to a
24 high level, in terms of your rebuttal, essentially you
25 outline two (2) significant concerns with the analysis

1 underlying the information flowing from Tables 6.1 and
2 6.2. And I'll suggest to you that the first one of those
3 relates to -- and without asking you to elaborate, that
4 the first one of those relates to a concern that the
5 information presented in Table 6.1 is -- is -- does not
6 accurately reflect Manitoba Hydro operations.

7 Would that be the first concern? The data
8 in that -- that table.

9 MR. DAVID CORMIE: Yes, when we reviewed
10 the Statistics Canada data and compared it to Manitoba
11 Hydro's financial results restated on a calendar year
12 basis, we couldn't -- there were -- there were
13 significant differences between -- between the -- the
14 numbers. And you would think that Statistics Canada
15 would be accurately representing information that
16 Manitoba Hydro provided. And they do. But Statistics
17 Canada also takes information from other sources, and --
18 and inputs that to be Manitoba Hydro data. And I think
19 that's where the confusion in the data became --

20 MR. BYRON WILLIAMS: And -- and could I
21 stop you there, and -- and I'll go through that in -- in
22 just a second, if -- and I don't mean to cut you off in -
23 - in any way.

24 Just at a -- again at a preliminary level,
25 the other major concern, and we won't -- I won't ask you

1 to elaborate at -- at this point in time, goes to what
2 you consider to be certain metha -- methodological flaws,
3 and I'll just ask you to confirm that.

4 MR. DAVID CORMIE: Yes.

5 MR. BYRON WILLIAMS: And I did rudely
6 interrupt you in terms of your -- your concerns on the
7 accuracy of the data. But I'll suggest to you that if we
8 turn to page 84 and page 85 of your rebuttal, towards the
9 bottom of page 84, and the top of 8 -- page 85. You
10 highlight some of the major concerns with the accuracy of
11 the data presented in -- in Table 6.1.

12 Would that be fair, sir?

13 MR. DAVID CORMIE: Yes, that was a small
14 set of example calculations where actual results were
15 significantly different than what was shown in Table 6.1.

16 And -- and a -- and a very good example of
17 this is when you go to the Table 6.1, and there's a
18 section there on export price. And the third line down
19 talks about firm Canadian export prices. And if you --
20 you go across to the 2007 number, it shows fifteen
21 dollars and seventy-two cents (\$15.72) per -- or fifteen
22 point seven two (15.72) cents per kilowatt hour as the
23 price received for a firm export to a Canadian source.

24 Unfortunately, Manitoba Hydro doesn't have
25 any -- we'd love to have a sale that was providing us

1 with fifteen point seven (15.7) cents a kilowatt hour,
2 but we -- we have no firm Canadian exports. And this is
3 an example of where the table is -- is just -- the
4 information in the table is not -- is not good, and that
5 the calculations that were based on that aren't -- aren't
6 good ba -- and -- and it -- it generates information that
7 never occurred. We didn't have a firm export sale, so we
8 couldn't have an export price of fifteen point seven
9 (15.7) cents.

10 MR. BYRON WILLIAMS: Let me -- let me
11 stay on export price again. So that's on -- on Table
12 6.1. Mr. Chairman, it's Table 6.1 on export price.

13 And, Mr. Cormie, again in the 2007 year
14 you'll see that -- it -- it looks on the extreme right-
15 hand side, that firm US exports were calculated to be
16 fourteen point six three (14.63) cents.

17 Do you see that, sir?

18 MR. DAVID CORMIE: Yes, and those are
19 only pri -- the prices that I only dream about getting.
20 They're not -- they're -- they're not -- they're not
21 realistic. We don't --

22 MR. BYRON WILLIAMS: All of a sudden
23 Keeyask starts to look a lot better, so.

24 MR. DAVID CORMIE: It looks very good
25 under those...

1 MR. BYRON WILLIAMS: What -- what would
2 be Manitoba Hydro's calculate -- I -- I guess actually
3 it's on the next page, isn't it.

4 It would be -- you would calculate that to
5 be about six (6) cents per kilowatt hour?

6 MR. DAVID CORMIE: Yes, it's -- that's --
7 that's the -- now, and then -- and you would think that
8 if you took the revenue that -- that Stats Canada had and
9 the -- and the -- and the pri -- and the volumes, you
10 could then calculate the price, and that's what they've
11 done. These aren't prices that -- that Sta -- Statistics
12 Canada has provided them. These are prices that they
13 calculated based on the information.

14 And -- and -- and to their credit, you
15 would think that they would -- you could rely on the
16 Statistic Canada data as accurate representation, but,
17 unfortunately, in this case, it's not a good source of
18 information for calculating average prices.

19 And then they take those prices, the
20 prices -- let's say for firm US exports starting in 2001
21 at three point nine seven (3.97) cents, and going all the
22 way across to fourteen point six three (14.63) cents in
23 2007, and they say that's the distribution of prices that
24 Manitoba Hydro can assume to get on an annual basis. It
25 could be low, it could be high, but there's some kind of

1 probability distribution associated with that. And they
2 -- they -- they calibrate their model around those
3 prices.

4 And our -- our -- our rebuttal evidence
5 says, Well, you can't do that because -- and have a
6 reliable model because the data that's going into the
7 model is -- is flawed, and it's flawed, unfortunately,
8 because Statistics Canada hasn't -- doesn't have a good
9 representation of -- of Manitoba Hydro's actual result.

10 MR. BYRON WILLIAMS: And I don't want to
11 belabour the data issues, but if one looked at pages 84
12 and -- and 85, concerns in terms of load, revenues
13 generation, some of the salient concerns of Hydro in
14 terms of the inconsistencies between the two (2) pieces
15 of information are -- are set out there.

16 Would that be accurate?

17 MR. DAVID CORMIE: Yes. And -- and, you
18 know, I think -- I think the -- the doctors, at a
19 conceptual level, have done the right thing. They're
20 looking at the -- the variation in Manitoba Hydro
21 results, the -- the Monte Carlo modelling. And the at-
22 risk model is the same model that Manitoba Hydro uses in
23 its PRISM model, it's identical. It's just that,
24 unfortunately, it's been calibrated to -- to a flawed
25 data set.

1 told you I'd get back to your prior discussion about
2 correlation, and also the relationship between weather
3 and power prices. But before I get to your second major
4 concern, I -- I -- at a -- at a conceptual level, I am
5 truly moving to a conceptual level for a second, I want
6 to have a bit of a discussion with you about independent
7 -- the concept of independent variables, correlation, and
8 serial correlation. Is that fine with you, Mr. Cormie?

9 MR. DAVID CORMIE: Yes.

10 MR. BYRON WILLIAMS: And let's start with
11 independent. And in the context of a distribution, if I
12 work on an assumption that the ou -- that outcomes are
13 independent, I'll suggest to you that by -- what we mean
14 by that is that the next outcome is not affected in any
15 way by the previous outcome. Would that be accurate?

16 MR. DAVID CORMIE: Yes.

17 MR. BYRON WILLIAMS: And you spoke of two
18 (2) heads, two (2) different sides to a coin, earliest --
19 earlier, and I'm going to provide you with that two (2)
20 headed coin -- or it better not be a two (2) headed coin
21 -- with a -- a coin, an unbiased coin, with a -- a head
22 and a tail.

23 And by independent, if I flip that coin
24 once, first of all, we understand that there's a 50/50
25 chance I'll get a head, and there's a 50/50 chance I'll

1 get a tail, correct?

2 MR. DAVID CORMIE: Yes.

3 MR. BYRON WILLIAMS: And where the
4 concept of independence comes in, assuming -- or being an
5 independent variable, assuming it's an unbiased coin,
6 whether I get a head or a tail the first flip, the next
7 time I go to flip that coin, assuming it's unbiased, I
8 still have a 50/50 chance I'll get a head.

9 MR. DAVID CORMIE: That's correct. And -
10 - and another example is -- is a slot machine, Mr.
11 Williams, where a -- a gambler sits at the slot machine
12 because he thinks that, I've lost so many times that
13 there's a pent-up pot that's going to come out, and I
14 just have to wait long enough for it to come out because
15 he assumes that he's lost so many times that there's got
16 to be a whole bunch of wins that are going to go
17 favourable, and he forgets that they're -- that his next
18 pull of the slot machine is completely independent of --
19 of -- of the last one or who sat at the machine. And
20 there's no -- there's no memory in the system. The --
21 there is -- they're -- they're independent. It doesn't
22 matter who pulls the -- the lever the next time, the
23 result will be completely independent of -- of the last
24 outcome.

25 MR. BYRON WILLIAMS: Mr. Cormie, I -- I

1 wish we could have had this conversation five (5) years
2 ago.

3 THE CHAIRPERSON: Mr. Williams, I think
4 we'll take a -- a break at this point.

5 MR. BYRON WILLIAMS: Okay. And, Mr.
6 Chairman --

7 THE CHAIRPERSON: A lot of numbers.

8 MR. BYRON WILLIAMS: -- I'm very close to
9 being completed, but, yeah, I'll -- twenty (20) minutes.

10

11 --- Upon recessing at 10:49 a.m.

12 --- Upon resuming at 11:10 a.m.

13

14 THE CHAIRPERSON: Okay, Mr. Williams.

15

16 CONTINUED BY MR. BYRON WILLIAMS:

17 MR. BYRON WILLIAMS: Mr. Cor -- Cormie,
18 when we left off, we were just finishing the discussion
19 of independence and -- or independent variables and you
20 were making me regret my decisions over the past five (5)
21 years.

22 But I'll -- I'll suggest to you, if that
23 assumption of independence doesn't hold, and -- and you
24 spoke of this right near the start of our discussion,
25 then the analysis can become much more complicated.

1 Would that be fair?

2 MR. DAVID CORMIE: Yes.

3 MR. BYRON WILLIAMS: And you've mentioned
4 the concept of correlation previously, and are you also
5 familiar with the concept of serial, S-E-R-I-A-L,
6 correlation or auto-correlation?

7 MR. DAVID CORMIE: Yes, I am.

8 MR. BYRON WILLIAMS: And I'll suggest to
9 you, and you'll correct me if I'm wrong, that if we -- we
10 look at the probability of an outcome in any particular
11 year being influenced to some degree by the outcome of a
12 prior year, such that the -- there's a -- a correlation
13 having a time dimension that is often described as
14 serial, S-E-R-I-A-L, or auto-correlation?

15 MR. DAVID CORMIE: Yes. And it's not
16 necessarily limited to a year. Any -- any process can
17 exhibit that serial correlation. It could be monthly, it
18 could be weekly, it could be daily, hourly, it could be
19 annual.

20 And if you -- if -- if you remember, Mr.
21 Williams, the chart of river flows that Manitoba Hydro
22 likes to use to show the history, it seems to go in
23 waves. There's periods of high flows and periods of low
24 flows. And there's -- there's a serial correlation.

25 High-flow years tend to -- tend to result

1 in high-flow years, and if you're in a low-flow year,
2 they tend to -- the subsequent year is low-flow. And
3 that -- that's a good example of the serial correlation.

4 MR. BYRON WILLIAMS: I -- I thank you for
5 that. And that type of relationship complicates
6 statistical analysis because now outcomes must be
7 conceived as coming from a distribution in which
8 successive events are correlated, or a joint probability
9 distribution of outcomes. Is that fair?

10 MR. DAVID CORMIE: Yes. You need to know
11 how often something -- an event happens simultaneously
12 with another event. And I used an example earlier on in
13 the hearing, talking about the correlation between cold
14 weather and the output from a wind farm. Generally when
15 it's cold it's not windy, so we -- you -- you don't --
16 you can't really rely on the capacity because cold
17 weather and wind in Manitoba are -- are -- there's a --
18 there's a negative correlation. Really -- really cold,
19 no wind, and...

20 MR. BYRON WILLIAMS: And if you're not
21 familiar with this author, Mr. Cormie, that's fine, but
22 have you heard of the -- the author or -- or the academic
23 Peter Jackel, J-A-C-K-E-L, and his work, Monte Carlo
24 Methods in Finance?

25 MR. DAVID CORMIE: No, I haven't --

1 MR. BYRON WILLIAMS: That's fair enough.
2 Would you disagree if I suggested to you that issues of
3 correlation and co-movement are one (1) of the singlest
4 greatest challenges facing quantitative analysts and risk
5 managers today? Would that be fair?

6 MR. DAVID CORMIE: I accept Mr. Jackel's
7 judgment on that. I would -- it would -- not being an
8 expert in -- in the field, I can't agree with him or
9 disagree, but I -- it's -- it would appear to be that's
10 an issue that needs to be considered.

11 MR. BYRON WILLIAMS: And I'm going to add
12 one (1) more complication in to the mix, Mr. Cormie.
13 Different risky outcomes may not only be serial
14 correlated, I'll suggest to you, but they may also be
15 correlated with each other, complicating the analysis
16 further. Would that be fair?

17 MR. DAVID CORMIE: That's -- that's
18 right. You -- there may be -- it's the difference
19 between inputs and outputs to a process.

20 An input could be the temperature. The
21 output is the Manitoba load. And if now you're
22 correlating the load to the weather, you're com -- you
23 know, you're not -- you're not -- you're -- you've got --
24 you've got to be careful that -- that these events are
25 not dependent on each other or -- and -- or are part of

1 the same process.

2 MR. BYRON WILLIAMS: And you make this
3 point at page 86 of your evidence, suggesting that
4 opportunity export energy is not a random variable, but
5 is related to both water levels and firm-load demand, as
6 one (1) example of that type of relationship?

7 MR. DAVID CORMIE: Yes.

8 MR. BYRON WILLIAMS: And so I'll suggest
9 to you that in terms of methodological concerns that
10 Hydro may have with the very valuable illustrative work
11 of Professors Kubursi and Magee, leading to Table 6.2,
12 I'll suggest to you that an -- an additional concern of
13 you -- of -- of Hydro is that the analysis of the
14 variants and risk factors did not appropriately canvas
15 the issues of auto-correlation and the intersection of --
16 of risk.

17 Would that be fair?

18 MR. DAVID CORMIE: Is -- is that -- do
19 you have a -- is -- is that a Manitoba Hydro statement or
20 is that yours, Mr. Williams?

21 MR. BYRON WILLIAMS: It's my -- my words
22 trying to interpret yours. I guess the other reference I
23 had, Mr. Cormie, I'm just referring you to Manitoba
24 Hydro, you don't need to turn there I don't think, IR-28,
25 where -- where you ask Professors Kubursi and Magee to

1 confirm that the various risk factors quantified in Table
2 6.2 do not take into consideration the correlation and
3 interrelationship between the risks.

4 MR. DAVID CORMIE: Yes, we agree with
5 that. Mr. Williams, if I can briefly take you back to
6 that red chart and --

7 MR. BYRON WILLIAMS: Which red chart is
8 that, sir?

9 MR. DAVID CORMIE: On --

10 MR. BYRON WILLIAMS: I -- I'm working off
11 the black and white version.

12 MR. DAVID CORMIE: Oh.

13 MR. BYRON WILLIAMS: But you're referring
14 to Figure 6.1, sir?

15 MR. DAVID CORMIE: Figure 6.1 and 6.2.
16 And you had asked me what the probability of that event
17 resulting in a impact on net revenues of 755 million
18 negative under an assumption of drought and high power
19 prices.

20 And if you have the -- the distribution,
21 you should be able to go on that distribution and find
22 the probability of minus seven hundred and fifty-five
23 (755) by going down to the 'X' axis and working your way
24 to the left until you get a number of seven fifty-five
25 (755). You actually have to go over to the next page in

1 order to find an event that -- that is that infrequent,
2 and that gives you an idea -- you actually have to go
3 over nine (9) standard deviations before you get to a
4 loss of \$755 million.

5 So that's -- I -- I don't really have the
6 exact probability, but it is nine (9) standard deviations
7 away from the mean. Nine (9) standard deviations is --
8 is an extremely low probability.

9 MR. BYRON WILLIAMS: And just to -- to
10 make sure I understand -- I understand your point, you're
11 suggesting it's nine (9) standard deviations over. Just
12 thinking of a normal distribution just for a second, sir.
13 A normal distribution would be within one point nine six
14 (1.96) standard deviations of its mean 95 percent of the
15 time?

16 MR. DAVID CORMIE: Yes.

17 MR. BYRON WILLIAMS: Staying still with
18 an important point on page 86, Mr. Cormie, and you fairly
19 pointed this right out at the start of our discussion,
20 lines 18 through 23 of your evidence on page 86, you have
21 -- I'll -- I'll suggest to you that you have some nice
22 things to say about the potential value of the concept
23 and process outlined in the report of the -- the
24 professors as it illustrates how a tool such as at-risk
25 could be used to quantify financial risk.

1 Would that be fair?

2 MR. DAVID CORMIE: Yes. And, you know,
3 in our discussions with the consultants we were quite
4 pleased of their opinion on the direction that should be
5 taken which was consistent with where Manitoba Hydro was
6 going with its PRISM model and the work that we did with
7 RiskAdvisory. There's a consistency there in concept and
8 direction.

9 And it just takes a lot of work to make
10 sure that the model is properly built and calibrated and
11 the data is good data. And -- but, conceptually, I'm
12 very pleased with what they've said. It -- it support us
13 and -- in the direction that we're going.

14 MR. BYRON WILLIAMS: And in terms of a
15 lot of work, I'll suggest to you that one (1) element is
16 the actual data. Another important element is sufficient
17 familiarity with the operations of Hydro and -- and,
18 indeed, its geographic and hydrological reality.

19 Would that be fair?

20 MR. DAVID CORMIE: Yes.

21 MR. BYRON WILLIAMS: Now, just going back
22 to the concept of Professors Kubursi and Magree -- Magee,
23 which you've agreed has value, correct, the concept?

24 MR. DAVID CORMIE: Ye -- yes, we do.

25 MR. BYRON WILLIAMS: If we outline the

1 path or we consider the path that -- that they've
2 suggested, I'll ask you if you agree with this
3 presentation of its concept, Mr. Cormie, and I'm going to
4 give you four (4) points. So I'll do them one (1) at a
5 time, and I think we'll agree on at least three (3) of
6 them.

7 I'll suggest to you an important point
8 they -- they make is we should start with the
9 identification of risk factors which have associated
10 probability distributions of outcomes. Fair enough?

11 MR. DAVID CORMIE: I agree with that,
12 except that -- that you can't model everything. It -- so
13 I think it has to be the significant risk factors, and I
14 -- I think their analysis has indicated some of the
15 factors that aren't significant. You know, you change
16 these numbers and it doesn't really have a material
17 effect on Manitoba Hydro's net income. So I -- it's --
18 it's -- it's appropriately identifying the major risk
19 factors and making sure that you've -- that you
20 understand their interrelationship, not all the factors
21 because that would be impossible and a waste of time at
22 the end of the day.

23 MR. BYRON WILLIAMS: So just to modify
24 that statement, then, starting point is an identification
25 of significant risk factors which have associated

1 probability distributions of outcomes.

2 MR. DAVID CORMIE: Yes, and I think
3 there's probably seven (7) or ten (10) of those factors
4 that -- that I would consider to be significant to the
5 Company.

6 MR. BYRON WILLIAMS: And, Mr. Cormie, I
7 might come back to that in -- in just a second. I'll
8 suggest to you that a -- a second important element or
9 step is an analysis of the probability distribution -- an
10 analysis of the probability distribution of each risk
11 factor using updated historical data -- data, including
12 the nature of any correlation between these risk factors.

13 Would that be fair?

14 MR. DAVID CORMIE: Yes.

15 MR. BYRON WILLIAMS: So we'll put a check
16 mark be -- beside that one. We'll see if we put a check
17 mark beside the next one.

18 The dela -- development of an integrated
19 model of Manitoba Hydro operations that links the risk
20 factors and the financial outcomes of interest, i.e., net
21 revenues.

22 MR. DAVID CORMIE: Yes, I agree with
23 that. There's the issue that Mr. Rose raised about
24 searching for the perfect model and developing it, and
25 then waiting a year for the answer to come out. And so,

1 generally, you want to have a -- a model that captures
2 the essence of the analysis and gets it to you in a -- in
3 a relatively short time so that you can digest it and --
4 and -- and -- and -- and -- and -- and understand, you know.
5 But if you have to -- if the analysis breaks down because
6 you have to wait forever for the perfect answer, it's
7 useless.

8 And so it's a compromise between getting
9 all the detail in, but then waiting a long time for the
10 result, and generally, in these Monte Carlo simulations,
11 when you want to do thousands and tens of thousands of
12 analyses, you -- you need to keep it simple.

13 And -- and to get the insights from the
14 models, generally what you do is you -- you do exactly
15 what the two (2) doctors have done, is you run it and
16 then you change an input and you see what happens to the
17 result. Does -- does Manitoba Hydro's net revenue go up,
18 which might be a good thing? Does its worst-case
19 scenario get less bad? And so it gets more like a
20 directional model, and -- and -- and you can use it in a
21 qualitative rather than in a quant -- strategically, this
22 is a good thing for the company to do. It reduces its
23 risk, it improves net income.

24 Does it have to be exactly a perfect model
25 to get those kind of insights? No, and -- and I think

1 you -- as long as you've got the essence of the problem,
2 an approximation is -- is sometimes all you really need
3 for the system operating effects.

4 MR. BYRON WILLIAMS: Although you would
5 want a -- I'll suggest to you, a -- information that
6 could result in a confidence level flowing from that
7 analysis.

8 MR. DAVID CORMIE: Yes.

9 MR. BYRON WILLIAMS: And I'll suggest to
10 you that the fourth critical element of -- of this
11 concept is the performance, as you've indicated, of Monte
12 Carlo simulations to assess the impact of risk on Hydro's
13 outcomes. Would that be fair?

14 MR. DAVID CORMIE: Yes. To the extent
15 that's feasible in the time that's available, you want
16 that. And as Mr. Surminski has told me many times, just
17 dealing with the variability of water flows over a forty
18 (40) year planning horizon is a very time-consuming
19 analysis already, and so we were very careful not to
20 overly complicate that by adding more variations, when it
21 -- when the sensitivity analysis can be done with a
22 simpler model, and you get the insights that you need.

23 MR. BYRON WILLIAMS: Now, Mr. Cormie,
24 just one the first point that we discussed in the --
25 about five (5) questions ago, I suggested we should be

1 identifying risk factors, and you put in the adjective of
2 significant risk factors, and you suggested that there
3 were seven (7) or ten (10) that Hydro considered
4 particularly relevant. I wonder if you would outline
5 those ones, just -- just if you -- if you can, sir.

6 MR. DAVID CORMIE: Yes. And subject to
7 Mr. Warden piping in with some others that might be of
8 interest to him, but clearly the water-flow variability
9 is -- is a risk factor that we need to worry about.

10 Weather is -- the weather is -- is a
11 variable, and -- and it affects power prices, it affects
12 the -- the operation of the power system, it affects our
13 ability to move water in and out of reservoirs because of
14 the ice effects. It affects the temperature, which is
15 the -- the -- that is a very important input into what
16 the Manitoba load is going to be, so weather is clearly a
17 factor.

18 Power prices is a function of natural gas
19 prices, and other coal and other fuels, so power prices
20 is important.

21 The uncertainty associated with carbon
22 policy is a -- is a huge factor creating uncertainty in
23 the long run for what power prices are going to be.

24 Exchange -- foreign exchange rates, and
25 the effect of that on man -- Manitoba Hydro's financial

1 health.

2 Regulatory uncertainty is a -- is a risk,
3 and I'm not -- and maybe that -- that comes down into the
4 issue of -- of carbon pricing, and, you know, regulatory
5 costs that -- that Manitoba Hydro is affected by.

6 But those kind of very broad high-level
7 issues -- and -- and -- and, you know, you can talk about
8 weather, but weather affects many different things, so
9 you can't take a -- you have to make -- make consistent.
10 You want to say I'm on a -- under -- under scenario of --
11 of climate change that results in global warming going up
12 three (3) degrees, now you want to have all the -- the
13 other factors that are dependent upon that occurring be
14 consistent, and you don't want to have inconsistent
15 results.

16 So it's very careful -- you have to be
17 very careful to start at the highest level of what's the
18 driving force, and then following that down and making
19 sure that you capture all the interrelationships.

20 THE CHAIRPERSON: If I could interrupt
21 just for a minute, Mr. Cormie, you touched on a subject
22 that we'd probably use some of your expertise on.

23 You mentioned currency and, as I
24 understand it, the Manitoba Hydro argument has basically
25 been that you have a natural hedge, given US debt and --

1 and the export prices. Could you confirm, or -- or
2 correct the understanding that natural hedge by itself
3 doesn't do it because the finance expenses are basically
4 one-quarter (1/4) of Hydro's overall cost, where of
5 course revenue is -- is revenue. Export revenue is 100
6 percent of export revenue.

7 So the -- that -- without derivatives, the
8 --the natural hedge can't cover the present value of
9 major currency changes, can it?

10 MR. DAVID CORMIE: Maybe Mr. Warden would
11 be better able to answer that.

12 MR. VINCE WARDEN: Well, Mr. Chairman, I
13 -- I wouldn't necessarily agree with your statement. In
14 fact, I wouldn't agree with it. That is why -- why we
15 have the Exposure Management Program, what we call the
16 Foreign Currency Exposure Management Program, in place at
17 Manitoba Hydro.

18 So in effect what that does is say that
19 Manitoba Hydro is indifferent to the change in the US
20 versus Canadian rate -- rate of ex -- exchange because a
21 dollar in/a dollar out, as long as they offset it doesn't
22 really matter. So if we get more on the revenue side
23 we'll get less -- it'll offset with lower finance
24 expense. So to the extent that US dollar inflows and
25 outflows are balanced, then there's no impact on the

1 bottom line of Manitoba Hydro. We have to manage that,
2 of course, and -- and that's what we do.

3 And what we -- the biggest variable in
4 that is water conditions. So if we get a -- run into a
5 period where the -- it -- the flows don't coincide with
6 our forecast, then we have to look into some kind of
7 contracts to offset those water-flow differences. But
8 our plan is to have a perfect hedge of US dollars in and
9 out such that the exchange rate is not significant.

10 We can't protect ourselves 100 percent,
11 but we certainly protect ourselves to a very large
12 extent.

13 THE CHAIRPERSON: And this is without
14 getting into derivatives, you're talking about?

15 MR. VINCE WARDEN: Yes, derivatives are
16 ma -- used mainly to bridge timing differences between
17 when the dollar is coming in and when the dollars are
18 going out, so we -- we do purchase foreign currency,
19 foreign exchange contracts, just to match up those timing
20 differences. But if you look at our forecast going
21 forward and you look at the inflows and outflows of
22 dollars, they're essentially balanced.

23 THE CHAIRPERSON: I must admit I'm kind
24 of struggling with getting a complete understanding of it
25 because the effect of the currency of it was long held.

1 Like, for example, in some of your forecasts you have got
2 the Canadian dollar, if I recall properly, at something
3 like eighty-six (86) cents, where it's actually right now
4 about a dollar five (\$1.05). And if the net exports are
5 -- are they -- the export sales are priced in US dollars,
6 that extends out for a very lengthy period of time.

7 And, again, the finance -- you're
8 obviously gaining on the interest payments because
9 they're converted because they're lower in Canadian
10 currency. You're probably gaining when you buy equipment
11 from the States because presumably it's cheaper because
12 of the currency. I can understand all that.

13 But I'm having difficulty understanding
14 how the natural hedge works on a present value basis when
15 the US currency is at the level that it -- it is. I
16 mean, you obviously have an unrealized gain of
17 substantial amount represented in your AOCI right now.
18 But unless you continue to accumulate American debt in
19 the same ratio as you go forward -- forward borrowing,
20 I'm just struggling to understand how this natural hedge
21 works out in the long haul.

22 MR. VINCE WARDEN: Well, we typically
23 look at the Exposure Management Program operating over a
24 twenty (20) year time frame. So we'll look at the
25 longest-term outstanding issue for US debt, and we'll

1 ensure -- or we will attempt to have revenues that will
2 meet that principal payment when due.

3 So if we have -- if you -- if you look for
4 -- there's two (2) -- really two (2) parts to it, the --
5 the revenues and the interest payments, which are offset
6 essentially. If we have a hundred million dollars in
7 revenue, a hundred million dollars in interest payments,
8 they're offset, and we're -- in any given year, and then
9 we're indifferent to whether that exchange rate moves up
10 or down because it's -- we're just dealing in the same
11 currency in and out, so it has no impact.

12 The -- the four (4) -- the debt
13 maturities, however, and we'll probably be getting into -
14 - judging from the information that has been provided in
15 the book of documents from Mr. Hacault, we're going to be
16 getting into some discussion later on the sinking fund
17 and the -- and how that sinking fund has been used for
18 purposes of debt retirement.

19 You're absolutely right that when we --
20 when we do have unrealized foreign currency gain or loss
21 it -- it -- it's recorded in other comprehensive income.
22 So we -- we don't recognize any gain or loss in current
23 year's operations unless it's realized. So we have a --
24 if a debt is due ten (10) years from now, the exchange
25 rate differences up and down in that ten (10) year period

1 will be recorded in other comprehensive income, it'll --
2 and so it'll not have an impact on the -- on the bottom
3 line until we get to the date of maturity, then -- then
4 we have either a gain or loss.

5 And this is where when we approach the
6 debt maturity, date of maturity, we can use the sinking
7 fund to hedge -- in effect hedge that gain or loss so
8 that we don't get hit in any one (1) year with a
9 significant gain or loss.

10 THE CHAIRPERSON: So do -- do your
11 assumptions then assume, as you go forward through the
12 decade of investment, that your -- your borrowings will
13 continue to reflect a -- whatever it is, 35 percent US
14 debt to --

15 MR. VINCE WARDEN: Yes. We would --
16 because we have such very large transactions in the
17 export market on the revenue side, it would be prudent to
18 continue with the borrowing in US dollars if -- with --
19 with the qualification, of course, that -- that the
20 interest rate that we can negotiate on those -- on those
21 bonds is similar to what we get in Canada.

22 So we wouldn't do anything that's
23 uneconomic simply for the -- the -- for the -- to balance
24 out our US revenues and expenses. But the -- the -- the
25 difference, at the long end at least, in Canada, US, very

1 similar, very similar in terms of the rates we can get on
2 both the US and Canadian markets.

3 THE CHAIRPERSON: Thank you for that
4 discussion. I -- I appreciate that. I'll do some more
5 homework. Mr. Williams...?

6

7 CONTINUED BY MR. BYRON WILLIAMS:

8 MR. BYRON WILLIAMS: Yes. And, Mr.
9 Cormie, I think I'm done with you. I just have a couple
10 of questions, and I thank you for your assistance. Just
11 a couple of questions for Mr. Surminski relating to
12 CAC/MSOS Exhibit 24. Do you have that, Mr. Surminski?

13 MR. HAROLD SURMINSKI: Yes, if that has
14 been labelled as that number.

15 MR. BYRON WILLIAMS: Yes, it has.

16 MR. HAROLD SURMINSKI: Yes. Okay.

17 MR. BYRON WILLIAMS: The Ten (10) Year
18 History of wa -- Water Rentals, and, Mr. Surminski,
19 especially given our prior -- or my conversation with Mr.
20 Cormie this morning, I'd better ask this question first,
21 sir. Any data or calculation concerns with the document
22 that -- that you have, sir?

23 MR. HAROLD SURMINSKI: Yes. you've
24 extracted the -- the water rentals here, I note, not
25 including the land rental, so it is purely the water

1 rentals, whereas in some aspects of the annual reports,
2 the total is reported. So one has to be careful in
3 extracting water rentals only, and that's what you've
4 done here.

5 MR. BYRON WILLIAMS: You're confirming we
6 were careful, sir? I'm just teasing you.

7 MR. HAROLD SURMINSKI: Okay.

8 MR. BYRON WILLIAMS: And so just so I
9 understand, Mr. Surminski, you've -- you -- you don't
10 have a -- subject to, I guess, further check, you don't
11 have concerns with the numbers being presented here?

12 MR. HAROLD SURMINSKI: I've looked, yeah,
13 at one (1) or two (2) annual reports, and that is the
14 number for water, purely the water rental that you have
15 here, yes.

16 MR. BYRON WILLIAMS: Okay. And -- and
17 I'm going to, just at a high level, walk you and -- and
18 the panel through what's on the table. The first pa --
19 or the tables. The first page presents a ten (10) year
20 history of water rentals derived from specific annual
21 reports, totals them, and then averages them at the end
22 on the extreme right.

23 Is that right, sir, to your understanding?

24 MR. HAROLD SURMINSKI: Yes, correct.

25 MR. BYRON WILLIAMS: The second page

1 then, if we can go to the next page, you'll see that's
2 described as net extraprovincial energy, and I'll suggest
3 to you that net extraprovincial is a calculation that has
4 -- subtracts out the imports.

5 Is that your understanding, sir?

6 MR. HAROLD SURMINSKI: That is one (1)
7 definition. It -- it's done for convenience, I imagine,
8 here.

9 MR. BYRON WILLIAMS: Okay. And
10 subtracting out the imports, extraprovincial's percentage
11 of total electrical energy on -- on this table is
12 calculated to be 31 percent.

13 Is that your understanding, sir?

14 MR. HAROLD SURMINSKI: Yes. This
15 particular definition, or quantification, of net
16 extraprovincial.

17 MR. BYRON WILLIAMS: And, Mr. Surminski,
18 the -- the question is a fairly simple one, but -- and --
19 and no one else needs to turn here, but where we're
20 trying to get at is -- is to look at the relationship
21 between extraprovincial water rentals, and extra --
22 extraprovincial energy as calculated in these two (2)
23 tables.

24 And I'll ask you to confirm that in
25 CAC/MSOS/Hydro-1-21A, Hydro indicated that about \$266

1 million over the last ten (10) years have been the water
2 rentals on the portion of Hydro generation used for
3 exports.

4 Would that be your understanding, sir?

5 MR. HAROLD SURMINSKI: That's what the
6 report is. I'm not sure exactly which ten (10) years
7 those are.

8 MR. BYRON WILLIAMS: And neither am I.
9 And, Mr. Surminski, let's -- and -- and I may -- we may
10 be down to such -- there may be an issue of whether we --
11 we have the corresponding years correct or not -- but
12 taking 266 million over the front page total of -- of
13 about a billion dollars would suggest that ten (10) year
14 water rentals associated with exports (sic) were about --
15 exports were about 26/27 percent of the ten (10) year
16 total of water rentals.

17 Mathematically, does that work out, sir?

18 MR. HAROLD SURMINSKI: Yes. You're
19 assuming --

20 MR. BYRON WILLIAMS: And -- and --

21 MR. HAROLD SURMINSKI: -- it's about a
22 billion, and this is two hundred and sixty-six (266) --

23 MR. BYRON WILLIAMS: So that's 26 or 27
24 percent.

25 MR. HAROLD SURMINSKI: Yes.

1 MR. BYRON WILLIAMS: And, Mr. Surminski,
2 let -- let's hope we have a year match, but assuming we
3 do, what if any reasons could you indi -- indicate to
4 suggest why there might be some mismatch between the
5 percentage of water rentals flowing from exports as
6 compared to net energy associated with export, or total
7 energy?

8 MR. DAVID CORMIE: Mr. Williams, on the
9 first table -- actually, yeah, it's on page 2 of your
10 exhibit, the line that's shown as extraprovincial is
11 physical and financial sales, okay; whereas on page 3,
12 the table is only physical deliveries. And so we may
13 have bought and sold the power, and never taken delivery
14 in Canada, so it end up in -- in effect being a financial
15 transaction; whereas the net import/export is actually
16 what's going through the metre.

17 And so if you're going to allocate -- if
18 you're going to allocate water rentals to physical
19 exports you do it on the -- on the net metred
20 interchange. So that -- that may help explain some of
21 the difference.

22 MR. BYRON WILLIAMS: Okay.

23 THE CHAIRPERSON: Mr. Cormie and Mr.
24 Williams, just -- one (1) just to get it out of my head.
25 I presume the -- the net numbers you're using here

1 excludes the purchase of wind.

2 MR. BYRON WILLIAMS: And, Mr. Chairman,
3 I'm not confident that I can assist you with that.

4

5 (BRIEF PAUSE)

6

7 MR. DAVID CORMIE: Wind will not be
8 included in -- in the net metered interchange. So to the
9 extent that wind is an iss -- issue, I don't know if it
10 would affect this calculation or not, but it -- it is
11 probably a factor in there that you have to account for.

12 THE CHAIRPERSON: I don't think it's
13 particularly material from looking at it, but I'm just
14 pointing out from previous testimony that wind was
15 counted within the imports.

16 MR. DAVID CORMIE: Yeah, in -- in terms
17 of our supply portfolio in -- in -- up to this year, it
18 would have been about 300 gigawatt hours out of ten
19 thousand (10,000), so it -- it would be a fraction -- a
20 fractional effect.

21

22 CONTINUED BY MR. BYRON WILLIAMS:

23 MR. BYRON WILLIAMS: Mr. Cormie, and just
24 one (1) other thought that comes to mind, and this is not
25 a huge point. We're just trying to reconcile numbers in

1 our -- in our own minds.

2 Would -- as I understand it, the water
3 rental formula has -- has two (2) different aspects to it
4 that can be employed, in terms of calculating it.

5 Is that your understanding?

6 MR. DAVID CORMIE: Two (2) aspects, in
7 which...?

8 MR. BYRON WILLIAMS: Two (2) different
9 formula.

10 MR. DAVID CORMIE: Oh, there's a --
11 there's a capacity component that determines the minimum
12 water rental payment. That has -- is not a factor in
13 these ten (10) years. The other issue, Mr. Williams, is
14 that, for the purposes of allocating water rental costs,
15 we probably would have to adjust all these loads back to
16 generation to account for system losses.

17 But I would -- in -- in thinking about it,
18 we would adjust both net metered interchange and domestic
19 load back. But the residential and general service may
20 have some additional distribution losses that -- that
21 would account for several more percent.

22 So, again, you have to ru -- you have to
23 be doing the calculations on the same basis, and it --
24 it's po -- potentially that some of the con -- confusion
25 arises because Manitoba Hydro may be adjusting for those

1 factors, and it's not obvious to you just by looking at
2 the water rentals and doing your own calculation.

3 MR. BYRON WILLIAMS: And -- and I guess
4 we'll leave it at -- at this. If there are any other
5 factors that might be in play, Mr. Cormie, and they occur
6 to you while you're still on the stand, you can certainly
7 -- I'm not asking for any undertaking, but you can
8 certainly elaborate on them if you so choose, okay.
9 Thank you.

10 And, Mr. Chairman, I do thank the panel,
11 both Hydro and -- and the Board, for their indulgence
12 this morning.

13 THE CHAIRPERSON: Thank you, Mr.
14 Williams. We're just wondering up here, Mr. Hacault, if
15 it wouldn't make more sense that we take the lunchbreak
16 and start at one o'clock.

17 Does that fit you?

18 MR. ANTOINE HACAULT: Whatever is the
19 will of the Board.

20 THE CHAIRPERSON: Okay. Well, so be it
21 then. We'll see you all at one o'clock. Thank you.

22

23 --- Upon recessing at 11:49 a.m.

24 --- Upon resuming at 1:08 p.m.

25

1 THE CHAIRPERSON: Oh there we are. Okay.
2 Welcome back.

3 Mr. Hacault...?

4 MR. ANTOINE HACAULT: Yes, Mr. Chairman.
5 Good afternoon, all. There's a housekeeping matter. We
6 had distributed prior to lunch some additional material,
7 which for all parties should be inserted at Tab 69, six
8 (6) nine (9). It was a tab that had no documents in. I
9 was saving it just in case we needed to kill some extra
10 trees.

11 THE CHAIRPERSON: As long as it was the
12 ones that were infested with the pine beetle.

13 MR. ANTOINE HACAULT: So that will form
14 part of MIPUG Exhibit 12. I don't think we need to give
15 it an extra exhibit number. The pages follow, but the --
16 we've taken the number, and then added a small letter to
17 each one (1) of them, so it'll be easy to identify on the
18 record what the new pages are.

19 THE CHAIRPERSON: You might want to
20 mention the -- the name you want to -- because in your
21 table of content, Tab 69 says, "Spare."

22 MR. ANTOINE HACAULT: Our intention, Mr.
23 Chairman, and all present, is to provide, as and when
24 required, a revised table for every -- everyone, which
25 will have the proper descriptive for the appendix from

1 KPMG report that we have included, and also the extract
2 from the report of Drs. Kubursi and Magee.

3 THE CHAIRPERSON: Very good.

4

5 MANITOBA HYDRO PANEL:

6 VINCE WARDEN, Resumed

7 HAROLD SURMINSKI, Resumed

8 MANFRED SCHULZ, Resumed

9 DARREN RAINKIE, Resumed

10

11 CONTINUED CROSS-EXAMINATION BY MR. ANTOINE HACAULT:

12 MR. ANTOINE HACAULT: If I could direct
13 the panel's attention to Tab 3, and the document there, I
14 did touch upon it yesterday, but there's one (1)
15 question, or one (1) point, I'd like to perhaps have a
16 comment from either Mr. Warden or anybody else on the
17 panel.

18 If we maintain a 75:25 debt-equity ratio,
19 my reading of the table is that from 2011 to, and
20 including, 2015 were basically asking ratepayers to pre-
21 fund some of the major capital initiatives, and then the
22 rates stay relatively low.

23 Do you have any comment on that?

24

25 (BRIEF PAUSE)

1 MR. ANTOINE HACAULT: Where I get the 30
2 percent is if I add the 2.9 percent for 2011, the 10
3 percent for the 2012, then there's a negative adjustment,
4 .9 percent, and then the six (6) -- sixteen point three
5 (16.3) and then the two point eight (2.8). Adding all of
6 those numbers up is in the range of 30 percent.

7 MR. VINCE WARDEN: So, Mr. Hacault, your
8 -- your question is, by maintaining a 75:25 debt-equity
9 ratio and implementing the rate increases or decreases
10 that are necessary to maintain that ratio, where we are
11 in effect pre-funding future capital, or capital
12 construction program?

13 MR. ANTOINE HACAULT: Putting -- I'm --
14 I'm wondering whether we can reach any conclusion on that
15 because if we see, once we have that 30 percent increase
16 from -- in that time period, rates are relatively flat
17 until 2000 -- 2022, which is -- I think has been referred
18 to you or others as the decade of returns, and then
19 there's practically the opposite, to keep it 75:25, we'd
20 be reducing rates for those ratepayers in that time
21 period from '22 -- '22 to 2026 by about 30 percent.

22 MR. VINCE WARDEN: Yeah. Well, I'm not
23 sure I would agree with your characterization of rates
24 being flat. They're -- in fact, they're very volatile
25 during that interim period, and that's the reason that

1 Manitoba Hydro is proposing smoothing the rates over that
2 period of time.

3 So when -- when you -- your original
4 question is: Are we pre-funding capital construction?
5 Well, this table is intended to do no more than to show
6 what rate increases would be required to maintain a
7 structure of 75:25. Assuming that a capital structure of
8 75:25 is the desired capital structure for Manitoba
9 Hydro, this table illustrates what rate increases are
10 required -- rate increases or decreases are required in -
11 - in order to maintain that ratio.

12 MR. ANTOINE HACAULT: Thank you for that
13 answer, but I was wanting to go a bit further with that.
14 In reviewing that tendency of the big increases in the
15 first five (5) years, 2011 to 2015, and then the fairly
16 substantial decreases from 2022 to 2026, is there any
17 observation from Manitoba Hydro as to -- if we
18 religiously adhered to this formula, are we asking the
19 Manitoba ratepayers in the first five (5) years to -- to
20 take the heavy load on the shoulders for what's happening
21 in the future?

22 MR. VINCE WARDEN: Well, I want to make
23 it very clear, we're not proposing this. We do not --

24 MR. ANTOINE HACAULT: I understand that.

25 MR. VINCE WARDEN: So you can interpret

1 it whichever way you like, really. All it's doing,
2 though, is saying 75:25 is being maintained throughout
3 that period, so, yes, a rate increase of 10 percent next
4 year going into a capital construction program would
5 provide funding for some of that capital.

6 But then, as you see, it's followed by the
7 -- the very next year, by a decrease of .9 percent. So
8 it's, you know, illustrative only and not for purposes of
9 anything more than that.

10 MR. ROBERT MAYER: Let -- let's make it
11 clear, Mr. Warden. You -- I believe you said a number of
12 times through -- through the course of this hearing that
13 you're prepared to let the 75:25 slide upward during the
14 decade of investment.

15 MR. VINCE WARDEN: Yes, that's what our
16 financial forecast does show, and that's what we're --
17 the information we're providing to this Board and to
18 credit rating agencies, is that, if all of our
19 assumptions are as they are in the forecast, that rate --
20 that ratio, debt ratio, will increase. A lot of
21 variables there, though, that -- that could change that
22 over -- over that decade.

23

24 CONTINUED BY MR. ANTOINE HACAULT:

25 MR. ANTOINE HACAULT: And I guess what

1 Manitoba Hydro has tried to do then is to smooth that
2 effect. But nonetheless, when we get those in-service
3 dates of the large generating stations, that's what you
4 call the decade of returns, and either there would be a
5 lowering of rates to maintain the 75:25 at that point, or
6 there would be a significant increase in retained
7 earnings. Is that correct?

8 MR. VINCE WARDEN: Yes, that's fair to
9 say once we get to the -- to the decade of returns,
10 which, you know, with the deferment, as we've seen this
11 year of in-service dates for Keeyask and Conawapa, it
12 slips a little bit into the next decade. So it doesn't
13 start immediately in the next decade, but once those
14 units are placed in service, those generating stations
15 are placed in service, and we start exporting power in
16 accordance with the term sheets, if everything evolves as
17 planned, yes, rate -- rates will be lower than they are
18 forecast to be in the first -- first decade.

19 MR. ANTOINE HACAULT: Thank you. Could
20 you please turn to Tab 5. My question will relate to the
21 very last paragraph on that page.

22 When you -- or Manitoba Hydro refers to
23 "The absolute level of equity is an al -- also an
24 important consideration in determining its adequacy," how
25 am I to understand that? Am I to understand it much in

1 the same
2 way as previously Manitoba Hydro had absolute levels of
3 equity to deal with a two (2) year drought? Would that
4 be an example of the absolute level of equity as opposed
5 to just putting a lot of importance on the 75:25 equity
6 ratio?

7 MR. VINCE WARDEN: Well, you -- you can
8 use that as an example for sure. A more modern example
9 would be the five (5) year drought, which we've
10 referenced in our financial forecast, the \$2.2 billion
11 that is associated with a five (5) year drought.

12 So if we were maintaining a ratio that had
13 a level of retained earnings lower than what our largest
14 risk was, then -- then we would have a concern. We -- we
15 do though have a level of retained earnings now of 2.2
16 billion, so it's sufficient to cover a significant
17 drought, which should give us some comfort level going
18 forward.

19 And not only that, but we are, according
20 to the financial forecast, adding positive net income
21 each and every year of the forecast so that retained
22 earnings will continue to grow over that decade even
23 though the 75:25 debt-equity ratio may not be maintained.
24 But our equity level will continue to -- to grow and
25 provide for the risks that we face, so that's -- that's

1 what that paragraph is intended to convey.

2 MR. ANTOINE HACAULT: So at the very end,
3 when there's a statement, "...to be sufficient to
4 withstand a recurrence of the worst drought on record."
5 We've had a whole bunch of numbers put in this
6 proceedings: five (5) years, seven (7) years, which five
7 (5) years. There's been even a concern or an indication
8 by the Chairman, I think, at one (1) point in time, why
9 don't we add the two (2) of them for a total of twelve
10 (12).

11 What's Manitoba Hydro's view with respect
12 to this statement? Is it the five (5) years, and which
13 one?

14 MR. VINCE WARDEN: Well, thi -- this
15 statement does refer to a recurrence of the worst drought
16 on record. The \$2.2 billion number that I referenced was
17 actually the second-worst drought on record. But
18 nevertheless, the order of magnitude of -- of a very
19 significant serious drought is in the order of \$2.2
20 billion.

21 MR. ANTOINE HACAULT: Now, how do we
22 apply that reasoning and methodology going forward so
23 that -- we've seen that, I think, and I was chastised for
24 asking how much it was going to cost me, but that the
25 retained earnings are projected to increase fivefold by

1 2030. Do we still adhere religiously to the 75:25
2 number, or do we look for the five (5) years being the
3 second-worst drought as the standard for sufficient
4 protection on retained earnings?

5 MR. VINCE WARDEN: Well, the 75:25 is a
6 target. It's just that. It's a target, and is subject
7 to change. As we've reviewed, I think yesterday, the
8 history of the retained earnings, the debt-equity ratio
9 targets have changed. They change with the times, so
10 there's no reason to think we're going to be religiously,
11 as you put it, wedded to that 75:25 debt-equity target
12 forever. There's considerations that will be -- will be
13 taken in when appropriate, when the circumstances dictate
14 that.

15 MR. ANTOINE HACAULT: So at least for the
16 time being because we're just dealing with rate increases
17 for the two (2) year period, you don't want to venture
18 into how we should apply that test going forward in the
19 IFF?

20 MR. VINCE WARDEN: Oh, I -- no, I didn't
21 -- I didn't say that. The 75:25 is our approved target.
22 That's what we're striving to achieve. That's a
23 reasonable target that's been accepted by this Board, I
24 believe, and certainly in the Manitoba Hydro Board, by
25 credit rating agencies, so it's a reasonable target. Is

1 that going to be there forevermore? Probably not, but
2 it's good for what we have before us today.

3 MR. ANTOINE HACAULT: Could you turn to
4 Tab 7 now, please, sir. At page 37 in that tab, it's the
5 DBRS credit rating report for November 10, 2010, and
6 yesterday you drew my attention, I believe, to the middle
7 of that page where there's the heading "Challenges."

8 And what I'd just to go through with you,
9 sir, is whether any of those challenges have materially
10 changed since 1991 when they were the ratings of Manitoba
11 Hydro at that point in time with the province. So
12 firstly, the first challenge listed is the hydrology
13 risk.

14 MR. VINCE WARDEN: Yes, and I -- I
15 wouldn't say that has materially changed. We've -- we're
16 a hydraulic utility. We'll always have hydrology risk,
17 so that hasn't changed, don't expect it will.

18 MR. ANTOINE HACAULT: I guess -- would it
19 be fair to suggest that the way Manitoba Hydro can manage
20 risk through the export contracts as earlier discussed
21 today, that's an improvement in how that risk can be
22 managed?

23 MR. VINCE WARDEN: Oh, absolutely. The
24 export contracts can be structured that recognize the
25 risks that Manitoba Hydro faced. That doesn't diminish

1 the hydrology risk though. We still -- we will always
2 have a water supply risk at Manitoba Hydro, but the
3 contracts as they're -- or the term -- term sheets
4 recognize that and allow us to -- to respond to that more
5 efficiently than we have in the past.

6 MR. ANTOINE HACAULT: Moving onto the
7 next major challenge listed here, high leverage. What
8 was -- what would that refer to? Would that be the debt-
9 equity ratio?

10 MR. VINCE WARDEN: Yes.

11 MR. ANTOINE HACAULT: And would you agree
12 with me that that factor has improved since the late '80s
13 and early '90s?

14 MR. VINCE WARDEN: Definitely improved,
15 but still a concern to the credit rating agencies.

16 MR. ANTOINE HACAULT: So we've seen an
17 improvement from 94 -- 96:04 initially in 1984, and now
18 we're actually in -- in one (1) year, was it last year,
19 we actually exceeded our expectation for the 75:25 debt-
20 equity ratio?

21 MR. VINCE WARDEN: Yes.

22 MR. ANTOINE HACAULT: The next major
23 challenge is the heightened capital expenditure profile.
24 How does that compare to what we had before?

25 MR. VINCE WARDEN: Well, we're entering a

1 capital program that's unprecedented.

2 MR. ANTOINE HACAULT: So even if we do
3 kind of a relative sizing for the early '90s, when we
4 were putting Limestone through and, according to the
5 reports, a fairly significant amount into Conawapa which
6 has yet to see the day, your view is that we're still
7 embarking in a higher capital expenditure profile as
8 compared to before, is that right?

9 MR. VINCE WARDEN: Oh, yes, much higher.

10 MR. ANTOINE HACAULT: The next item is
11 the net export revenues sensitive to fluctuation in
12 exchange rates. How does that compare to what happened
13 in the late '80s and early '90s? Were you managing that
14 risk better today than you were before?

15 MR. VINCE WARDEN: Very similar. There
16 have been some accounting changes in that period, as
17 we've discussed, the most recent being in 2007 with
18 respect to financial instruments, but the principles are
19 still the same.

20 I do have to point out, these are the
21 rating reports and -- and the words, the concerns
22 expressed by the rating agencies. We always try to
23 convince them this -- this particular one isn't a great
24 risk because of our Foreign Currency Exposure Management
25 Program, but, nevertheless, they choose to include it on

1 the list. So -- but, in answer to your question, no,
2 it's not significantly changed from previous in terms of
3 how it's managed.

4 MR. ANTOINE HACAULT: So if we went back,
5 you'd have a similar matching between revenues coming in
6 on the contracts supporting the US debts as far as export
7 contracts?

8 MR. VINCE WARDEN: Yes. The -- Manitoba
9 Hydro's Foreign Currency Exposure Management Program has
10 been in place for many years, and it's been refined over
11 those years to some extent, but essentially it's still
12 the same program.

13 MR. ANTOINE HACAULT: Thank you. The
14 last risk that's mentioned is the Northern Flood
15 Agreement, yet to be settled. That has since been
16 settled, as I understand it?

17 MR. VINCE WARDEN: No. No, this one is
18 still outstanding. It's, again, a matter of
19 interpretation. We do have a -- an agreement, a Northern
20 Flood Agreement, with all First Nations that were
21 affected by northern development.

22 What we did do, though, subsequent to the
23 signing of the Northern Flood Agreement in 1997, I
24 believe it was, we entered into comprehen -- what we call
25 comprehensive settlement agreements, such that there was

1 a -- a payment made in settle -- so that those agreements
2 weren't ongoing. So there was a -- we were able to do
3 that with four (4) out of the five (5) Bands, and there's
4 one (1) Band that still is being administered through the
5 original Northern Flood Agreement.

6 MR. ROBERT MAYER: Mr. Warden, I could
7 have sworn I heard a news release whereby you guys
8 settled with Pimicikamak a couple of months ago. I'm
9 talking about the right Band, aren't I? That's the only
10 outstanding one, Cross Lake.

11 MR. VINCE WARDEN: Not a comprehensive
12 settlement, Mr. Mayer.

13 MR. ROBERT MAYER: That's what it sounded
14 like on the radio.

15 MR. VINCE WARDEN: We -- we've come to
16 different agreements from time to time with the Band, but
17 in terms of a comprehensive settlement, such that the
18 Northern Flood Agreement no longer applies, no, we
19 haven't. We haven't done that.

20

21 CONTINUED BY MR. ANTOINE HACAULT:

22 MR. ANTOINE HACAULT: So is it your view,
23 then, Mr. Warden, that this identified challenge has been
24 better addressed now than at the state it was in the late
25 '80s and early '90s?

1 MR. VINCE WARDEN: Well, it's an ongoing
2 issue. Our relationship with the First Nation referenced
3 here has improved greatly over the intervening years, but
4 the issue is -- is still -- still the same.

5 MR. ANTOINE HACAULT: But my point was,
6 you'll agree that in the late '80s, early '90s, you had
7 more of these claims outstanding than you do now with the
8 First Nations.

9 MR. VINCE WARDEN: Well, I -- I'd have to
10 look at the dates of settlements to confirm that
11 statement one (1) way or another, but, yeah.

12 MR. ANTOINE HACAULT: Okay. We'll move
13 on.

14 MR. VINCE WARDEN: I -- I don't think
15 it's -- I don't think it's substantially different.

16 MR. ANTOINE HACAULT: I have some further
17 questions with respect to the material at Tab 8, which is
18 about where we left off yesterday, specifically with
19 respect to the international financial reporting
20 standards, and I don't know who -- who on the panel might
21 be able to answer that, maybe Mr. Schulz. Does it permit
22 more than one (1) accounting model for property plant and
23 equipment?

24 MR. DARREN RAINKIE: I think I can give
25 Mr. Warden a rest for a few minutes. It actually allows

1 for a revaluation model as well as a historical cost
2 model.

3 MR. ANTOINE HACAULT: And for somebody
4 like me who doesn't understand what accounting's all
5 about because I'm a lawyer, what's a revaluation model?

6 MR. DARREN RAINKIE: It -- it allows you,
7 I guess, to deviate from historical costs and use more
8 current market-cost valuations. I think you had a
9 discussion with Mr. Warden about that yesterday late in
10 the day.

11 Of course, to do that, you have to have
12 fairly expansive valuations and it has to be reliable, so it
13 -- it comes with that price tag, as well as you have to
14 recognize moving from historical cost reduces, in some
15 people's view, the reliability of the financial
16 statements because now a valuation is a -- is an opinion,
17 it's no longer a fact in terms of what your historical
18 costs were.

19 MR. ANTOINE HACAULT: Okay. And I'm just
20 trying to relate this to my own experience. So a car
21 dealership is selling and the adjusted cost base after --
22 is a certain number, and you've got a whole bunch of
23 depreciation, and that gets -- gives you your net book
24 value. Is that correct?

25 MR. DARREN RAINKIE: Well, net book value

1 is a historical cost construct, it's what you paid for
2 the asset minus the accounting depreciation up to this
3 point in time. A fair value or a -- I use the word
4 "revaluation." You could also use the word "a fair value
5 approach" to accounting would be based on either, you
6 know, income valuations or equipment valuations, an -- an
7 opinion in terms of what the cashflow or value of those
8 assets are in the future. And that's what you would use
9 to -- to base both your -- your gross book value, as
10 well, your depreciation on an ongoing basis would have to
11 take into consideration your higher fair value as well,
12 right, it all -- it's all relative.

13 But I was just trying to earlier comment
14 on the information that is used to derive historic cost
15 statements is quite different than the information that
16 is used to -- to derive a fair value accounting
17 statement, and some might say less reliable because a
18 valuation is an opinion, whereas historical cost
19 accounting you can, you know, point back to the invoices
20 or whatever that you had in order to pay for the asset in
21 the first place. So there is quite a difference between
22 those two (2) basis of accounting.

23 MR. ANTOINE HACAULT: Okay. If we accept
24 for a moment that utility regulation is a proxy for
25 competition because there's no competition, and if this

1 were a public company owned in a private setting and
2 needed to get financing somewhere, might it be a question
3 that the financial institutions ask, What are your assets
4 really worth, as opposed to the net book value?

5 MR. DARREN RAINKIE: I suppose it might
6 be a question in terms -- that they might ask. But I
7 think we were talking about the context of credit
8 ratings, and I think back to my experience, because I was
9 part of the Centra Gas Company many years ago, and all of
10 our financial statements were based on a historical cost
11 accounting basis, and that's what our credit ratings were
12 based on as well.

13 As well, you talk about the regulatory
14 construct. Well, most regulatory constructs work on
15 historical cost, it's enshrined in the -- in the
16 legislation itself.

17 So that's quite common for utilities to
18 use historical costs. And in our work on IFRS thus far,
19 I'm unfamiliar with any utilities that would, at least in
20 Canada, that would move to a fair value basis in terms of
21 both their book -- for book purposes, or financial
22 statement purposes, or for regulatory purposes.

23 MR. ANTOINE HACAULT: And maybe the
24 reason why it isn't as important for Manitoba Hydro it's
25 be -- is because it's got the backing of the province of

1 Manitoba, so it really wouldn't be important to know
2 whether your assets are worth another 5 or \$6 billion
3 more than the net book value.

4 Is that correct?

5 MR. DARREN RAINKIE: I'm not sure I
6 hundred percent agree with the presumption that the --
7 that the guarantee is a really big thing in this
8 equation. To me, it's more about the reliability of your
9 financial statements and what you're using them for. I'm
10 not sure the guarantee -- I'm following you in terms of
11 what the guarantee means here.

12 Obviously, as we stated yesterday, the
13 credit rating that Manitoba Hydro uses is a flowthrough
14 of the province, so that's the credit -- that's what the
15 credit rating of Manitoba Hydro is based on as a plo --
16 flowthrough of the province. So I'm not sure
17 understanding what the fair market value of Hydro's
18 assets are adds to the equation.

19 THE CHAIRPERSON: Mr. Rainkie, on that
20 point, when you're looking at the fair market value of
21 the assets, wouldn't you have to include the -- the
22 income stream? And the difficulty that you have is that
23 you are rate regulated basically on a cost basis, and
24 what you get is based on the depreciated cost of the
25 assets? You'd have to move into a different arena to

1 have a different income flow?

2 MR. DARREN RAINKIE: That's right.
3 Usually -- as I was saying, evaluation isn't an opinion.
4 It's a forward looking calculation of what -- what this
5 kind of value of the earning stream is. And if you're
6 limited to earning on your net book value, then yeah,
7 having some higher amount may not make any sense.

8 THE CHAIRPERSON: You're not in the same
9 situation as Alberta or Saskatchewan with oil or gas,
10 where it doesn't really matter how much they produce it
11 for, it's the -- it's the market price.

12 MR. DARREN RAINKIE: Yeah, I don't think
13 we're in the same situation as -- as that. I agree.

14

15 CONTINUED BY MR. ANTOINE HACAULT:

16 MR. ANTOINE HACAULT: Thank you both for
17 clarifying that aspect of it.

18 So that for rate regulation, there's a
19 certain perspective which may be adopted to -- if,
20 however, with respect to the debt equity ratio, if we
21 found another \$5 billion of value in the assets, then the
22 debt equity ratio would substantially change, would it
23 not?

24 MR. DARREN RAINKIE: Numerically it
25 would, but I think we'd have the same conundrum as the

1 Chairman just went through, is -- is what is -- what
2 income flow do you have to substantiate that higher
3 value.

4 MR. ANTOINE HACAULT: Nonetheless, if
5 somebody came to decide whether or not you had the assets
6 to back your requested borrowings, they would look at
7 income plus the assets.

8 It would be a combination of both, would
9 it not?

10 MR. MANFRED SCHULZ: Typically when
11 entities are looking to take on investments relative to
12 our borrowings, credit ratings similarly so, and they're
13 looking at our financial structure, capital structure,
14 they're heavily fixated on cash flow, and so they're
15 looking at, as Mr. Rainkie indicated, the -- the cash
16 streams, if you will, that are generated by our assets.
17 The actual value numerically of the assets, either
18 described through historic costs or fair valuing,
19 wouldn't necessarily affect the actual cash flow
20 structure that would be important for any debt servicing
21 costs that would be arising out of any debt that would be
22 borrowed.

23 MR. ANTOINE HACAULT: And I guess that's
24 why we see in some of the reports that one (1) of the
25 very favourable things that Manitoba Hydro has on its

1 side is the extremely low rates that it would have in an
2 -- a fairly wide margin compared to the market generally
3 to increase the rates and increase its revenues.

4 It's just because we're doing -- providing
5 hydro at cost for Manitobans that the rates are where
6 they are, isn't that correct?

7 MR. MANFRED SCHULZ: Well, in part,
8 actually on this tab you can see a reference to that
9 exact same point by DBRS. So on page 38, under "Rating
10 Considerations, Strengths [2]".

11 MR. ANTOINE HACAULT: So you'll agree
12 with me then, sir -- I don't think we've had a response
13 to that yet -- that, given these low rates, and that in
14 all likelihood the Manitoba Hydro legacy generation have
15 a higher value than the book value, that could be an
16 important consideration if we came to the market to get
17 extra money.

18 MR. MANFRED SCHULZ: Well, I think the --
19 the point that DBRS would be making, and I think we have
20 made that similarity so, is, you know, and I'll just
21 quote it on -- it's considered a strength by DBRS. It
22 may be the legacy, as you described it, but, you know, it
23 says:

24 "The low-cost hydro-electric base
25 generating capacity accounts for

1 approximately 91 percent [blah-blah-
2 blah-blah]."

3 And then the next sentence says:

4 "This gives the utility the flexibility
5 to increase rates in the future."

6 And so that is considered to be a strength
7 in this context for the rating bodies that look at
8 Manitoba Hydro.

9 MR. ANTOINE HACAULT: Thank you. It's
10 not the end of the world, I would suggest; it's one (1)
11 of the criteria. Because if we're looking at a 75:25
12 ratio and all of a sudden we found \$5 billion more of net
13 worth because the assets are undervalued, then we
14 shouldn't, in fairness, say, Oh, well, we just have an
15 undepreciated value of 'X' amount, so therefore we can --
16 our borrowings are limited to that amount.

17 MR. MANFRED SCHULZ: Yeah, I'm not sure
18 that I exactly follow. I -- I think, at the end of the
19 day, the -- the people who'd be buying our bonds would be
20 seeing if there's enough cash-flow to pay for the stream
21 of coupon payments that they would be expecting. How we
22 actually definitionally defined the value of our assets,
23 I think would be almost -- I mean, it would be of
24 interest to them, but I -- I don't think that it would be
25 hugely material to them in terms of whether or not they

1 should buy the bond or not.

2 THE CHAIRPERSON: Mr. Hacault, I don't
3 know if this would be helpful to you or not, and I'm
4 certainly not giving evidence, but I'm just repeating
5 history, and if I'm wrong, Manitoba Hydro can correct my
6 misunderstanding.

7 But when Manitoba Hydro acquired Centra
8 Gas, certain adjustments were made in the financial
9 statements: increased value was attributed to the fixed
10 assets; there was income taxes that were put on the
11 books; and then a good val -- goodwill value was put in.
12 But because Centra was a regulated entity, okay, the --
13 there was no net effect to the ratepayers, because the
14 regulator held their net income to the same level it was
15 when it was previously valued under the prior owner,
16 which is sort of a significant difference than if we want
17 to call it the free market and -- and retail stores or
18 manufacturing plants.

19

20 CONTINUED BY MR. ANTOINE HACAULT:

21 MR. ANTOINE HACAULT: Thank you. And I
22 wasn't suggesting that, because there was an increased
23 market, a different value on the assets than the book
24 value, that it should affect rates. In fact, Mr. Schulz,
25 am I correct in understanding that if Manitoba Hydro had

1 chosen to go to a reevaluation model, that the increase
2 in value reflected by the difference between the market
3 value and the net book value would be credited to other
4 comprehensive income and accumulated in equity?

5 MR. DARREN RAINKIE: I think that's
6 consistent with my understanding as well, that -- that
7 would go into an unrealized account.

8 MR. ANTOINE HACAULT: The next thing I
9 have a question -- and this is just for my own
10 edification, I guess. As I understood, some of the
11 updated reports on the international fin -- financial
12 reporting standards -- there were two (2) of them by
13 Manitoba Hydro filed in this proceeding -- is that
14 initially, back in February of 2010, there wasn't a
15 decision that Manitoba Hydro would elect to deem its net
16 book value on transition.

17 Is that correct?

18 MR. DARREN RAINKIE: That's correct. I
19 think if the -- that came a few months later after that.

20 MR. ANTOINE HACAULT: So, by now, there
21 is a decision that Manitoba Hydro won't go with the other
22 option of revaluation; it will go with the net book
23 value?

24 MR. DARREN RAINKIE: Yes, that's the path
25 that we're heading down. That election is one (1) thing

1 we actually got out of the deliberations of the
2 International Accounting Standards Board over the last
3 year.

4 MR. ANTOINE HACAULT: Now, one (1) thing
5 I don't quite understand, and it probably is totally
6 insignificant to this hearing, but what's reported by
7 Manitoba Hydro is that this will require that the
8 accumulated depreciation be set to zero.

9 MR. DARREN RAINKIE: That's correct.

10 MR. ANTOINE HACAULT: So if we have \$5
11 billion of accumulated depreciation when we start this
12 new accounting, we put that number at zero and start our
13 books again with a net book value, and then start
14 depreciation based on that net book value.

15 Is that correct?

16

17 (BRIEF PAUSE)

18

19 MR. DARREN RAINKIE: That's what would
20 happen on your balance sheet, yes. You would --
21 essentially the gross value of your assets would become
22 your net -- your net book value.

23 THE CHAIRPERSON: Mr. Hacault, if I could
24 interject again just in the means of being helpful here.
25 IFRS did provide that opportunity, okay, if you followed

1 along. And the -- the regulator, if you wanted, started
2 granting massive rate increases, okay, to recognise the
3 now value on the balance sheet, because you'd have higher
4 amortisation costs, et cetera, et cetera.

5 It would actually, in a sense, fit in with
6 the old RCM/TREE argument, which would argue that there's
7 no debt attached to that, so significant net income would
8 spin out of that. And, presumably, I recall the RCM/TREE
9 argument of years ago which sought electricity prices
10 that would be a fairer price signal in their view, okay?
11 The -- the access funds would be used for different
12 purposes.

13 And if I misunderstood any of this,
14 Manitoba Hydro can correct me. But I think the
15 significant thing there was the revaluation of their
16 assets sends -- or lacking a complete change in rate
17 regulation, would not improve their financial position.

18

19 CONTINUED BY MR. ANTOINE HACAULT:

20 MR. ANTOINE HACAULT: Mr. Schulz, can --
21 can you help us on that. If it's credited to other
22 comprehensive income and accumulated in equity, is it the
23 subject of depreciation?

24 MR. VINCE WARDEN: Mr. Hacault, maybe I
25 can respond. In just following up on the Chairman's

1 comments, yes, it would def -- definitely if we re --
2 revalued our assets to what they're worth -- and I think
3 we said they're worth many multiples of what we got on
4 the books right now -- that revaluation would go into
5 equity and would improve the debt-equity ratio for sure.
6 But then we would be applying for rate increases based on
7 a much higher amortization. So we would have to get
8 massive rate increases in order to cover off the
9 amortization of -- of that higher book value. I don't
10 think that's in the interest of anybody.

11 And that's one (1) of the reasons why no
12 utility in Canada is adopting the method of reevaluating
13 assets; it just doesn't make sense.

14 THE CHAIRPERSON: You do insure it though
15 for the replacement value, in a sense?

16 MR. VINCE WARDEN: I'm -- I'm sorry?

17 THE CHAIRPERSON: You self-insure. I
18 remember this debate from several hearings ago, and I'm
19 just trying to remind myself. There was a discussion --
20 like, the reality is, to replace those assets, like you
21 say, it would cost significantly more. So if disaster
22 befell and a plant went down through whatever, fire,
23 whatever, how would you replace those assets? Would it
24 be through insurance, catastrophe insurance --

25 MR. VINCE WARDEN: Well --

1 THE CHAIRPERSON: -- that I believe you
2 carry?

3 MR. VINCE WARDEN: Well, we -- we do --
4 we do carry insurance for that. If -- if there is some
5 kind of a major disaster, we have -- we have insurance.
6 So we -- we do self-insure up to a certain limit, then
7 over that limit the insurance would kick in.

8 MR. ROBERT MAYER: Mr. Warden, I -- I
9 suppose we -- if we're talking about risk, if for some
10 reason or another you lost the four (4) dams on the lower
11 Nelson -- I think there are only three (3) right now --
12 after you build Conawapa you lost the four (4) of them,
13 would there be an insurance company in the world that can
14 put up that kind of money?

15 MR. VINCE WARDEN: I think --

16 MR. ROBERT MAYER: With the possible
17 exception of BP Oil?

18 MR. VINCE WARDEN: I think insurance
19 companies have ways of pooling their risks such that if
20 there was a major disaster, like a dam burst, that there
21 would be a provision for that. I don't have at my
22 fingertips our insurance provisions, but there is a --
23 there is a disaster provision within our policies that
24 cover us off in -- in the event of a -- a major dam
25 failure.

1 MR. ROBERT MAYER: What -- what I think
2 I'm concerned about is: Does it have a top end limit, or
3 does it have a relatively high -- I was led to believe it
4 had a relatively high deductible before you get to
5 collect anything from an insurance company.

6 MR. VINCE WARDEN: I believe it has a --
7 quite a high -- very high deductible, actually, but --
8 before the insurance would kick in, but they're -- it
9 might be good for us to bring some details of that. If
10 you're interested, I can -- I can perhaps take an
11 undertaking to summarize that.

12 MR. ROBERT MAYER: Yeah. That does
13 appear to be a risk issue, at least as far as I'm
14 concerned.

15 MR. VINCE WARDEN: No. No, it's not a
16 major risk issue for Manitoba Hydro.

17 THE CHAIRPERSON: The divergence into
18 this area is actually kind of interesting. Thank you,
19 Mr. Hacault.

20 I mean, you've got -- you have two (2)
21 risks, don't you? The number 1 risk, of course, is just
22 replacing the asset, which could be a significant cost,
23 but the other risk is the, if you want to call it what
24 they would call in the field "business interruption
25 insurance," because you would have to, of course, import

1 vast amounts of power to replace the power that you would
2 have normally would have been producing at a lower cost.

3 MR. VINCE WARDEN: Yes, and that's why we
4 identify the number 1 risk actually ranking ahead of
5 drought is infrastructure risk, for that very reason.

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: So just to clarify
9 then, if this is comprehensive income on reevaluation,
10 comprehensive income, according to IFRS, requires a
11 depreciation?

12 MR. DARREN RAINKIE: Yes, if you're going
13 to increase the value of your assets on your books,
14 correspondingly you're going to have to increase your
15 depreciation. It just follows.

16 MR. ANTOINE HACAULT: And that's an
17 accounting matter, as opposed to a rate regulation
18 matter?

19 MR. DARREN RAINKIE: It's an accounting
20 matter, but usually rate regulation I guess follows the
21 depreciation rates that are set for accounting purposes,
22 as well. It doesn't have to be the same, but I think
23 usually they're one (1) in the same.

24 MR. ANTOINE HACAULT: With respect to the
25 reports by Moody's, DBRS, and Standard & Poor's, does

1 Manitoba Hydro get to review the drafts of the reports
2 before they're published?

3 MR. VINCE WARDEN: Yes.

4

5 (BRIEF PAUSE)

6

7 MR. ANTOINE HACAULT: So for each of the
8 -- each of the reports that has now been produced before
9 the Board, Manitoba Hydro would have had an opportunity
10 to look at and correct any issues, or confirm any issues?

11 MR. VINCE WARDEN: Well, the rating
12 agencies want to -- as is typical with any consultants
13 that we hire, they want to ensure that they haven't
14 misinterpreted some data that we provided to them, or
15 that they haven't made some error in how data is being
16 presented in their reports. They aren't usually
17 receptive to editorial-type comments, though. In fact,
18 they -- they're quite unresponsive to that. So it's
19 mainly arithmetical-type errors that they want to make
20 sure don't slip through on their reports.

21 MR. MANFRED SCHULZ: The only other
22 comment I'd make is that, for confidentiality, they put
23 that caveat in their review, too, to make sure not only
24 the -- the accuracy of information, but to make sure
25 there's no confidential information that may be

1 distributed through the rating reports.

2 MR. ANTOINE HACAULT: Does that review
3 process of -- also involve somebody from -- a
4 representative from the province of Manitoba, given that
5 it's a Crown-owned utility?

6 MR. MANFRED SCHULZ: The credit rating
7 reports to Manitoba Hydro are reviewed by Manitoba Hydro,
8 the credit rating reports to the province would be
9 reviewed by the province. And, to the degree that there
10 is Manitoba Hydro involvement in those provincial credit
11 rating reports, they -- you know, we see the draft there,
12 too, in case they misrepresent or, you know, have some in
13 -- inaccuracies with respect to Manitoba Hydro
14 information.

15

16 (BRIEF PAUSE)

17

18 MR. ANTOINE HACAULT: Now, upon reviewing
19 the IRs, I notice that Manitoba Hydro declined to provide
20 reasons for setting the 75:25 target in documents used to
21 set that target in 2002, 2004, and 2008. Has the
22 reasoning changed at all as -- as to why that target was
23 set, and why is it not relevant to know the origin and
24 the reasoning behind setting that ratio?

25 MR. VINCE WARDEN: Could you give us a

1 reference, Mr. Hacault, where we declined to provide that
2 information?

3 MR. ANTOINE HACAULT: It was in response
4 to CAC/MSOS around -- I think it's 101A and B. That's
5 what my note indicates.

6

7 (BRIEF PAUSE)

8

9 MR. ANTOINE HACAULT: All I'm more
10 interested in is to know: Has any of the reasoning or
11 philosophy behind it changed and is -- is there any
12 reason why the discussion with respect to when that was
13 initially set is no longer relevant?

14 MR. VINCE WARDEN: Well, as we discussed
15 earlier, Mr. Hacault, the conditions change over time,
16 and the appropriate level of equity relative to debt is a
17 judgment matter, what is -- what represents an
18 appropriate financial structure for a Crown-owned
19 utility, and the -- the ratio that we've settled on as
20 being appropriate to us today is 75:25, but that doesn't
21 necessarily mean that it won't change as conditions --
22 conditions change.

23 MR. ANTOINE HACAULT: I think your
24 counsel wanted to draw your attention to something.

25

1 (BRIEF PAUSE)

2

3 MR. ANTOINE HACAULT: Sorry, it was Round
4 2, 101.

5 MR. VINCE WARDEN: We just don't
6 typically decline to provide that type of information, so
7 we just wanted to -- if nothing turns on that, then maybe
8 we'll -- if you want to move on, that would be fine.

9 MR. ANTOINE HACAULT: As I understood the
10 IR was -- the purpose was to discover the reasoning and
11 the rationale of Hydro in -- in wanting to maintain that
12 level. And there was a request -- it say -- well, it was
13 initially set in 2002. Presumably the Manitoba Hydro-
14 Electric Board and some people there decided and came to
15 some reason as to why that was the number they wanted to
16 have, and I know it's been the subject of some discussion
17 at prior hearings.

18 I think your counsel may have found that
19 now.

20

21 (BRIEF PAUSE)

22

23 MR. ANTOINE HACAULT: I guess, first, are
24 my notes correct in recalling that the response was that
25 it wasn't relevant?

1 MR. VINCE WARDEN: Yes, that's
2 essentially the answer. We did respectfully decline to
3 provide the requested documents. And -- and the request
4 was that a copy of all the analysis that was conducted
5 with respect to the setting of those targets. And I
6 think the an -- the response was that, you know, since
7 these targets were established back in 1995, that really
8 there wasn't a lot of relevance to reproducing all of the
9 documents that went into -- into the determination of
10 that ratio.

11 But, you know, I can -- I can just repeat
12 what I said earlier, is that it is a matter of judgment,
13 and that judgment was na -- made initially by the
14 Manitoba Hydro Board and ultimately accepted by this
15 Board.

16 MR. ANTOINE HACAULT: With respect to the
17 revised one though, the 75:25, except we won't hold that
18 debt equity during major capital construction, was that
19 the subject of a report and an analysis to the Manitoba
20 Hydro-Electric Board?

21 MR. VINCE WARDEN: Well, it would have
22 been based on a forecast that showed the debt-equity
23 ratio deteriorating over the -- the decade of investment,
24 and so a recommendation would have been made to the
25 Manitoba Hydro Board that that was acceptable given the

1 circumstances, and that would have -- obviously it was
2 accepted by the Manitoba Hydro Board.

3 MR. ANTOINE HACAULT: My question was
4 more detailed than that though, Mr. Warden. Was there a
5 report and analysis on that issue which was considered by
6 the Board? That's different than here it is in the IFF,
7 it's going down, we'll adopt the IFF. My question is
8 more specific.

9 Was there a report and analysis by people
10 who would be knowledgeable in the area on that specific
11 issue?

12 MR. VINCE WARDEN: There was no detailed
13 report. It was, again, based on judgment of people that
14 are -- have experience in such matters. I'm speaking of
15 people on the audit committee of the Board of Manitoba
16 Hydro that are qualified -- qualified to make those
17 decisions or -- or recommendations to the Manitoba Hydro
18 Board.

19 They would have been presented with the
20 integrated financial forecast. The forecast based on all
21 the assumptions that were -- were in that forecast showed
22 a deterioration of the debt-equity ratio over the ensuing
23 -- ensuing ten (10) year period, and a recommendation
24 would have been made that that was, under the
25 circumstances, acceptable. That recommendation was

1 accepted.

2 And so it -- it -- you're -- if you're
3 looking for details, it's no more detailed than that, Mr.
4 Hacault. There is judgment involved.

5 MR. ANTOINE HACAULT: Okay. So am I to
6 gather then that there was no actual discussion or
7 specific decision by the Manitoba Hydro-Electric Board on
8 that issue. The decision was made indirectly as a result
9 of the recommendation to accept the IFF and the ratios
10 that were going to be achieved during that time period.

11 MR. VINCE WARDEN: Yes. Financial
12 targets are approved as an integral part of the
13 integrated financial forecast process.

14 MR. ANTOINE HACAULT: So to clarify, it
15 wouldn't have been an agenda item that would have been
16 considered by the Board specifically. Agenda item 75:25
17 varied to 75:25 doesn't have to be met during major
18 capital projects. That wouldn't have been the subject of
19 a specific discussion.

20 MR. VINCE WARDEN: Well, there would have
21 been an agend -- or a recommendation made to the Board
22 just as you outlined. The Board would have considered it
23 and approved it.

24 MR. ANTOINE HACAULT: I'm not too sure
25 what that answer communicates to me. Was it an agenda

1 item that was specifically discussed, or was it discussed
2 in the context of IF -- here's the IFF, and implicitly
3 because they accepted the IFF they accepted that new
4 target?

5 MR. VINCE WARDEN: No. I'm sorry, I
6 thought I did answer that. There would have been a
7 recommendation. So by a recommendation, that's a
8 specific agenda item, saying, Please approve targets such
9 that they won't -- re -- with the realization they may
10 not be achieved during the major additions to capital to
11 fixed assets during the period of investment -- decade of
12 investment.

13 So, yes, there would have been a specific
14 agenda item, which would have been consciously
15 deliberated on by the Board, and a decision would have
16 been made.

17 THE CHAIRPERSON: Mr. Hacault, what --
18 you're basically asking whether or not there's a
19 discussion paper that dis -- reviews the issue of debt-
20 equity ratios, and concludes with a recommendation to the
21 Board, or starting maybe with the audit committee, that
22 during times of significant new investment the rules
23 should be relaxed somewhat. That's what you're after,
24 isn't it?

25 MR. ANTOINE HACAULT: I was after that.

1 I understand Mr. Warden's question to indicate to me that
2 that report does not exist. That -- but that it was the
3 subject of an agenda item.

4 The reason for my questioning is I wanted
5 to gain some insight as to the thought process of
6 management leading to a decision by the Board and
7 recommendations on -- on why that was an appropriate
8 amendment to the target.

9 THE CHAIRPERSON: Well, it is -- it --
10 it's quite an interesting, actually, issue. I mean, the
11 debt-equity ratio of the Corporation and it's
12 relationship to rate setting is no doubt significant and
13 tied. And actually it follows up on some of the other
14 things that you were -- you're -- you were asking. I'm
15 going to call for a short break so we can all think about
16 this for a little while, but I -- I've got a couple of
17 comments first, if you don't mind.

18 Again, I'm not giving evidence, but we --
19 we read, we attend conferences, and we have certain
20 understandings, and Board members, just like you and --
21 and others in the audience, have attended seminars put on
22 by people that involved people from investment banks and
23 things like that.

24 It's my general understanding that if
25 you're a private utility company operating in Canada, and

1 you don't have a government debt guarantee backing you,
2 debt-equity ratio that's going to give you a P1
3 (phonetic) is going to have to be -- look like something
4 like 60:40.

5 Is -- does that sound reasonable?

6 MR. VINCE WARDEN: Yes.

7 THE CHAIRPERSON: Okay. And following
8 back to Mr. Hacault's question before, when he was
9 talking about fair market value and just meditating on
10 the thought as the debate went on, he has a point in a
11 way in a sense, and I'll just test it out.

12 For example, if like Centra Gas was sold
13 from West Coast to Manitoba Hydro, I think that's -- was
14 -- was -- it was West Coast, wasn't it?

15 MR. VINCE WARDEN: Yes, it was.

16 THE CHAIRPERSON: Yeah. Well, if
17 Manitoba Hydro, for example, was sold, and sold at, as
18 Mr. Hacault puts it, fair market value to a private
19 concern, presumably that concern, IFRS would allow that -
20 - the -- the assets to be written up to fair market value
21 with no accumulated depreciation attached to it.

22 Amortization presumably at that point
23 would soar, and presumably, if that entity was intending
24 to carrying on with the decade of investment and -- and
25 borrow money, amortization and interest costs would

1 accrue, it would be a taxable entity, and even on a cost-
2 based regulation period, an application could be made to
3 a regulator for significantly higher rates, is that not
4 true?

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

7 THE CHAIRPERSON: There's been a lot of
8 heavy thoughts. If you don't mind, Mr. Hacault, we're
9 just going to take a -- a short -- we'll take our
10 afternoon break now. Thank you.

11

12 --- Upon recessing at 2:13 p.m.

13 --- Upon resuming at 2:34 p.m.

14

15 MR. ANTOINE HACAULT: Thank you, Mr.
16 Chairman, members, Mr. Vice-Chair, all present.

17

18 CONTINUED BY MR. ANTOINE HACAULT:

19 MR. ANTOINE HACAULT: Turning to Tab 8, I
20 believe I had -- oh, no, this is something added to my
21 binder specifically. But with respect to this equity or
22 reserve, in the event of a drought, that amount of
23 shortfall that we've been talking about gets borrowed, is
24 that correct, to the extent we can't absorb it in net
25 income?

1 So in a year of drought, and say there's a
2 negative variance -- let's pick a number of \$500 million
3 -- to the extent you can't absorb that through the net
4 income because there's -- you may have, in a normal year,
5 had a -- a hundred and some thousand dollars of net
6 income, you would have to go and borrow money.

7 MR. VINCE WARDEN: Well, Mr. -- Mr.
8 Hacaault, we're talking a bit of an accounting issue, but
9 essentially any costs would flow through the income
10 statement. So the cost of drought would be reflected in
11 the income statement, regardless of the amount. So net
12 income would definitely be affected negatively by a
13 drought. Cash -- how we generate cash, how we fund our
14 operations -- is -- is a -- a different matter, though.

15 So we look at all of our requirements for
16 the year, both capital and operating, take into account
17 the amount of cash that's being generated internally from
18 internal sources, and then go to the market for the
19 difference, essentially. So because drought would reduce
20 the amount of cash that we have available, it would
21 increase the -- the borrowing, but it might not be a one
22 (1) for one (1) relationship. It would depend on what
23 else might be going on at the time.

24 MR. ANTOINE HACAULT: I can understand
25 that. So in the immediate term at least, to the extent

1 that you have additional borrowings, the effect on --
2 immediate effect on your cashflow is the increased burden
3 of additional interest?

4 MR. VINCE WARDEN: Yes. Increased
5 borrowings result in interest costs, yes.

6 MR. ANTOINE HACAULT: That's helpful,
7 because for somebody like me who didn't have an
8 accounting background when I started this thing, I said,
9 Oh, my God, we're going to have a 5 mil -- \$500 million
10 loss. We're going to have to get it all out of rates.
11 But that \$500 million, it's borrowed, and eventually we
12 want to -- to get our debt-equity back in line, but the
13 next year of the drought we don't have to repay all of
14 that borrowing.

15 MR. VINCE WARDEN: That's right.

16 MR. ANTOINE HACAULT: Now, with respect
17 to the ratings of Manitoba Hydro, is there any statement
18 by any of the raters that they consider the sinking fund
19 contributions by Manitoba Hydro as a strength or a major
20 rating issue?

21 MR. MANFRED SCHULZ: So just to be
22 specific, for the ratings of Manitoba Hydro-Electric
23 Board, certainly not Moody's nor DBRS. They make no
24 reference to sinking funds being a strength. And with
25 respect to S&P for MHEB, just looking at Tab 8, and I

1 believe this credit rating report, dated -- yeah, dated
2 November 2008 does not make any reference to sinking
3 funds. The sinking fund references that S&P does make
4 are in the credit rating reports for the province of
5 Manitoba, which are not included in amongst the package
6 that you see here.

7 MR. ANTOINE HACAULT: I think they may be
8 later, but not -- not in this tab. Now, with respect to
9 the ratings of the province of Manitoba, am I right in
10 understanding that those ratings have increased, at least
11 with respect to some of the raters, over the last years?

12 MR. MANFRED SCHULZ: Depends how far back
13 you go, Mr. Hacault. I think in recent times the ratings
14 have been fairly stable for the province of Manitoba.

15 MR. ANTOINE HACAULT: I thought I had
16 read somewhere that as late as the present rating of Aa1
17 was 2009, and before that it was Aa2 in 2006, and I think
18 Aa3 in 2003.

19

20 (BRIEF PAUSE)

21

22 MR. MANFRED SCHULZ: Just looking at your
23 Tab 9, page 78, for rating history, the province of
24 Manitoba, Moody's.

25 MR. ANTOINE HACAULT: Obviously my

1 memory's not very good, but there was a change. So it
2 was the September of '98 it was Aa3; January 2003, Aa2;
3 and November 6, Aa1. So there's been a progressive
4 increase in the last decade or so?

5 MR. MANFRED SCHULZ: Correct.

6 MR. ANTOINE HACAULT: Now, with respect
7 to the discussion of Manitoba Hydro in this Moody's
8 report that you've referenced at page 75 of the book of
9 documents in Tab 9. So Tab 9, page 75. Have you located
10 that?

11 MR. MANFRED SCHULZ: I think we have
12 that.

13 MR. ANTOINE HACAULT: Now, I just want to
14 draw attention to two (2) points. Firstly, this rater
15 concurs with the view of Manitoba Hydro, that it --
16 Manitoba Hydro, by virtue of its exports, has a natural
17 hedge against the US-Canadian currency fluctuation.
18 That's consistent with Manitoba Hydro's view, you said?

19 MR. MANFRED SCHULZ: I'm just trying to
20 find on the page where you would have read that, sir.

21 MR. ANTOINE HACAULT: Oh, it's the
22 heading immediately above where it says, "Significant
23 borrowing for Manitoba Hydro, but self-supported." In
24 the paragraph immediately above that there's a discussion
25 about Manitoba Hydro, by virtue of its exports of hydro

1 electric-power to the United States has a natural hedge
2 against the US-Canadian currency fluctuations.

3 MR. MANFRED SCHULZ: Yes, I see that.

4 MR. ANTOINE HACAULT: Is that a
5 discussion that's different than what you were explaining
6 to us earlier and the discussion that was happening
7 between the Chairman and Mr. Warden?

8 MR. MANFRED SCHULZ: The paragraph there
9 refers to two (2) items. One (1) is with the province of
10 Manitoba, excluding Manitoba Hydro. All of their debt is
11 eventually swapped back into Canadian funds. So they may
12 issue in US dollars, but they will immediately swap it to
13 Canadian so that their net effect is that they have
14 Canadian debt.

15 The only debt on the province of Manitoba
16 that is, in -- in their sense here, unhedged would be
17 Manitoba Hydro. However, as indicated here, Manitoba
18 Hydro has a natural hedge. So, yes, we would agree with
19 the information as described here.

20 There are two (2) different types of
21 hedging transactions here that the province, when they
22 issue, for instance, debt in the United States, they
23 would undertake a swap transaction so as that their net
24 effect would be that they would be as if they were paying
25 Canadian debt.

1 For us, because we want to have a natural
2 hedge of the US-dollar interest payments against the US-
3 dollar revenues, we don't take that last leg of the --
4 the swap transaction to bring it to the Canadian debt.
5 We leave it in US debt, and that paragraph is describing
6 that situation.

7 MR. ANTOINE HACAULT: Thank you. Could
8 you flip back to page 70 of that report? Page 70 should
9 have -- sorry, it's page 70 in the book of documents.
10 It's not page 70 of the Moody's report itself.

11 MR. MANFRED SCHULZ: I have that, and I
12 think that's actually from an earlier report. I think
13 that's a page from Moody's report on the province dated
14 January 25th, 2010.

15 MR. ANTOINE HACAULT: Correct.

16 MR. MANFRED SCHULZ: Yes, I have that,
17 sir.

18 MR. ANTOINE HACAULT: Could you indicate
19 to me whether there is anywhere on this table where I can
20 find reference to the rating given by this rating agency
21 to the indirect debt of the province of Manitoba in the
22 sense that it's guaranteeing the Manitoba debt -- or the
23 Manitoba Hydro debt?

24

25 (BRIEF PAUSE)

1 MR. MANFRED SCHULZ: Sorry. Moody's uses
2 a fairly complicated methodology, and they define that as
3 their baseline credit assessment, so sort of off the top
4 of my head I'm not familiar with all the nuances of their
5 methodology. However, just looking at it just quickly on
6 the surface of it, I would think that there is a score
7 that they attribute to it on -- under Factor 4 --

8 MR. ANTOINE HACAULT: Yeah --

9 MR. MANFRED SCHULZ: -- but I would have
10 to -- you know, subject to check on that again because,
11 again, I'm not immediately familiar with their
12 methodology.

13 MR. ANTOINE HACAULT: Okay. So if it
14 would be somewhere, you believe it would be which of the
15 three (3) items under Factor 4?

16 MR. MANFRED SCHULZ: Again, I -- I think
17 I would be hesitant to provide any of the analysis that
18 Moody's would have performed on that.

19 MR. ANTOINE HACAULT: Okay. But are --
20 just following up on that, is there any other factor
21 which you could identify, at least in a preliminary way?

22 MR. MANFRED SCHULZ: Well, I'm not sure
23 specifically what the question is there, Mr. Hacault.

24 MR. ANTOINE HACAULT: Okay. With respect
25 to the issue we were talking about, is there any other

1 factor in this baseline cra -- credit assessment related
2 to the guarantee of Manitoba Hydro's debt by the province
3 of Manitoba? You've identified four (4) -- Factor 4, but
4 in doing so, have you excluded each of the other ones?

5 MR. MANFRED SCHULZ: Again, I would be
6 hesitant to provide any kind of direct response to that.
7 I'm not -- I'm not sure how they -- the nuances of how
8 they would have performed their assessment, sir.

9 MR. ANTOINE HACAULT: Am I to take from
10 your responses, then, that you're unable to explain to me
11 what, if any, rating Moody's gives or what weighting
12 there is at all to Manitoba Hydro debt when evaluating --
13 evaluating the province of Manitoba?

14 MR. VINCE WARDEN: Mr. Hacault, this --
15 this is a rating of the province of Manitoba. Manitoba
16 Hydro's interest in reviewing these reports is only the
17 references directly to Manitoba Hydro. So we would not
18 typically get involved in any kind of discussion with
19 respect to the -- to the rating factors that you're
20 referencing on -- on page 70 of this document, so that
21 goes beyond what we would typically involve ourselves
22 with. This is -- this is the matter between the credit
23 rating agency and the -- and the province.

24 MR. ANTOINE HACAULT: But, members of the
25 panel, you see why I was asking the question because

1 there's been some suggestion that the province of
2 Manitoba rating is affected by its guarantee of Manitoba
3 Hydro debts, so I was looking to see if Manitoba Hydro
4 had any insight at all as to what that was and what the
5 basis for the statement which was previously made, that
6 Manitoba Hydro's debt is a consideration in the rating by
7 Moody's.

8 MR. VINCE WARDEN: Well, we -- we can't
9 really point you to a line or lines in these reports that
10 could -- that could say the extent to which Manitoba
11 Hydro's debt is a -- is a consideration by the rating
12 agencies. We do know, in discussions with -- with them,
13 though, that it is an important -- an important
14 consideration, and just logically, when -- when Manitoba
15 Hydro -- Manitoba Hydro's debt represents close to 35
16 percent of the total debt of the province, then it's --
17 it's reasonable to assume that it would have an impact on
18 the rating.

19 MR. MANFRED SCHULZ: And -- and just
20 further to that, actually on page 75, they reference that
21 in the Moody's report. So on page 75 of your book of
22 documents, halfway down on the page, under the title
23 "Significant Borrowings for Manitoba Hydro but Self-
24 Supported," you know:

25 "Roughly one-third (1/3) of the

1 province's total direct and indirect
2 debt is attributed to Manitoba Hydro
3 and is considered to be self-
4 supporting. This Crown Corporation's
5 ability to meet its own financial
6 obligations without recourse to the
7 province -- to the provincial subsidies
8 is a positive credit attribute to the
9 province."

10 So I think further to my comment on the
11 baseline credit assessments and further to what Mr.
12 Warden said on the quantification of how much the number
13 would be on the baseline credit assessment, I don't know
14 the magnitude of that or the nuances of how they
15 performed their assessment, but I think our -- our
16 representation here is that at one-third (1/3) of the
17 province's debt it stands to reason that we are a
18 significant contributor to the overall rating of the
19 province.

20 MR. ANTOINE HACAULT: And you get the
21 one-third (1/3) number if we go to page 79. Would that
22 be -- I think the numbers bear themselves out. At page
23 79 is the annual statistics, and there's a line on that
24 page, a coup -- about one-third (1/3) of the way down,
25 "Total Direct and Indirect Debt." Do I read that to be

1 the total direct and indirect debt of Province of
2 Manitoba?

3 And then, immediately under that line,
4 there's the Manitoba Hydro portion of that debt. Is it
5 by taking the ratio of those two (2) numbers that I get
6 the one-third (1/3) ratio?

7 MR. MANFRED SCHULZ: Yes, so that on that
8 line item, for instance, where it says "Per -- Percent of
9 Hydro Debt," working across that row to 2010F, which
10 presumably is forecast, you see thirty-three point one
11 (33.1).

12 MR. ANTOINE HACAULT: So at -- just --
13 has everybody found that line which Mr. Rainkie (sic)
14 referred to? Okay.

15

16 (BRIEF PAUSE)

17

18 MR. ANTOINE HACAULT: Could I ask you to
19 turn to Tab 10, and first to page 85.

20

21 (BRIEF PAUSE)

22

23 MR. ANTOINE HACAULT: I believe it's the
24 second page in at Tab 10, the bottom right-hand corner,
25 page 85. This is, as I understand it, the DBRS bond

1 rating for the province of Manitoba in 1991.

2 Would I be correct to understand that this
3 is what the document is purported to be? We got it from
4 one of the previous filings in rate hearings.

5 MR. MANFRED SCHULZ: I personally had
6 never cast eyes on it prior to seeing it in this book of
7 exhibits, but based on the headers and footers and the
8 information provided, I'm assuming that you would be
9 correct.

10 MR. ANTOINE HACAULT: So, once again, at
11 that point in time the Hydro Electric Board rating was a
12 flowthrough of the province of Manitoba rating? Is that
13 correct?

14 MR. MANFRED SCHULZ: I'm just looking at
15 the bottom of the page, your reference, page 85, and
16 would draw that conclusion based on the fact that they're
17 all rated 'A'. But I don't now if specifically it's
18 flowthrough, but I would imagine that would be the case.

19 MR. ANTOINE HACAULT: Thank you. Could
20 you now turn to page 87. And is there anything on that
21 page which would help us understand what proportion
22 Manitoba Hydro's debt was of the provincial debt at that
23 time?

24 I guess, to have the baseline the same,
25 we'd have to exclude Manitoba Telephone. Is that fair?

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(BRIEF PAUSE)

MR. MANFRED SCHULZ: I think the -- the calculation that we would be looking at, for instance, for the 1990 year --

MR. ANTOINE HACAULT: Yes. Could you bring me through that calculation.

MR. MANFRED SCHULZ: -- would be thirty-nine twelve (3,912) divided by eleven three ninety-nine (11,399). And I see Mr. Warden's nimble fingers at work.

MR. ANTOINE HACAULT: Has that included or excluded the telephone debt?

MR. MANFRED SCHULZ: That would be excluding. I think you would just be looking at Manitoba Hydro as a function of the total public sector debt. And I'm calculating 34 percent.

MR. ANTOINE HACAULT: And that's with the Manitoba telephone debt included in the total debt?

MR. MANFRED SCHULZ: Correct.

MR. ANTOINE HACAULT: Could you do the calculation again but excluding the Manitoba telephone debt?

MR. MANFRED SCHULZ: Thirty-six point

1 five (36.5).

2 MR. ANTOINE HACAULT: So at least that
3 proportion has remained fairly consistent through -- from
4 1991 to date. Are we in agreement with that?

5 I mean, there's a variation of a couple
6 percentages. It was a bit higher than, but not
7 significantly higher. Is that correct?

8 MR. MANFRED SCHULZ: It would appear to
9 be the case.

10 MR. ANTOINE HACAULT: I guess the
11 elephant in the room, so to speak, is that Conawapa and
12 Keeyask, we don't know for sure, but may change that debt
13 ratio, depending on what the total provincial debt is
14 when those units are in service.

15 Is that correct?

16 MR. MANFRED SCHULZ: I'm not sure if
17 that's the elephant in the room, but I remember being
18 asked that question on day 3 in the testimony, and -- and
19 I indicated, I think, at that time that I'd be hesitant
20 to provide any kind of thought about what that number
21 would be, moving into the future.

22

23 (BRIEF PAUSE)

24

25 MR. ANTOINE HACAULT: I'd like to move to

1 the next subject matter, which is sinking funds.

2 Now, as it relates to Manitoba Hydro,
3 could you please me with a short definition, for the
4 record, of what the sinking fund is in this particular
5 instance, as it relates to Manitoba Hydro being required
6 to do so by the province of Manitoba.

7 What -- what kind of animal are we talking
8 about? If you had to describe it to a dumb lawyer like
9 me, what would you say it is?

10 MR. VINCE WARDEN: Well, the intent of
11 the sinking fund was to set aside an amount each year
12 that would provide for the orderly retirement of debt in
13 accordance with the formula that's provided in the
14 Manitoba Hydro Act over a term of forty-one (41) years.

15

16 (BRIEF PAUSE)

17

18 MR. ANTOINE HACAULT: And when you say
19 the Manitoba Hydro Act, I've reproduced some portions of
20 it at Tab 15, there's a formula at page 136, Section
21 41(2), would this be the formula you're referring to, Mr.
22 Warden?

23 MR. VINCE WARDEN: Yes, it is.

24 MR. ANTOINE HACAULT: Okay. And that
25 formula starts at the very beginning, "Subject to

1 subsection 7," so if we flip to the next page, 41(7)(a)
2 provides that:

3 "The Lieutenant Governor in Council
4 may..."

5 "May," so it's discretionary.

6 "...direct that..."

7 And I'm skipping:

8 "...in the respect of any monies
9 advanced to or borrowed by the
10 Corporation, pursuant to Sections 31 or
11 32, no amounts need be reserved or set
12 aside as a sinking fund."

13 Has the cabinet ever exercised this
14 discretion to your knowledge?

15 MR. VINCE WARDEN: Not to my knowledge,
16 no.

17 MR. ANTOINE HACAULT: Has Manitoba Hydro
18 made a request to the cabinet that it exercise that
19 discretion?

20 MR. VINCE WARDEN: Not to my knowledge,
21 no.

22 MR. ANTOINE HACAULT: Now, I'd ask you to
23 flip back to page 107, which was an extract of the
24 submission made in the last rate application, as I
25 understand it, on behalf of MIPUG. But there's some

1 short references which are backed up by transcripts later
2 on at that same tab, with respect to statements which
3 were made during that hearing.

4 And I just would like to clarify whether
5 there's been any change in the position or the statements
6 since that hearing. So if I might lead you through a
7 couple of those statements, whoever in the panel wants to
8 respond to those questions.

9 The first exchange that occurred which I'd
10 like to refer to is at page 118 of the book of documents.
11 It's at line 19 of the transcript. It was Mr. Peters
12 asking you questions then, as I understand it. And do
13 you see the statement made from lines 19 to 23? And I'll
14 read it into the record:

15 "The sinking fund has served a purpose
16 in the past, and going forward that
17 purpose is properly -- probably not as
18 -- as useful as it was in the past, and
19 we -- we would look at the potential
20 for either eliminating or -- or drawing
21 it down to an absolute minimum."

22 Is there anything that's happened since
23 that hearing which would cause you to change your
24 testimony, Mr. Warden?

25 MR. VINCE WARDEN: No, that's

1 consistent with our position.

2 MR. ANTOINE HACAULT: And it continues to
3 be consistent today then, just for clarity?

4 MR. VINCE WARDEN: yes.

5 MR. ANTOINE HACAULT: Okay. And then
6 flipping onto the next page, there's another response by
7 you, starting at line 9 to 13, and I'd specifically draw
8 your attention to the portions at lines 11 to 13, and I'm
9 quoting for the record:

10 "The sinking fund doesn't play as large
11 a role as it did in the past, in the
12 terms of the hedging program."

13 Now, I'm not too sure, based on the
14 exchange that occurred this morning, whether that
15 continues to be true. Does it, Mr. Warden?

16 MR. VINCE WARDEN: Yes, that's still a
17 relevant statement.

18 MR. ANTOINE HACAULT: Now, I'd ask you to
19 flip to page 123 of the book of documents, and that's a
20 different area of the transcript. At that time you were
21 being asked questions by Ms. Tamara McCaffrey. And could
22 you take time to read the lines 1 to 7. And I appreciate
23 it wasn't you responding, Mr. Warden, or anybody on the
24 panel, but after reading that extract, and I'm quoting
25 from a part of the question leading to the response, as

1 follows:

2 "It did not see any negative impacts on
3 borrowing interest rates or access to
4 capital markets of removing the sinking
5 fund requirement."

6 And that was in relation to, I believe,
7 the British Columbia removal of that requirement. And
8 the response was:

9 "Yes, I'd agree with that."

10 Now, I'll just re-frame the question.
11 First, are you aware that the sinking fund requirement
12 was removed for BC Hydro?

13 MR. VINCE WARDEN: Yes.

14 MR. ANTOINE HACAULT: And are you aware
15 of any negative impacts on BC Hydro's borrowing, interest
16 rates, or access to capital markets, as a result of the
17 removal of the sinking fund requirement?

18 MR. VINCE WARDEN: No.

19 MR. ANTOINE HACAULT: And that remains
20 true, as of today?

21 MR. VINCE WARDEN: Yes.

22 MR. ANTOINE HACAULT: In the following
23 pages there's a discussion about what was then happening
24 between the government and Manitoba Hydro, related to the
25 removal of this requirement. And, as I understand it,

1 this ultimately led to some comments by this Board which
2 are included at Tab 16. So if you could move to Tab 16.

3 MR. ROBERT MAYER: You quoted from page
4 123, where you got an answer from Mr. Page. It appears
5 to be somewhat inconsistent with the answer Mr. Warden
6 gave to Ms. McCaffrey on page 124 of the book of
7 documents and transcript page 1,326. Mr. -- at line 13,
8 Mr. Warden says:

9 "Well, Ms. McCaffrey, our evidence is
10 that the sinking fund is used -- has
11 served a useful purpose in the past and
12 it continues to serve a useful
13 purpose."

14 That sounds a little different than what
15 Mr. Page said. What is your view, Mr. Warden?

16 MR. VINCE WARDEN: No. Yeah, I think you
17 probably have to read the whole thing, I -- but I don't
18 think we're contradicting at all, actually. I think
19 elsewhere, and I'd have to find the exact location, where
20 I indicated that with changes in accounting requirements,
21 it -- it's not serving as useful a purpose as it did in
22 the past -- and -- yeah, that's on page 124, actually --
23 and that we go on to say at the opportune time we would
24 look to eliminating the sinking fund.

25 So, yeah, no, I think those statements

1 made by the Manitoba Hydro panel were totally consistent.

2 MR. ROBERT MAYER: Well, all right, let's
3 go to the stuff in-between.

4 MR. VINCE WARDEN: Okay.

5 MR. ROBERT MAYER: How would you know if
6 the date was an opportune time? And then you go to the
7 statement:

8 "It's still serving a useful purpose."

9 Does it still serve a useful purpose, Mr.
10 Warden, today?

11 MR. VINCE WARDEN: Yes. Yes, it is, but
12 diminishing, and that's why we've drawn down the sinking
13 fund, which was at the start of 2000 and -- well, around
14 2000/2001 it was up around 1.5 billion; now it's
15 approximately 200 million. So we've been drawing that
16 sinking fund down very significantly, and we're on the
17 verge now of -- of eliminating the sinking fund. So the
18 opportune time has arrived.

19 MR. ROBERT MAYER: Mr. Warden, this mor -
20 - as late as this morning, we heard about how the sinking
21 fund forms part of your --

22 MR. VINCE WARDEN: Exposure management
23 program.

24 MR. ROBERT MAYER: -- exposure management
25 program, in response to the Chair's questions on -- on

1 your value of the -- relative value of the Canadian
2 dollar. I'm getting confused now, sir.

3 MR. VINCE WARDEN: Well -- and sorry, I
4 don't -- it is a little bit complicated, and I certainly
5 don't mean to confuse you.

6 But, as I mentioned, we are drawing that
7 down. There is an amount left in the sinking fund of
8 approximately \$200 million that relates entirely to the
9 exposure management program. As those -- as those
10 related debt issues mature, they'll be matched up with
11 the sinking fund and the sinking fund will -- will
12 disappear, in effect, assuming the province agrees with
13 that. It does have an impact on the amount of fees that
14 we pay to the province, so they may have something to say
15 about that.

16 But nevertheless, in terms of -- of the --
17 the sinking fund not serving a purpose is not -- not as
18 useful a purpose in the past, we're certainly on that
19 path to draw it down, and we -- we -- that's still our
20 plan today.

21 MR. ROBERT MAYER: So you're not making
22 any payments into the fund any longer?

23 MR. VINCE WARDEN: We -- our -- our
24 obligation is still to make payments into the fund, in --
25 in accordance with the statutory requirements. We've

1 been making those payments into the fund in -- with US --
2 for purposes of -- of refinan -- or repaying US debt
3 which -- when it matures.

4 So we've -- we've reached the point where
5 that doesn't -- isn't as applicable as it was in the
6 past, but until we change the legislation that statutory
7 requirement is still there. But, in effect -- and -- and
8 it's -- it's -- even though the statutory requirement is
9 there, we can put this -- make the payment into the
10 sinking fund one day and draw it out the next, so it's --
11 it -- not that we've done that, but there's nothing in
12 the legislation that really prevents us from doing that.

13

14 CONTINUED BY MR. ANTOINE HACAULT:

15 MR. ANTOINE HACAULT: Mr. Warden, if I
16 understood you correctly then, you're exercising prudent
17 fiscal management currently. And would it be correct to
18 suggest then, if there wasn't the mandatory statutory
19 requirement, you would continue to do whatever you
20 thought was appropriate to manage say, for example, the
21 US debt issue?

22 MR. VINCE WARDEN: Well, that's a very
23 good point, Mr. Hacault. We -- we might very well,
24 instead of having a sinking fund, we might have an
25 equivalent investment account that we would deposit US

1 funds into this investment account to provide for a debt
2 maturity, but the -- the difference would be -- would be
3 at whatever amounts we choose to be appropriate rather
4 than having to be mandated by -- by legislation.

5 MR. ANTOINE HACAULT: And is it your view
6 that your ability to exercise this discretion as Manitoba
7 Hydro would be beneficial to Manitoba ratepayers?

8 MR. VINCE WARDEN: Absolutely, yes.

9

10 (BRIEF PAUSE)

11

12 MR. ROBERT MAYER: If it does nothing
13 else, Mr. Warden, it would prevent us from having this
14 issue discussed at each and every future general rate
15 application.

16 MR. VINCE WARDEN: I thought everybody
17 liked talking about the exposure management program.

18 MR. ROBERT MAYER: I was talking about
19 the sinking fund.

20

21 CONTINUED BY MR. ANTOINE HACAULT:

22 MR. ANTOINE HACAULT: Just a couple quick
23 ones to give us the order of magnitude. Would it be
24 reasonable to expect that Manitoba ratepayers could save,
25 and this is at page 110, it was an interrogatory,

1 somewhere in the range of \$93 million over the -- an IFF
2 period?

3

4

(BRIEF PAUSE)

5

6 MR. VINCE WARDEN: You do have to put
7 that \$93 million into some context. The majority of that
8 is payments to the province, that is through the debt
9 guarantee fee. So, you know, if the province wasn't
10 getting this payment, they might choose to increase fees
11 elsewhere. Not that I would ever suggest that, but --
12 but that is a source of revenue for the province.

13 MR. ANTOINE HACAULT: So am I correct to
14 understand that actually this sinking fund is not
15 required in terms of borrowings; it is really at this
16 point in time only required as a result of the Act, and
17 you might not choose to do it as a term of borrowing?

18 MR. VINCE WARDEN: No, it's definitely an
19 integral part of our exposure man -- foreign currency
20 exposure management program today. It doesn't affect our
21 borrowings, but it -- it's a part of that management of
22 foreign debt.

23 MR. ANTOINE HACAULT: Maybe I didn't ask
24 that question correctly. When you borrow from a third
25 party, is it a condition that they impose that you have a

1 sinking fund?

2 MR. VINCE WARDEN: No. No, it's not.

3

4 (BRIEF PAUSE)

5

6 MR. ANTOINE HACAULT: Now, it may be that
7 you simply say you can't respond because there's cabinet
8 confidences, but is there -- there was an indication, or
9 some interest by the Board before making a decision the
10 last time, and I had drawn your attention to Tab 16 but
11 we got sidetracked, and I'm quoting from the last
12 paragraph on that page, which was a discussion by the
13 Board:

14 "Out of an abundance of caution, and in
15 light of the major capital expansion,
16 and related anticipated growth and debt
17 levels now planned, the Board will
18 recommend that Manitoba Hydro seek
19 independent advice, as well as advice
20 from the government and its current
21 rating agencies, as to the merits of a
22 possible elimination from the sinking
23 fund requirements."

24 Now, first, have -- have you, as Manitoba
25 Hydro, sought independent advice on this?

1 MR. VINCE WARDEN: No, we haven't, but it
2 was a recommendation of the Board. Really there's no
3 parties that think disagree with the direction we're
4 going, so there wouldn't be a lot of value to independent
5 advice at this stage.

6 MR. ANTOINE HACAULT: The second point
7 was advice from the government. Is there any merit in
8 pursuing that, or can you respond to that? You may not
9 be able to respond. I see your counsel shaking her head.

10 MS. PATTI RAMAGE: No. Mr. Hacault, you
11 -- you've anticipated that one correctly. Manitoba Hydro
12 isn't in a position to comment on its discussions with
13 the government.

14

15 CONTINUED BY MR. ANTOINE HACAULT:

16 MR. ANTOINE HACAULT: The last point of
17 interest, which was raised by the Board, is seeking
18 advice from credit rating agencies. Have I understood
19 your previous response correctly that all third parties
20 are basically in agreement with this, except that you
21 can't respond with respect to the province of Manitoba's
22 position? Is that correct?

23

24

(BRIEF PAUSE)

25

1 MR. MANFRED SCHULZ: Yeah. The -- the
2 nuance to this, and -- and I think we talked about this
3 briefly earlier, is that both Moody's and DBRS do not
4 list the -- you know, having a sinking fund as being a
5 positive attribute, and therefore would not affect the
6 credit rating at all.

7 S&P has a bit of a stand-by-itself
8 position on this, and I think we've indicated that in an
9 -- in an information request, that they do have expressed
10 concerns or -- actually, they consider it a strength of
11 the province that there is a -- a sinking fund, and it
12 has been amplified somewhat in the context of the
13 economic downturn. And the -- the nuance to their
14 argument is that having sinking funds readily available
15 provides cash in -- in liquidity purposes in case of an
16 economic challenge.

17 We have put the question to them: Would
18 that affect the overall rating if there was an
19 elimination of a sinking fund? And the response back has
20 been that it's one (1) of many factors. A sinking fund
21 is only one (1) of many factors. We've talked about, you
22 know, the strengths, the weaknesses, and the factors, and
23 they are not prepared to articulate and say, you know, if
24 we eliminate the sinking fund, this will be the result.
25 And so our response in the one (1) information request is

1 a careful, you know, sort of nuanced response,
2 understanding that that's their issue.

3 MR. ANTOINE HACAULT: Thank you. But in
4 any event, even though the requirement was removed if, in
5 Manitoba Hydro's discretion, it thought it was useful
6 because of an expression of concern by the rating agency,
7 it would still hold the discretion of establishing such a
8 -- a fund as part of its credit-management strategies,
9 correct?

10 MR. VINCE WARDEN: Sorry, did you mean to
11 say exposure management --

12 MR. ANTOINE HACAULT: Sorry.

13 MR. VINCE WARDEN: -- strategies.

14 MR. ANTOINE HACAULT: Exposure management
15 --

16 MR. VINCE WARDEN: Yes.

17 MR. ANTOINE HACAULT: -- as opposed to
18 credit, yes.

19 MR. VINCE WARDEN: Yes.

20 MR. ANTOINE HACAULT: Okay. Sorry. Next
21 I'd move into the area of operating expenses. That's
22 Tabs 18 and following. At Tab 18, just for the record,
23 and I don't think we need to go through it, are extracts
24 of Board orders expressing concern and its request or
25 desire that Manitoba Hydro control expenses.

1 So, for example, at page 141, under the
2 heading "Operating Expenses," I'll just read the first
3 sentence, and -- and that'll be a lead to some of the
4 questions I'll be asking:

5 "Although Hydro's operating and
6 administration expenses appear
7 reasonable, the Board encourages Hydro
8 to continue to control these expenses -
9 - expenses through aggressive cost-
10 control initiatives and management of
11 the labour force."

12 And of course there's further discussion
13 there that everybody can read on their own time, and
14 there's further extracts in the following pages out of
15 Board Order 116/'08 at page 144 of the book of documents.
16 And again, the Board is expressing concern about the
17 growth of the OM&A expenses, particularly to the level
18 and growth of these expendi -- expenditures, prior to
19 deferrals, capitalization, and allocation to
20 subsidiaries.

21 So you've, Mr. Warden, in your
22 presentation to the Board at the outset, and this is
23 found at Tab 20, identified some of the major cost
24 constraint measures.

25 Is that correct?

1 MR. VINCE WARDEN: Yes.

2 MR. ANTOINE HACAULT: Now, could you help
3 me understand what process was followed by the
4 Corporation to attempt to realize savings in OM&A? By
5 process, let me try and give you some kind of a
6 background. For example, hospitals and schools and other
7 public institutions such as universities are asked by the
8 government: Give me a zero increase budget. Give me a
9 CPI budget. Get your managers and whatever levels below
10 them to tell me how we would achieve the cost savings
11 that we're looking at.

12 With that kind of general statement in the
13 background, did the Board, and by "the Board" I mean the
14 Manitoba Hydro-Electric Board, provide some kind of a
15 directive to management as to what it was expecting
16 management to do in arriving at budget and cost-cutting
17 measures?

18 MR. VINCE WARDEN: Didn't come from the
19 Board directly. It would have -- the directive would
20 have come from the president. The Board would be
21 apprised of the measures that were being taken and
22 certainly supported those measures. So the -- the
23 president would have, through the vice-presidents,
24 directed the business units to exercise constraints as
25 outlined, as you pointed out, on -- at Tab 20 of your

1 book of documents. That -- those were the measures at a
2 very summary -- summarized level, the measures that were
3 taken to constraining costs at Manitoba Hydro over the
4 past twelve (12) to eighteen (18) months.

5 MR. ANTOINE HACAULT: Could you help me
6 understand what the specific directive was? Was it
7 limited to those five (5) items? In other words, did the
8 president say, I expect that you're going to come back
9 with an amended -- or a budget that's going to reflect
10 travel restrictions, hiring freezes, overtime reju --
11 reductions, computer life extensions, fleet reductions,
12 and new IT systems, full stop?

13 MR. VINCE WARDEN: Well, not in those
14 exact words. There would have been some language around
15 a directive that included these items. This may not be
16 an all-inclusive list, but they were referenced in the
17 directive that came from the president's office.

18 MR. ANTOINE HACAULT: Is that directive
19 something that's on the -- the record of these
20 proceedings?

21 MR. VINCE WARDEN: I don't believe so,
22 no.

23 MR. ANTOINE HACAULT: Is it something
24 that you could provide for these hearings?

25

1 (BRIEF PAUSE)

2

3 MR. VINCE WARDEN: Actually, I'm advised
4 that the -- that correspondence may already be on -- on
5 the record. We'd have to double-check that.

6 MR. ANTOINE HACAULT: Okay. Well, we can
7 stand that item down then because I'll probably continue
8 -- be continuing my cross-examination next week. So
9 between now and then, if we could -- if it is already on
10 the record, being the directive by the president to -- I
11 guess, would it be staff? How would I describe that?

12 MR. VINCE WARDEN: The directive would
13 have gone to the vice-president of each business unit,
14 and -- and that vice-president would be responsible for
15 implementing the measures within his or her respective
16 business unit.

17 MR. ANTOINE HACAULT: So if it isn't on
18 the record, do I have your undertaking to produce that
19 directive?

20 MR. VINCE WARDEN: Yes, we can do that.

21 MR. ANTOINE HACAULT: Thank you very
22 much.

23

24 --- UNDERTAKING NO. 122: Manitoba Hydro to provide the
25 directive from Manitoba

1 Hydro-Electric President, as
2 to what was expected of
3 management to do in arriving
4 at budget and cost-cutting
5 measures
6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: Now, doesn't
9 Manitoba Hydro go through what I'll call similar
10 processes -- so the ones I've described, which are
11 applicable to school divisions, universities, and
12 hospitals, coming back with a zero budget, and explaining
13 what could, or would be, cut to achieve zero percent
14 increase in operating and mainten -- OM&A?

15 MR. VINCE WARDEN: Well, I don't know
16 whether the process is the same, but the objectives are
17 similar, for sure, that we look at, at any measures that
18 -- especially during an economic downturn that -- that
19 could reduce costs, or constrain costs. Sometimes
20 though, in our business we have to be very careful of
21 that because we can't jeopardize the safety or
22 reliability of -- of the system.

23 MR. ANTOINE HACAULT: And that's fully
24 understandable. Everybody wants to have their lights on
25 and the heat working. But if -- is there any reason that

1 you can think of as to why it would not be a useful
2 exercise for Manitoba Hydro to do the same as
3 universities, hospitals, and school divisions are
4 required to do?

5 MR. VINCE WARDEN: No, I -- I think I --
6 I didn't say we did anything different. It -- it might
7 be as -- you know, I'm not totally familiar with the
8 process they go through, but the end result should be the
9 same.

10 MR. ANTOINE HACAULT: In that answer,
11 you're implying then that the directive said, I'm
12 expecting a budget coming back at a zero percent
13 increase, tell me what that would look like and, whether
14 or not if it can't be achieved, explain to me why it
15 can't be achieved because, as you said, we have to
16 maintain a certain level of service for Manitobans.
17 Would that be what the directive says?

18 MS. PATTI RAMAGE: Mr. Hacault, it might
19 be helpful if we can find that directive, either on the
20 record, or we'll get a copy of it before trying to
21 speculate on what it may or may not say. I thought it
22 was already here, but we're checking, and if it's not we
23 will get it to you.

24

25

(BRIEF PAUSE)

1 CONTINUED BY MR. ANTOINE HACAULT:

2 MR. ANTOINE HACAULT: I'll then try to
3 move on in my questioning because I had a line of
4 questioning that may or may not be asked differently in
5 the light of an existing directive.

6 I don't know if -- if -- we all have
7 electronic copies here. Might it be useful to stand down
8 for ten (10) minutes? That might be --

9 THE CHAIRPERSON: Very good.

10

11 --- Upon recessing at 3:32 p.m.

12 --- Upon resuming at 3:47 p.m.

13

14 THE CHAIRPERSON: Okay, Mr. Hacault. Ms.
15 Ramage...?

16 MS. PATTI RAMAGE: Yes, Mr. Chair. We've
17 attempted to locate the documents in question, and while
18 we may have some, we don't think we're able to give a
19 full picture at this point. I've spoken to Mr. Hacault,
20 and perhaps we'll leave this issue, give us time to go
21 back to the office and find the documents to show a full
22 picture, as opposed to trying to throw things together
23 piecemeal.

24 THE CHAIRPERSON: Mr. Hacault...?

25

1 (BRIEF PAUSE)

2

3 MR. ANTOINE HACAULT: The only comment I
4 have with respect to that is, I'm not too sure what's
5 going to be provided, and it -- so I -- I can jump this
6 part, I guess, and --

7 THE CHAIRPERSON: I think that'd probably
8 be best.

9 MR. ANTOINE HACAULT: -- that way I can
10 try to ensure that -- because the main concern is -- the
11 one expressed by the Board is the one expressed by our
12 clients, is that, you know, we've had a recession,
13 they've had to undergo major cost cuts, and I'd like to
14 see hopefully that the Corporation has taken its cost-
15 cutting approach seriously, too.

16 THE CHAIRPERSON: My memory may be
17 fading, Mr. Hacault, but I'm almost convinced that I
18 remember seeing a document at this hearing that was
19 signed by Manitoba Hydro's president and talked about
20 restrictions on out-of-province travel and hiring and
21 things -- and things of that particular nature, but maybe
22 I've just been -- so many pieces of paper, I've lost
23 track.

24 MS. PATTI RAMAGE: I think you and I are
25 having the same dream, and we're...

1 MR. ANTOINE HACAULT: I'm just looking to
2 see what might be the next logical subject because I
3 don't know that -- has Robin kind of planned to be ready
4 for cost of service, or -- I mean, we don't have Mr.
5 Cormie here. I would have been able to go through stuff
6 with him also.

7 MR. ROBERT MAYER: The next thing I see
8 on your list is normal capital spending. Is that a...

9 MR. ANTOINE HACAULT: But there -- yeah,
10 there may be some -- sorry to ask for five (5) minutes,
11 but maybe -- it might be useful if we just -- I -- if I
12 have a chat because I -- this is something that happened
13 just before we got --

14 THE CHAIRPERSON: Yeah, that's fine.

15 MR. ANTOINE HACAULT: -- the mics, that--

16 THE CHAIRPERSON: Yes. If we can make
17 use of the next half hour, great. If we can't, such is
18 life.

19

20 (BRIEF PAUSE)

21

22 MR. ANTOINE HACAULT: Mr. Chairman, I
23 might have a discussion with Mr. Wiens on cost of service
24 for a time.

25 THE CHAIRPERSON: Sure. Sounds good.

1 MR. ANTOINE HACAULT: And then we'll see
2 where that leads us.

3

4 ROBIN WIENS, Resumed

5

6 CONTINUED BY MR. ANTOINE HACAULT:

7 MR. ANTOINE HACAULT: Good afternoon, Mr.
8 Wiens.

9 MR. ROBIN WIENS: Good afternoon.

10 MR. ANTOINE HACAULT: If I could draw
11 your attention firstly to Tab 38. I'm going to deal with
12 the thermal plant costs assigned to export class issue.

13 MR. ROBIN WIENS: I have that.

14 MR. ANTOINE HACAULT: So under this
15 prospective cost of service done for the end of fiscal
16 year March 31, 2011, at page 202 of the book of documents
17 there's a statement:

18 "In accordance with the climate change,
19 legislation use of abandoned Unit 5
20 coal-generating station is limited to
21 emergency use only."

22 Would this study have been something that
23 you reviewed and prepared, Mr. Wiens?

24 MR. ROBIN WIENS: Yes, it is. And -- and
25 for the record, if that quote is accurate, it's page 201

1 if anybody's looking for it.

2 MR. ANTOINE HACAULT: Yes. So page 201,
3 Tab 38. Now, as I recall the discussion with Mr. Peters,
4 and just to put it into context, there is a difference in
5 view between Manitoba Hydro as to the allocation of
6 thermal plant costs being allocated to the export class
7 and Mani -- the Board's view on this issue. Is that
8 correct?

9 MR. ROBIN WIENS: Well, I'm -- I'm not
10 sure if there still exists a difference in perspective.
11 I guess there exists a difference in perspective between
12 what's enunciated on this page and the -- the directives
13 coming out of, I believe, Board Order 116/'08.

14 MR. ANTOINE HACAULT: Okay. Now, further
15 on at Tab 39 I've taken time to give -- produ --
16 reproduce extracts from the Climate Change and Emissions
17 Reductions Act -- would -- regulation. Would that be the
18 legislation that we should look at to have this
19 discussion about what you've described as emergency
20 operations?

21 MR. ROBIN WIENS: It's, yeah, certainly
22 relevant context.

23 MR. ANTOINE HACAULT: So I direct your
24 attention to Section 1(1), which is the definition of
25 emergency operations. In -- and I'll have a couple

1 questions because there's some language used in this
2 section and the following sections which I'd like to have
3 your input as to how the factual situation relates to
4 what's stated in this legislation.

5 So under 1(1)(a) there's -- which is part
6 of the definition of emergency operations, it indicates:

7 "Prevent or minimize the impact of a
8 system or local emergency or any other
9 condition that may jeopardize the
10 continuous supply of power [that's (i)]
11 or cause or contribute to instability."

12 And that continues and finishes with these
13 words:

14 "...within Manitoba or an integrated
15 regional power grid."

16 What integrated regional power grids does
17 Manitoba Hydro have?

18 MR. ROBIN WIENS: Manitoba Hydro has
19 interconnections with the United States, with
20 Saskatchewan, with Ontario, if -- if that's the meaning
21 of the question.

22 MR. ANTOINE HACAULT: That's how I was
23 asking, and thank you very much for the -- for that
24 answer.

25 So there's two (2) concepts here,

1 factually. We could have these issues, which I've just
2 indicated on the record, arising within Manitoba, or
3 these issues could also affect an integrated regional
4 power grid, and you've identified three (3) of them: the
5 one (1) that we have with the United States of America,
6 Ontario, and Saskatchewan. Is that correct?

7 MR. ROBIN WIENS: Yes.

8 MR. ANTOINE HACAULT: And that -- I draw
9 your attention next to 1(2) which follows. It -- again
10 in subparagraph (a), these are d -- directions to
11 Manitoba Hydro:

12 "...must, in assessing the potential
13 for an emergency or other condition..."

14 So it's not limited to emergency:

15 "...under clause 1(a), or making a
16 forecast under clause (b), consider any
17 interconnection or other binding
18 agreement under which Manitoba Hydro is
19 obligated to provide a reliable and
20 continuous supply of power."

21 Could you identify which agreements, and I
22 guess, you don't have to list them all, but with at least
23 counterparties that Manitoba Hydro has under which its
24 obligated to provide a reliable and continuous power
25 supply?

1 MS. PATTI RAMAGE: I don't think there's
2 anyone here on the panel who would have that information,
3 Mr. Hacaault.

4

5 CONTINUED BY MR. ANTOINE HACAULT:

6 MR. ANTOINE HACAULT: I didn't think it
7 would be that complicated. I thought we were going to
8 say, Well, we've got a couple term sheets that require us
9 to give so much firm power. We've got the NSP sale that
10 requires that. We've got all these legacy contracts with
11 all -- a number of third parties. But if -- I'm not
12 looking for something more particular than that. They're
13 all -- I'd like some kind of a general description of
14 what binding agreements Manitoba Hydro has under which it
15 feels it's obligated to provide a reliable and continuous
16 power supply.

17 MR. ROBERT MAYER: Would that be the
18 contracts that Manitoba had -- Hydro has that are sup --
19 to be supplied out of firm power? And I won't -- I think
20 they're only like three (3) or four (4) contracts that do
21 that.

22 Am I not correct?

23 MR. ROBIN WIENS: Well, Mr. Mayer, my --
24 my problem here is that I don't have sufficient detailed
25 familiarity with those contracts, even to make a general

1 statement because for every general statement there may
2 be some detail there that I don't have familiarity with.
3 I'm not -- I'm not comfortable with answering that
4 question.

5

6 CONTINUED BY MR. ANTOINE HACAULT:

7 MR. ANTOINE HACAULT: So much for that
8 dry line of questioning. I'll have some more, but I
9 guess I'll have to wait until Mr. Cormie comes around,
10 but I didn't anticipate I was going to have difficulty in
11 identifying this.

12 But we might not be able to identify the
13 exact contracts, but can we at least agree on this to
14 allow the discussion to -- to proceed. There are some
15 contracts which Manitoba Hydro has under which it's
16 obligated to provide a reliable and continuous supply of
17 power.

18 Can we at least agree, with all the people
19 that are here from Manitoba Hydro, that this beast
20 exists?

21 MR. VINCE WARDEN: Yes, we'll -- we'll
22 agree with that.

23 MS. PATTI RAMAGE: I'm more concerned
24 with the -- the legal implications of the question, but I
25 think Mr. Warden's generalization that there is some sort

1 of a supply obligation should meet your -- your needs to
2 carry on.

3

4 CONTINUED BY MR. ANTOINE HACAULT:

5 MR. ANTOINE HACAULT: Okay. With respect
6 to the planning portion, would you agree with me that
7 Brandon Coal increases the dependable energy available
8 for export?

9 MR. ROBIN WIENS: I'm afraid I don't want
10 to take a stand on that one (1) either, Mr. Hacault. I
11 would go so far as to agree that it is capacity. It is
12 considered in looking at Manitoba Hydro's available
13 capacity.

14 MR. VINCE WARDEN: We -- we do have Mr.
15 Surminski in the back row that we can bring up if
16 necessary, and he has some knowledge on this subject.
17 I'm -- I'm not sure how far you're going to go with this,
18 Mr. Hacault. You know, we -- we do have -- we -- we are
19 allowed to operate Brandon under certain emergency
20 conditions, including provision of power to our -- our
21 contracts which have dependable supply provisions within
22 those contracts.

23 MR. ANTOINE HACAULT: I -- I think that
24 was the gist of what I was looking for, thank you. And I
25 might point out, I think it's at Tab 74 of this binder, I

1 understand that this is a graph that was produced and is
2 in the record, and I thought it was a useful illustration
3 of what was considered the dependable energy, and how
4 that was comprised of.

5 So am I right in reading this graph, that
6 on the left-hand side there's a thermal component to
7 what's considered dependable energy based on low water
8 flows? That would be to the extreme left of the graph.

9 MR. HAROLD SURMINSKI: Yes, correct. I'm
10 familiar with this figure and had a hand in prun --
11 developing it.

12 MR. ANTOINE HACAULT: So first, I think
13 it's in kind of -- mine seems to be in a red line.
14 There's an indication, Manitoba load, and it's 27,483
15 gigawatts. Is that correct?

16 MR. HAROLD SURMINSKI: Yes, correct.

17 MR. ANTOINE HACAULT: Okay. And then
18 there's a line that's up on the 'X' axis which indicates
19 total firm commitments. What's the difference between
20 the Manitoba load and the total firm commitments? Is
21 that what we were talking about?

22 MR. HAROLD SURMINSKI: Yes. They are the
23 firm export sales that we have.

24 MR. ANTOINE HACAULT: Okay. And is it
25 fair to say that, on the left-hand side of the graph,

1 there's a section of it that illustrates how Manitoba
2 Hydro would deal with its total firm commitments should
3 it have a low water flow during a particular year? Is
4 that what the left-hand side illustrates?

5 MR. HAROLD SURMINSKI: Yes. Generally,
6 it's -- it's not the -- the full -- it -- this was
7 illustrative for a lowest flow condition. It's not
8 necessarily the -- the -- forcing the system to the
9 maximum capability, but at the very lowest flow that's
10 the resources that we would have on the system.

11 MR. ROBERT MAYER: And that's what you
12 would have needed had -- had your bipole lines come down,
13 I take it, every scrap of that.

14 MR. HAROLD SURMINSKI: Sorry, we would
15 need those?

16 MR. ROBERT MAYER: You'd have needed
17 everything you had on this graph if you -- outside your
18 electrical gener -- your hydro-generated power if the
19 bipole lines had gone down.

20 MR. HAROLD SURMINSKI: Yes, but this is
21 illustrative of also the lowest flow condition occurring
22 at the time. So it could be anywhere along this 'X' axis
23 for water supply conditions.

24

25 CONTINUED BY MR. ANTOINE HACAULT:

1 MR. ANTOINE HACAULT: And in fairness,
2 you've indicated it's -- it's not necessarily what
3 Manitoba Hydro would do, and I'm not going to repeat the
4 evidence that's already been given, and I think Mr.
5 Cormie explained a number of times you might decide to
6 financially settle some of these firm export commitments.
7 You -- there's a number of different options that you
8 have, but one (1) of the options is to run your thermal
9 plants, as shown on this diagram at Tab 74.

10 Is that correct?

11 MR. HAROLD SURMINSKI: Yes, that's
12 correct.

13

14 (BRIEF PAUSE)

15

16 MR. ANTOINE HACAULT: Given Mr. Warden's
17 previous answer, I don't think I need to go much further
18 on this, Mr. Chairman and Mr. Vice-Chair. I think the
19 rest is a matter of argument based on -- on the facts as
20 to whether or not the position stated in the initial
21 quote that I made lines up with what's set out in the
22 regu -- regulations based on the responses given by these
23 witnesses.

24 So I'll move on to another subject, unless
25 there's questions from the -- the Board.

1 MR. ROBERT MAYER: I -- I take it, Mr.
2 Hacault, you're suggesting that the full cost of the
3 thermal generation should not be charged back, or at
4 least attributed totally, to domestic use, but because
5 there is a provision whereby these units could be used as
6 standby to firm up some problems in connecting grids or
7 interrelated grids, that some of that should be assigned
8 to the export class.

9 Is that going to be your argument?

10 MR. ANTOINE HACAULT: That's correct, it
11 firms up the Manitoba load. Like you said, if the two
12 (2) lines go down, it firms up the export contracts. It
13 -- it firms up everything, so I don't think you can pick
14 and choose, but that's a matter of argument.

15

16 (BRIEF PAUSE)

17

18 MR. ROBIN WIENS: Mr. Hacault, just
19 perhaps to complete the record for your argument, the --

20 MR. ANTOINE HACAULT: This is the
21 question I didn't ask, right?

22 MR. ROBIN WIENS: The -- the -- you're
23 quite correct in referring to firm export sales, but
24 certainly not with respect to opportunity export sales,
25 so that -- those cannot be supported by coal generation.

1 In addition, existing firm contracts are -- can be
2 supported by coal generation, but new contracts are not
3 going to be undertaken with the expectation that coal
4 would -- would support them.

5 MR. ANTOINE HACAULT: I have to ask
6 another question now. Is there anything in this
7 legislation which precludes that happening with respect
8 to the new contracts that you have that you know of?

9 MS. PATTI RAMAGE: Mr. Hacault, that
10 would be asking Mr. Wiens or the panel for a legal
11 opinion, and I think that would be best done by the
12 lawyers in their final submissions, not by the panel.

13 MR. ANTOINE HACAULT: But, you see, my --
14 then we have to disregard Mr. Wiens' response in part
15 because he was purporting to give some kind of a legal
16 opinion as to this, the part of the new firm contracts
17 that you're going to have not being supported by coal.

18

19 (BRIEF PAUSE)

20

21 MS. PATTI RAMAGE: I don't think Mr.
22 Wiens was referring to the legislation when he -- he did
23 that. But if we take that position one (1) step further,
24 then we would have to disregard this entire segment of
25 cross-examination because it started with what contracts

1 fall under Section 40 -- I can't remember the section
2 offhand, but that was the point I made with -- at the
3 beginning, that we'll proceed that there are some
4 contracts that fall -- fall within that.

5 And if we want to get more specific, then
6 -- then I think we're asking for legal opinions. We're -
7 - we're going forward just on the -- the generalized
8 basis so that we could allow this area of cross-
9 examination.

10 MR. ANTOINE HACAULT: I'll move on. I
11 think I've had the answers that I need to make my
12 submission, and I've made my point.

13

14 (BRIEF PAUSE)

15

16 MR. VINCE WARDEN: I should just point
17 out, Mr. Hacault, and I just want to help you with your
18 final argument, the -- the -- as we've testified earlier,
19 the coal plants are coming out of service, so by the time
20 the -- the new contracts that we're speaking of kick in,
21 the -- the coal plants will be gone, so it's not really
22 relevant.

23

24 CONTINUED BY MR. ANTOINE HACAULT:

25 MR. ANTOINE HACAULT: Never say never

1 because what did we look at, 1991 Board Review, half of
2 the Conawapa costs were already sunk into the ground.
3 Can we ever forecast what's really going to happen in the
4 future?

5 I know it's the fir -- current plan. It
6 was then the plan to have Conawapa in place, too. In any
7 event, thank you for your response, sir.

8

9 (BRIEF PAUSE)

10

11 MR. ANTOINE HACAULT: I'll continue with
12 a couple questions about the relative levels of cost for
13 the different classes.

14 But firstly, because I wasn't around, and
15 apparently a lot of money was spent dealing with this
16 issue before, could you remind me how much money
17 everybody spent dealing with the cost of service, to have
18 some kind of an answer and a good debate about this last
19 time?

20 MR. ROBIN WIENS: Well, you've included
21 the -- conveniently included the tab in -- in your book
22 of documents, Mr. Hacault, and to answer to the best of
23 Manitoba Hydro's ability, and the number is 1.28 million.

24 MR. ANTOINE HACAULT: And that doesn't
25 include MIPUG costs, Manitoba Power Industrial Users

1 Group. Is that correct? Their cost would have been in
2 addition to that? They swallowed all of that cost?

3 MR. ROBIN WIENS: This includes the cost
4 that Manitoba Hydro covered.

5 MR. ANTOINE HACAULT: But not the MIPUG
6 costs, so the total cost of that exercise would be higher
7 than what you've just identified, at Tab 33.

8 MR. ROBIN WIENS: It doesn't -- it does
9 not include MIPUG's costs.

10

11 (BRIEF PAUSE)

12

13 MR. ANTOINE HACAULT: Now, could you just
14 remind me, which cost of service study which was done,
15 more closely reflects the directives of the Board to
16 date, is it the one (1) that was distributed in March
17 '09, the PCOSS-08?

18 MR. ROBIN WIENS: Yes.

19 MR. ANTOINE HACAULT: And with that
20 particular study, where did we have the residential
21 sector before export revenue at, as far as their share of
22 costs based on that study?

23

24 (BRIEF PAUSE)

25

1 MR. ROBIN WIENS: This is before the
2 allocation of export revenues to domestic classes?

3 MR. ANTOINE HACAULT: Yes.

4 MR. ROBIN WIENS: 91.8 percent.

5 MR. ANTOINE HACAULT: Could you just
6 identify which page you're looking at?

7 MR. ROBIN WIENS: I'm looking at your Tab
8 37 on page 196, with your book of documents numbering.

9 MR. ANTOINE HACAULT: Okay. So Tab 37,
10 page 196. Tab 37, page 196. And where do we find this
11 percentage of pre-export allocation?

12 MR. ROBIN WIENS: If you go to the top of
13 the table that's shown there, below the title you will
14 see a line that's labelled on the left-hand side,
15 "Customer Class," and then it follows through with a
16 number of headings. The -- the third of the column
17 headings says, "RCC & Pre-Export Allocation," and just
18 below the line is the number for the residential class.

19 MR. ANTOINE HACAULT: And there's --
20 which other one (1) in this line is outside the zone of
21 reasonableness, which I believe we've discussed, which is
22 ninety-five (95) to one-o-five (105). Is that it?

23 MR. ROBIN WIENS: You want to know which
24 one (1) is outside ninety-five (95) --

25 MR. ANTOINE HACAULT: Yes.

1 MR. ROBIN WIENS: -- to one-o-five (105).
2 General service large, greater than 100kV, is outside
3 that zone at 107.6 percent. And of course the export
4 class is outside that zone.

5 MR. ANTOINE HACAULT: Okay. Now, once we
6 no longer have this gravy train of export revenue because
7 we're going to be sinking it into a new plant, these
8 would be the types of percentages that we would have
9 allocated between the various classes? It may change,
10 but at least today, if -- if we didn't have this -- I'm
11 going to say gravy of export revenue, this is the way the
12 classes look, is that right?

13 MR. ROBIN WIENS: Well, you're trying to
14 cover a multitude of -- of -- of aspects there, Mr.
15 Hacault, because the export revenue, along with the
16 domestic revenue, forms Manitoba Hydro's revenue, and the
17 cashflow coming from that assists in making the
18 investments that Manitoba Hydro has to invest over the
19 future, but it doesn't necessarily affect the results of
20 this study. It doesn't necessarily mean that in an
21 embedded-cost study, net export revenues available to be
22 allocated to domestic customer classes will disappear.
23 But, apart from that, if your premise is, if there are no
24 net export revenues, that this is what the revenue costs
25 coverage will look like, and I will agree to the extent

1 that everything else is equal in the study.

2 First of all, the net export revenues are
3 a derivative of something else. They're a derivative of
4 what the export revenues are as well as the costs that
5 were either assigned directly or allocated to the export
6 class. If the -- if the revenues go away, the costs
7 don't necessarily go away, but the -- there are a number
8 of -- there are a number of -- of aspects to the
9 algorithm that goes into determining the available net
10 export revenues as well as the costs that are -- that are
11 absorbed in this study by the export class. So if you
12 had a different set of assumptions, for example, about
13 the costs, or different determination of what the costs
14 were, you would have a different result here.

15 MR. ANTOINE HACAULT: And with the export
16 revenue, the scenario doesn't look better, though, under
17 this cost of service study for general service large, is
18 that correct? It actually makes the problem worse?

19 MR. ROBIN WIENS: Well, this again is --
20 it's -- it's -- it flows naturally from the method that
21 was used to construct the results. You'll see that if
22 you go down the column which was headed "Customer Class,"
23 you will come to a heading which is "Total General
24 Consumers." So the revenue cost coverage pre-export
25 allocation for all general consumers is 96.2 percent.

1 The exports add to the revenue, or the net
2 exports add to the revenue, but they don't add to the
3 costs in this analysis. So the revenue cost coverage is
4 going to increase for every customer class. General
5 service large will, as you point out correctly, go
6 further away from 105 percent. Residential will actually
7 come into the zone of reasonableness.

8 MR. ANTOINE HACAULT: So the way this
9 cost of service study works, and I may be simplifying it,
10 we use next -- net export revenue allocation to bring the
11 residentials into line, but at the same time we're
12 bringing general service large practically another 5
13 percent further from the zone of reasonableness.

14 MR. ROBIN WIENS: Yeah, the revenue cost
15 coverage for both classes is increased by about 5
16 percent, but in the case of the general service large it
17 moves it away from the zone of reasonableness.

18 MR. ROBERT MAYER: Well, let's be a
19 little bit even more particular because general service
20 large, zero to 30 kilovolts, still wouldn't come within
21 the zone of reasonableness with 5 percent on top.

22 MR. ROBIN WIENS: You -- you've correctly
23 pointed that out. And I made a -- I made an assumption
24 that Mr. Hacault was referring to general service large
25 over a hundred kV.

1 CONTINUED BY MR. ANTOINE HACAULT:

2 MR. ANTOINE HACAULT: Yes, and I
3 apologize for not making the record clearer because we
4 were having the discussion about one-o-seven (107) and
5 then to the one twelve (112). So, yes, I wasn't
6 referring to the general service large which correctly is
7 -- is not yet within the zone of reasonableness, but it
8 goes up less than the gen -- the residential class, does
9 it?

10

11 (BRIEF PAUSE)

12

13 MR. ANTOINE HACAULT: It's actually
14 exactly the same, 4.4 percent, I guess.

15

16 (BRIEF PAUSE)

17

18 MR. ANTOINE HACAULT: Now, does it
19 continue to be Manitoba Hydro's policy to try and bring
20 rates within the zone of reasonableness of the cost of
21 service study?

22 MR. ROBIN WIENS: Yes, I would say,
23 subject to -- we have a -- an agreement that we are
24 actually correctly comparing costs and revenues. If, af
25 -- after we had that degree of concurrence, we were to

1 see that some classes would be outside the zone of
2 reasonableness, we would want to take steps over a
3 reasonable period of time to correct that.

4 MR. ANTOINE HACAULT: Now, under the Cost
5 of Service Study 11 pre-export where our residential and
6 general service large at, are they still within the zone
7 of reasonableness pre-export?

8 MR. ROBIN WIENS: Do -- do you have a
9 reference?

10 MR. ANTOINE HACAULT: I had -- I think it
11 was the Board book of documents, Tab 47, page 124.

12

13 (BRIEF PAUSE)

14

15 MR. ANTOINE HACAULT: Now, my page 124 at
16 Tab 47 of the Board book of documents doesn't show
17 percentages pre-export. Have you located the document,
18 Mr. Wiens? And we'll finish on this particular document.

19

20 (BRIEF PAUSE)

21

22 MR. ROBIN WIENS: Well, I don't see that
23 number in this document, Mr. Hacault.

24 MR. ANTOINE HACAULT: Yes, I can see
25 that, and that's why -- but it would be a fairly easy

1 calculation to do for the residential pre-export. It
2 would put it -- not just be a matter of dividing the
3 numbers -- two (2) of the numbers on this table?

4 MR. ROBIN WIENS: That's correct, and I
5 would get ninety-two point one (92.1).

6 MR. ANTOINE HACAULT: And I don't want to
7 thread into the able cross-examination of Mr. Peters, but
8 remind us again, this study -- I think he was chastising
9 you for not following the Board directives and -- and
10 doing it the way Hydro preferred to have it done?

11 MR. ROBIN WIENS: I'm not sure if he was
12 gently chastising me or if it was something else, but you
13 point out that there are some differences, and that is
14 correct.

15 MR. ANTOINE HACAULT: And could you do
16 the same calculation again with respect to general
17 service large greater than 100 kVs? We had the
18 residential at ninety-two point one (92.1). What's the
19 general service large greater than 100 kVs at?

20 MR. ROBIN WIENS: I have one-o-eight
21 point eight (108.8).

22 MR. ANTOINE HACAULT: Okay. So under the
23 study that's closest to what the Board wanted, and under
24 this different study which Manitoba Hydro has done,
25 according to what it believes it wants to do, in both

1 cases, residential and general service large over 100 kV
2 are outside the zone of reasonableness.

3 Do -- do we have an agreement on that?

4 MR. ROBIN WIENS: They're outside of the
5 one-o (10) -- ninety-five (95) to one-o-five (105).

6 MR. ANTOINE HACAULT: And with that,
7 members of the Board and members of the panel, thank you
8 very much. Thank you for kind of cooperating in this
9 kind of last minute jump to a different subject. I
10 really appreciate that, and I think it helped us move
11 along. Thank you.

12 THE CHAIRPERSON: Thank you, sir. Thank
13 you to the panel, and everyone else, and we -- Mr.
14 Peters, if you could remind us, we're next back together
15 at 9:30 on Monday, correct?

16 MR. BOB PETERS: Yes. A coup -- no, not
17 -- not correct.

18 THE CHAIRPERSON: Not correct.

19 MR. BOB PETERS: But there's a couple of
20 matters. First I'll attend a housekeeping matter, as
21 Manitoba Hydro has circulated Undertaking 99, marked as
22 Exhibit Manitoba Hydro 111, and I think we should
23 formally acknowledge that, and put that on the record,
24 provided Ms. Ramage is in concurrence.

25 MS. PATTI RAMAGE: Thank you, Mr. Peters,

1 for doing my job.

2

3 --- EXHIBIT NO. MH-111: Response to Undertaking 99

4

5 MR. BOB PETERS: And Mr. Chairman, to
6 address your question in terms of the -- the calendar, I
7 should -- I should start off by saying this hearing will
8 reconvene one (1) week from today on the 14th of April,
9 at 9:30 in the morning, and also --

10 THE CHAIRPERSON: I was too enthusiastic,
11 Mr. Peters.

12 MR. BOB PETERS: I -- I appreciate that.
13 And I will also indicate that the cross-examination of
14 Manitoba Hydro's panel will continue on both April 14 and
15 15. There are some scheduling issues that are
16 still being finalized, and I will communicate with
17 counsel on the dates, and we will look at the overall
18 schedule, in light of the additional dates that are
19 available from the Board, which does have a change from
20 what I had previously communicated. So I'll surprise the
21 parties with that.

22 I should indicate, Mr. Chairman, that the
23 Board has committed to a meeting in this room next week,
24 which will mean that the room will have to be vacated in
25 terms of people's possessions, because there will be a

1 Manitoba Bar Association subsection meeting in this room.
2 And I think we're -- I'm probably the most guilty of not
3 cleaning the room, but others should remove their
4 materials, and bring them back next week.

5 THE CHAIRPERSON: Well, that's not -- I
6 don't think we're all overjoyed over that, Mr. Peters,
7 but it's certainly not the responsibilities of any
8 parties in this room, except for myself, so such is life.
9 We'll see you all back next Thursday. Thank you.

10

11 (PANEL RETIRES)

12

13 --- Upon adjourning at 4:30 p.m.

14

15 Certified Correct

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20 _____
Cheryl Lavigne, Ms.

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