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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
- Len Evans (np) - Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
March 2, 2011
Pages 3560 to 3757

1 APPEARANCES

2 Bob Peters (np)) Board Counsel

3 Anita Southall)

4

5 Patti Ramage) Manitoba Hydro

6 Marla Boyd)

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9 Myfanwy Bowman (np))

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11 Antoine Hacault) MIPUB

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13 Michael Anderson (np)) MKO

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EXHIBITS

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	UNDERTAKINGS		
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4		for what is an apparent disconnect re	
5		related merchant transmission.	3673
6	77	KPMG to advise if the 2008 price forecast	
7		provides a single average export price	
8		for the year as a whole, or for each month	
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1 --- Upon commencing at 9:30 a.m.

2

3 THE CHAIRPERSON: Okay. Good morning,
4 everyone. It is 9:30, Wednesday morning, March the 3rd
5 (sic), I think. Mr. Williams, whenever you're ready.

6

7 KPMG PANEL:

8

WILL LIPSON, Resumed

9

FRANK CHEN, Resumed

10

JONATHAN ERLING, Resumed

11

ANURAG GUPTA, Resumed

12

13 CONTINUED CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

14

15 MR. BYRON WILLIAMS: Yes. Good morning,
16 Mr. Chairman and members of the Board, or other member of
17 the Board. This morning, just -- I -- we'll -- we'll be
18 turning, to start with anyways, to Chapter 3 of the KPMG
19 report. And I'll also -- I assume I'll be dealing with
20 Mr. Erling, and I'll al -- also ask him to have at hand
21 the PUB book of documents, which is Exhibit 17, and
specifically Tab 7, sir.

22

23

You'll let me know when you have it, Tab
7.

24

25

MR. JONATHAN ERLING: That's the North
American natural gas supply?

1 MR. BYRON WILLIAMS: No, I think -- I'm
2 referring to the PUB book of documents that was
3 distributed yesterday. It should be Exhibit 17, and it
4 should be the Corporation's response -- so it's Tab 7.
5 Yeah, you have that, sir?

6 MR. JONATHAN ERLING: I do.
7 Unfortunately, I have two books of documents and they
8 both have the same title and neither say 17, so I should
9 note them somehow.

10 MR. BYRON WILLIAMS: That's probably a
11 clever effort to confuse you, sir, and -- and -- I'm just
12 teasing. If you would also turn in terms of your
13 evidence, Chapter 3, to page 47.

14 MR. JONATHAN ERLING: Okay.

15 MR. BYRON WILLIAMS: And, Mr. Erling, you
16 had some discussion on this -- this information, I
17 believe both on Monday and Tuesday, including a
18 discussion with my friend Ms. Southall. But just at a --
19 a high level, just to -- to recap, when we look at
20 Exhibit 3.4, what it represents is a comparison of actual
21 generation over a certain per -- time period, being from
22 the 1999/2000 year out to 2008/'09 versus forecast
23 generation as generated through HERMES at a particular
24 point in time. Would that be fair, sir?

25 MR. JONATHAN ERLING: Yes, it is.

1 MR. BYRON WILLIAMS: And we see a number
2 of -- on the graph on Exhibit 3.4 a number of data points
3 represented there. And you'll agree with me that PUB
4 Manitoba Hydro Information Request Risk-99, which is
5 found in Tab sa -- 7 of the PUB book of documents, is --
6 provides the numerical background for those data points.

7 Would that be fair?

8 MR. JONATHAN ERLING: Yes, it is.

9 MR. BYRON WILLIAMS: And you've also been
10 helpful to the Board in identifying that Exhibit 3.4, in
11 terms of its forecast, while it's labelled, "Forecast in
12 July," with three (3) month actuals, it would be more
13 accurate to say that the -- the forecasts that appear on
14 the graph are not all from -- from July of the particular
15 year. Would that be fair?

16 MR. JONATHAN ERLING: That's fair.

17 MR. BYRON WILLIAMS: And, indeed, turning
18 to PUB-99, only two (2) of them would be from July, with
19 six (6) being from September and two (2) from October.

20 Would that be fair?

21 MR. JONATHAN ERLING: That's correct.

22 MR. BYRON WILLIAMS: And we're just
23 leafing through some pages. I'm just... And in -- in
24 terms -- I -- I want to focus in on the '03/'04 forecast
25 for just a moment, Mr. Erling, and -- and certainly

1 directing your attention to PUB-99. My understanding is
2 that the forecast date for that would about the 10th of
3 September, 2003. Would that be your understanding, sir?

4 MR. JONATHAN ERLING: Yes, it is.

5 MR. BYRON WILLIAMS: So that would be
6 more than -- you know, a bit more than five (5) months
7 into the fiscal year.

8 Would that be right?

9 MR. JONATHAN ERLING: Yes, it is.

10 MR. BYRON WILLIAMS: And would it be your
11 understanding that being more than five (5) months into
12 the fiscal year that that forecast would be based not on
13 three (3) months actuals but on perhaps five (5) months
14 actuals? Would that be fair?

15 MR. JONATHAN ERLING: Let me just think
16 about that for the moment. I have to count on my --

17 MR. BYRON WILLIAMS: I had to do the
18 finger counting as well.

19 MR. JONATHAN ERLING: -- fingers. So
20 that -- hang on. April, May, June, July. About five (5)
21 months. Yes, I agree with that.

22 MR. BYRON WILLIAMS: And certainly your
23 understanding would be for that particular year it would
24 be based upon five (5) months actuals?

25 MR. JONATHAN ERLING: Yes, I do.

1 MR. BYRON WILLIAMS: Okay. Just flipping
2 back to page 46 of your evidence for -- for a moment, and
3 referring you to the second-last paragraph of that -- of
4 that, you'll see that on the third line you're referring
5 to Exhibit 3.4, sir?

6 MR. JONATHAN ERLING: Yes, I am.

7 MR. BYRON WILLIAMS: And the inference I
8 drew when I was looking at this is that Exhibit 3.4 would
9 be based upon actual data three (3) months out. But
10 we've agreed certainly in -- in terms of the '03/'04 year
11 that we're talking five (5) months out. Would that be
12 fair?

13 MR. JONATHAN ERLING: Yes.

14 MR. BYRON WILLIAMS: Turning you -- your
15 attention to the last sentence on page 46, you indicate
16 that Exhibit 3.4 indicates that the forecasting modules
17 used in HERMES can take the data set available in July
18 and produce realistic produ -- production plans for the
19 remainder of the fiscal year, correct?

20 MR. JONATHAN ERLING: Yes.

21 MR. BYRON WILLIAMS: Speaking
22 specifically of the '03/'04 year, and recognizing that
23 there's a 11 percent variance between forecast and
24 actual, is it your evidence that the 11 percent negative
25 variation in terms of the difference between forecast and

1 actual would still enable real -- realistic production
2 plans for the remainder of the '03/'04 year?

3 MR. JONATHAN ERLING: I think the focus
4 of this sentence was more a general statement over the
5 course of time and not referencing that specific year.
6 One thing to note, that gave us comfort at the time, was
7 that although there were variances in a few years that
8 were large, in particular in '03/'04, the overall
9 weighted average variance of the average variance is
10 about zero. So there doesn't appear to be any bias one
11 direction or the other in the forecasts that are
12 produced.

13 You know, the other consideration may be
14 that in the period 2003 and 2004, there were perhaps
15 decisions by management later in the year to operate the
16 system differently based on trying to maintain reservoir
17 levels and hence reducing generation but perhaps
18 increasing imports, and that may have affected the
19 difference in that year.

20 MR. BYRON WILLIAMS: So just in terms of
21 the statement then and to make sure I have your point.
22 First of all, you're not res -- referring to any
23 particular year, you're referring to the overall impact,
24 correct?

25 MR. JONATHAN ERLING: Overall --

1 MR. BYRON WILLIAMS: Variance from
2 average.

3 MR. JONATHAN ERLING: Overall variance
4 would be the focus of -- of the sentence, yes.

5 MR. BYRON WILLIAMS: And unless I or
6 anyone else criticize you for -- for drawing too broad of
7 a picture over the '03/'04 year, you would hasten to add
8 that there were -- there may have been certain management
9 decisions that might have affected generation in that
10 year, given the drought situation. Fair enough?

11 MR. JONATHAN ERLING: Fair enough. There
12 may have been management interventions or changes in
13 strategy.

14 MR. BYRON WILLIAMS: And, for example,
15 protecting against a worse winter than one normally does
16 might have been one (1) of those factors?

17 MR. JONATHAN ERLING: Correct, or
18 maintaining reservoir levels certainly would have been a
19 factor. It had ava -- additional imports being available
20 at -- at perhaps lower than expected cost when the HERMES
21 optimization was initially done.

22 MR. BYRON WILLIAMS: Okay. And I'm going
23 to ask you to turn next -- and thank you very much for
24 that clarification. I'm going to ask you turn next to
25 pages -- to page 65 of your evidence. And I'm also --

1 you might want to also keep a finger on page 114 at the
2 same time.

3 I know that's asking a lot this early in
4 the morning but do you think you can manage that, sir?

5 MR. JONATHAN ERLING: I will try.

6 MR. BYRON WILLIAMS: On page 65, and
7 specifically I'm referring you to Section 3.7.3.2, you're
8 discussing the adjustments that need to be made to
9 translate estimates of future MISO prices into estimates
10 of the MISO prices that Hydro will receive for export
11 sales.

12 That's the subject of this discuss -- this
13 section?

14 MR. JONATHAN ERLING: Yes, it is.

15 MR. BYRON WILLIAMS: And I want to draw
16 your attention to the very last page -- excuse me, the
17 very last sentence of this page where you make some
18 interesting comments. Well, let me back up.

19 And the point you make in -- in the last
20 bullet on this page, the starting point is that while
21 available price forecasts are available for key MISO hubs
22 such as Minnesota, Manitoba Hydro transacts at the MHEB
23 node.

24 Would that be fair?

25 MR. JONATHAN ERLING: That is fair.

1 MR. BYRON WILLIAMS: And you -- you --
2 you indicate in this bullet that you've examined data in
3 terms of the nodal price difference as compared to the --
4 between the Minnesota node -- node, N-O-D-E, and the MHEB
5 node.

6 Is that correct?

7 MR. JONATHAN ERLING: That's correct. We
8 do have a graph that discusses that issue in the report,
9 although in my recollection it may be redacted so I'd
10 like to just check a -- a copy that is a redacted
11 version, so I do not --

12 MR. BYRON WILLIAMS: Yeah, it's -- it's--

13 MR. JONATHAN ERLING: -- disclose any --

14 MR. BYRON WILLIAMS: -- yeah, it's parag
15 -- page 67, I believe, sir. Is that the one -- no,
16 perhaps that's not the one.

17

18 (BRIEF PAUSE)

19

20 MR. JONATHAN ERLING: No, actually, the
21 exhibit I that I was thinking on is page 68. It's
22 Exhibit 37, "On-Peak Pricing at MINN and MHEB."

23 MR. BYRON WILLIAMS: Super, so feel free
24 to refer to that as well.

25 MR. JONATHAN ERLING: There was another

1 page I was keeping my finger on and of course I've now
2 forgotten that. So you'll have to --

3 MR. BYRON WILLIAMS: That -- that's 114,
4 but, you know, I don't want to ask too much of your --
5 your fingers this early in the morning.

6 MR. JONATHAN ERLING: Yes, please don't.

7 MR. BYRON WILLIAMS: Let's start -- let's
8 now -- and thank you for referring us to that graph, that
9 should be helpful. Let's start with the last -- or look
10 at the last sentence on page 65. You're discussing that
11 in off-peak periods Manitoba Hydro transactions and
12 whether it is exporting or importing appear to affect
13 MISO prices and/or nodal diff -- differences while these
14 effects are much less pronounced during on-peak periods.

15 That's your general interpretation of the
16 information?

17 MR. JONATHAN ERLING: Of that sentence,
18 yes.

19 MR. BYRON WILLIAMS: And I -- I want to
20 explore first of all what your -- the first part of that
21 sentence, namely your conclusion that Manitoba Hydro
22 transactions, and whether it is exporting or importing,
23 appears to affect MISO prices.

24 So I wonder if you can discuss at a high
25 level what's the basis for that conclusion?

1 MR. JONATHAN ERLING: The conclusion is
2 not based on those particular exhibits, which don't show
3 the level of import/export activity by Manitoba Hydro.
4 It is based on some other analyses that we saw during the
5 course of our work that looked at the differentials,
6 depending on whether Manitoba Hydro was importing or
7 exporting.

8 MR. BYRON WILLIAMS: Okay. Well -- well,
9 let's get -- get to it and then I'll -- I'm going to ask
10 you about that other information you -- you looked at.
11 In terms of affecting MISO prices, and we're talking
12 about off-peak periods right now, what is the impact,
13 relatively, of exporting versus importing.

14

15 (BRIEF PAUSE)

16

17 MR. JONATHAN ERLING: I don't have the
18 data handy. My expectation would be that exporting would
19 tend to decrease the price at MHEB, but I'd have to check
20 on that.

21 MR. BYRON WILLIAMS: My clients are quite
22 interested in this -- this issue. Is that data readily
23 available?

24 MR. JONATHAN ERLING: I'll have to defer
25 to Manitoba Hydro on that. I believe they may regard

1 that data as proprietary, the analysis they -- that they
2 have done.

3 MS. MARLA BOYD: You haven't asked us for
4 an undertaking, but I'm going to have to take it under
5 advisement whether or not that's available to be
6 released.

7 MR. BYRON WILLIAMS: Mr. Chairman, there
8 -- we have a series of -- of questions in this area, or a
9 -- a number anyways, and I -- I think that what I'll do
10 is perhaps at the break I'll have a discussion with --
11 with Manitoba Hydro because there's some clarification --
12 and we'd certainly -- regardless of whether the
13 information's available or not, we'd -- we'd like to
14 understand the basis for the KPMG conclusions, both at
15 this page and page 114.

16 So when I close my cross before the
17 morning break, I'm going to do it with the caveat that
18 I'll discuss this with my friend Ms. Boyd and hopefully
19 we'll find a way to get more information on the record on
20 this point.

21 THE CHAIRPERSON: And in any -- and in
22 any case you'll report back to the -- the panel meeting.

23 MR. BYRON WILLIAMS: Yeah. Is that an
24 undertaking, sir?

25 THE CHAIRPERSON: Yes.

1 (BRIEF PAUSE)

2

3 MR. BYRON WILLIAMS: It's -- I'm just
4 joking, and I apologize.

5 MR. ROBERT MAYER: Mis -- Mr. Williams is
6 getting cheeky.

7 MR. BYRON WILLIAMS: Yeah. Mr. Williams
8 is very tired. There's no undertaking. We'll -- we'll
9 report back to the Board. Yeah, and there's no
10 undertaking by Manitoba Hydro. Mr. Chairman, I just want
11 to set aside my notes on this so I -- I don't misplace
12 them.

13

14 (BRIEF PAUSE)

15

16 MR. JONATHAN ERLING: I was conferring
17 with Manitoba Hydro personnel. They believe that the
18 data are available through MISO websites, that there may
19 be -- I mean, certainly the nodal price points are
20 available for each hour at each node. And the scheduled
21 transfers or transmission transfers at the border should
22 be available as well, from my understanding from them.

23

24 CONTINUED BY MR. BYRON WILLIAMS:

25 MR. BYRON WILLIAMS: I'm going to suggest

1 we do defer this to the break be -- because, Mr. Erling,
2 I'm trying to understand the basis for your conclusion,
3 so -- and I need you -- you to be able to speak to that.
4 So I'll -- I'll chat -- discuss that with Ms. -- Ms.
5 Boyd.

6 Turning you to page 67 of your evidence,
7 Mr. Erling, and under the Exhibit 3.6 you indicate that
8 Manitoba Hydro has not, to your knowledge, done an
9 analysis of whether quoted future prices would be a
10 better predictor of future spot prices than the forecast
11 purchased from the external forecasting firm.

12 That's your -- that's your evidence, sir?

13 MR. JONATHAN ERLING: That is.

14 MR. BYRON WILLIAMS: And it's KPMG's view
15 that comparing the effectiveness of alternative
16 forecasting approaches would improve the confidence in
17 Manitoba Hydro's current price forecasting process as it
18 relates to future spot prices. Would that be fair?

19 MR. JONATHAN ERLING: That's a fair
20 statement. There is a sentence at the bottom of the
21 paragraph that says substantially that.

22 MR. BYRON WILLIAMS: And to your
23 knowledge, has -- has this been done yet by Manitoba
24 Hydro?

25 MR. JONATHAN ERLING: I don't have

1 knowledge of whether they have done an analysis since we
2 prepared this report.

3 MR. BYRON WILLIAMS: And, Mr. Erling,
4 just explain, if -- if you would, why you believe that
5 looking at future prices might be a valuable source of
6 information on future spot prices.

7 MR. JONATHAN ERLING: I'm not sure. I
8 have a view that futures prices are preferable. What we
9 were noting in the second sentence of that paragraph, I
10 think the wording is one (1) rationale for using quoted
11 future prices as a forecasting tool is that they
12 represent the actual preferences of market participants.

13 I believe that's a view that would be
14 espoused by peer market economists who generally have a
15 preference for transaction type data. I have some
16 reservations about that data. It can be relatively
17 limited in terms of its availability if there are not
18 many future transactions. And oftentimes futures markets
19 for electricity are fairly thin and don't go out very
20 far, so I'm not sure that that data would be able to
21 supplant purchased forecasts.

22 MR. BYRON WILLIAMS: And, of course, I --
23 I'm not sure I used the word "better." I -- I asked you
24 why it might be of value. And the point being that
25 whether or not it can supplant purchase forecasts, you

1 certainly believe that it would be worthwhile for
2 Manitoba Hydro to undertake an analysis of whether some
3 alternative mechanisms, such as quoted future prices,
4 might add value to the -- Hydro's current price
5 forecasting process?

6 MR. ROBERT MAYER: On that point, if
7 futures markets are valuable, or you at least may -- say
8 may have some value in determining future prices, would
9 you not then expect that the people from whom Hydro buys
10 its forecast wouldn't be using the futures market at
11 least as an input to their predictions?

12 MR. JONATHAN ERLING: That's possible,
13 certainly. It would be typically more relevant for
14 shorter-term transactions than longer-term transactions
15 because I think there's certainly a limitation in terms
16 of the time horizon over which you can obtain future
17 status, so this is really more applicable to shorter-term
18 type transactions.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21 MR. BYRON WILLIAMS: And by shorter-term
22 you mean kind of about one (1) or two (2) years, sir?

23 MR. JONATHAN ERLING: That would be my
24 guess. My -- you know, perhaps Frank has more direct
25 knowledge of the time horizon since he deals I think more

1 in this space than I do.

2 MR. BYRON WILLIAMS: And, Mr. Chen, I'm
3 not asking for a great deal of elaboration, but if you
4 have anything to add on the topic, it would be helpful.

5 MR. FRANK CHEN: I think generally, yes,
6 short-term can be defined around that time horizon, one
7 (1) to two (2) years.

8 MR. BYRON WILLIAMS: And Mr. Chen, in your
9 view, is -- is that the extent of the value or -- or is
10 there a possible value going out farther than that from
11 future prices?

12 MR. FRANK CHEN: With respect to
13 electricity I think it is limited to probably the first
14 twelve (12) months. You can get -- Oh. For
15 electricity, typically, futures prices are quoted for the
16 first year or out to twelve (12) months. You can get
17 prices out to the next year but perhaps in -- in seasonal
18 blocks, not in off-peak in -- in monthly increments.
19 Perhaps, you know, prices blocked out for the -- further
20 than the subsequent next six (6) months in year 2 and
21 then another six (6) month block price for, you know, the
22 latter half of year 2 and then -- and that's it. There's
23 going to be lack of transparent pricing data in year 3
24 and out for electricity.

25 MR. JONATHAN ERLING: And -- and also, I

1 -- actually, I think I -- if I could add a point here. I
2 think in particular when you're dealing with off-peak
3 prices, that there is some limitation in your ability to
4 use quoted futures contracts because they are generally
5 quoted for a standard on-peak product five (5) by sixteen
6 (16) hours.

7 And I think one of the things that we note
8 in the report is that the relationship between an on-peak
9 and off-peak price is quite variable and hence as the
10 issue is as much getting a good forecast of the
11 differential as it is the base price for a standard five
12 (5) by sixteen (16).

13 MR. BYRON WILLIAMS: Okay. Thank you for
14 that. Turning you to page 76 of your evidence. And Mr.
15 Erling, just for context, this -- this page 76 your
16 comments are under Section 3.76 and you're, in this
17 section of your evidence, responding to a suggestion by
18 the cons -- the New York consultant that Hydro might be
19 prudent -- or excuse me, that's the wrong word, but --
20 that Hydro should consider dropping flow forecast data
21 prior to 1942 from it's -- from it's out -- from it's
22 calculations?

23 MR. JONATHAN ERLING: Yes, that was the
24 intent of this, which was to indicate that such an
25 approach would be less conservative since it would remove

1 data that show slightly lower flows.

2 MR. BYRON WILLIAMS: And -- and I don't
3 think -- and I don't want you to think that my clients
4 are disagreeing with you on this point, but essentially
5 your evidence was that even if this evidence was based on
6 less extensive gauging data, there was value to including
7 it in Hydro's calculations because it did add a element
8 of conservatism. Is that fair, sir?

9 MR. JONATHAN ERLING: Well, I don't think
10 that's the only reason it is of value. One (1) of the
11 indications is that it provides additional data with
12 respect to the potential year-to-year variability and
13 certainly flow patterns from year to year. So it's not
14 simply a question of the fact that the data have a
15 somewhat lower flow average and therefore add an element
16 of conservative -- and conservatism, but they also
17 provide additional data with respect to -- for example,
18 the serial correlation between year to year.

19 And also, discussing this issue with
20 Manitoba Hydro I know that the personnel there believe
21 that while the gauging data may not be as extensive, it
22 still covers a reasonably wide percentage of the relevant
23 flow channels, and -- and therefore is of value.

24 MR. BYRON WILLIAMS: And just to make
25 sure I have your point on that, Mr. Erling, and I'm going

1 to divide your -- your lengthy response into three (3) --
2 three (3) -- three (3) points: a) that certainly there is
3 some value in that there's some added -- added
4 conservatism, that's certainly one (1) element of the
5 value that you see from including this data?

6 MR. JONATHAN ERLING: Yes, I do.

7 MR. BYRON WILLIAMS: Secondly, the fact
8 that this data provides information in terms of longer
9 trends and insight into serial correlation, that's a
10 second value added, of including this data, correct?

11 MR. JONATHAN ERLING: Yes, it is.

12 MR. BYRON WILLIAMS: And you also take
13 some comfort in including because it in -- in -- includ -
14 - it's -- while the information may be less -- the -- the
15 gauges were less extensive, it still had a relatively
16 widespread -- so you were advised by Manitoba Hydro?

17 MR. JONATHAN ERLING: So I am advised,
18 yes.

19 MR. BYRON WILLIAMS: Now, just going back
20 to page 40 -- or 75 of -- of your report, so one (1) page
21 previously, the first paragraph under Section 3.76,
22 you're -- you're relaying the comments of the New York
23 consultant and -- and he or she seems to be making the --
24 the suggestion that because the number of gauging points
25 for which data are available is reduced, estimates of

1 overall flow volumes become less reliable.

2 Do you see that suggestion, sir?

3 MR. JONATHAN ERLING: I do, yes.

4 MR. BYRON WILLIAMS: And again, without
5 trying to undermine your -- your overall conclusions,
6 which we've canvassed, would you -- in -- in your view,
7 does the fact that there are less gauging points suggest
8 that the information prior to 1942 is somewhat less
9 reliable than subsequent information with materially
10 added gauging points?

11 MR. JONATHAN ERLING: I should emphasize
12 or clarify that the sentence that says...

13 "As you go farther back in time the
14 number of gauging points for which data
15 are available is reduced and,
16 accordingly, estimates of overall flow
17 volumes become less reliable."

18 ...is our attempt of paraphrasing the New
19 York consultant's assertions and not specifically our
20 view. However, it -- yeah, I would leave it at that.

21 MR. BYRON WILLIAMS: And now I'm try --
22 and I understood that perfectly, Mr. Erling, now I'm
23 trying to press you, but gently. Is it your view,
24 without undermining your -- your absolute conclusion,
25 that going farther back in time that we -- that we would

1 tend to press -- put less reliance on that earlier data
2 in that it was based upon less extensive gauging data?

3 MR. JONATHAN ERLING: All else being
4 equal, if you have a future -- fewer number of gauging
5 points, it is directionally likely, perhaps, that the
6 data would be therefore less reliable, but there are many
7 reasons for including these data. It is, you know, there
8 are significant concerns over measuring the long-term
9 variability of hydrological flows, and it would seem to
10 me that would strongly support using all of the data that
11 you have that is of reasonable quality.

12 MR. BYRON WILLIAMS: And certainly my
13 clients won't disagree with you on that point. Would you
14 -- but I appreciate your modest concession.

15 And recognizing that, all other things
16 being equal, less gauging data points, would that suggest
17 that extra care should be looking at pre-1942 data in
18 isolation given the absence -- or the -- the reduced
19 number of de -- gauging points?

20 MR. JONATHAN ERLING: I don't know that I
21 would leap to the conclusion that you especially need to
22 take extra care with the 1942 data, or rather the data
23 prior to 1942. I'm not sure I'm sufficiently familiar
24 with the differences in the gauging points that are being
25 used. And this section was really just to address an

1 issue raised by the New York consultant rather than, in
2 my mind, being something that is a significant issue of
3 concern going forward with the use of the data.

4 MR. BYRON WILLIAMS: And I'm not sure I
5 was leaping quite as far as your answer suggested. Let's
6 -- we'll take one (1) last crack at this. In looking at
7 pre-1942 data in isolation, if one were to do that one
8 might exercise particular caution to the extent that one
9 recognizes that there's less gauging data in play.

10 Fair statement?

11 MR. JONATHAN ERLING: Yes, I think it's
12 the degree of -- or quantum of the -- the caution that
13 might be required to be exercised that -- that would be
14 of -- at issue.

15 MR. BYRON WILLIAMS: Fair enough.

16 Turning to page --

17 MR. ROBERT MAYER: Just -- just before
18 you leave that point, I'm looking at Exhibit 311 on page
19 76.

20 MR. JONATHAN ERLING: Yes.

21 MR. ROBERT MAYER: Reading that, could
22 somebody actually have gauges at Conawapa back in 1912?
23 It would have been a heck of a walk into the bush.

24 MR. JONATHAN ERLING: I ca -- have no
25 direct knowledge of the geographic locations of the

1 gauging data that were available, so I would hesitate to
2 comment. I -- my understanding is that there are very
3 good data for key points in the system. And since all
4 the flow that goes, for example, through Lake Winnipeg
5 will end up going through Conawapa, or maybe I'm
6 overstating the case, but a good portion of it, that --
7 that if you do have good data at key points in the system
8 in the past you probably do have a very good
9 representation of water flows through the system.

10 But I am relaying information that was
11 imparted to me many months ago in some discussions that
12 we had at Manitoba Hydro, so I would be reluctant to --
13 not be able to check any assertions that I might make in
14 that regard.

15 MR. ROBERT MAYER: Conawapa -- you can't
16 quite see Hudson Bay from Conawapa, but pretty close.
17 You're pretty much the back end of the system if you're
18 actually gauging water from there. And to my knowledge,
19 1912 there wouldn't have been an awful -- the only way
20 you would have been able to get there, I'm assuming, is
21 by the -- by river, and it was pretty fast.

22 MS. MARLA BOYD: Mr. Mayer, the Hydro
23 panel will be able to -- to address those issues.

24

25 CONTINUED BY MR. BYRON WILLIAMS:

1 MR. BYRON WILLIAMS: Mr. Erling, you're
2 com -- you're con -- you're confirming that you weren't
3 there in 1912?

4 MR. JONATHAN ERLING: Well, I would have
5 hoped that was obvious, but perhaps not.

6 MR. BYRON WILLIAMS: Mr. Erling, we're --
7 we're almost done. Turning your attention to page 100
8 and 101 of your section of the evidence, please.

9 MR. JONATHAN ERLING: Yes.

10 MR. BYRON WILLIAMS: Now, KPMG has done
11 some interesting looks at drought periods and severity of
12 drought risk. You'll agree with me on that?

13 MR. JONATHAN ERLING: Did you refer to
14 them as interesting?

15 MR. BYRON WILLIAMS: Yes.

16 MR. JONATHAN ERLING: Yes, well, I -- I
17 take that as a great compliment, so I will agree
18 wholeheartedly, which is perhaps the first thing -- first
19 time I've agreed with you har -- wholeheartedly this
20 morning, but...

21 MR. BYRON WILLIAMS: That was the best
22 concession I've had, sir. Turning your attention right
23 to the bottom of page 100. KPMG makes the assertion that
24 drought periods tend to last on average three (3) to four
25 (4) years depending on what definition you use.

1 Do you see that, sir?

2 MR. JONATHAN ERLING: I do.

3 MR. BYRON WILLIAMS: And you said KPMG
4 suggests that this information may be useful when
5 assessing drought risk, correct?

6 MR. JONATHAN ERLING: Yes, I do.

7 MR. BYRON WILLIAMS: And explain to me
8 why -- what insight you expect that Hydro or a regulator
9 might get from the droughts tending to last on average
10 three (3) to four (4) years, in terms of assessing
11 drought risk.

12 MR. JONATHAN ERLING: I think that the
13 point that we were trying to make here was not, for
14 example, that it would be inappropriate to use a five (5)
15 year drought in calculating drought risk, but rather that
16 it is very clear that there is serial correlation and
17 therefore that droughts tend not to be one (1) year
18 events. And the calculations here are demonstrating --
19 and particularly the calculations in table 318 with
20 respect to auto-correlation are -- are demonstrating that
21 there are good reasons to believe that there are serial
22 correlations, so it's more than a one (1) year event.

23 MR. BYRON WILLIAMS: And so the insight
24 you draw is that in -- in considering the extent of
25 drought risk it would be prudent to look at multi-year

1 events?

2 MR. JONATHAN ERLING: That is certainly
3 correct.

4 MR. BYRON WILLIAMS: Now, the other -- on
5 the next page, again at the bottom of one (1) -- the
6 bottom of page 101:

7 "KPMG concludes that the increase in
8 drought risk for longer holding periods
9 levels off after four (4) years or so."

10 Do you see that, sir?

11 MR. JONATHAN ERLING: Yes, we do. We
12 make the statement that droughts of -- between four (4)
13 and seven (7) years have a relatively similar -- similar
14 cumulative shortfall in flows over a per -- over the
15 period of the drought.

16 MR. BYRON WILLIAMS: And what -- what, if
17 any, inference would you draw from that conclusion in
18 terms of its -- its usefulness in assessing drought risk.

19 What -- to what point would you apply that
20 information?

21 MR. JONATHAN ERLING: I don't think I
22 actually really thought farther than that in terms of its
23 implications. We were really trying to illustrate the
24 nature of the droughts that have occurred and trying to
25 analyze or present the data in new or different ways that

1 may help people think about droughts. I'm not sure it
2 said anything to me that's obvious in terms of changing
3 the way that drought analyses has been undertaken.

4 MR. BYRON WILLIAMS: I'm not asking you
5 to change the way that drought an -- analyses has been
6 undertaken.

7 Are there any conclusions, now that I
8 press you gently again, you might draw that -- that would
9 provide insight into assessing drought risk given this
10 interesting conclusion?

11 MR. JONATHAN ERLING: Well, I think you
12 would want to look at droughts -- if you're really
13 interested in looking at the worst-case scenarios that
14 you could be reasonably comfortable that you are looking
15 at worst-case scenarios if you are looking at droughts of
16 five (5) to says seven (7) year in duration.

17 MR. BYRON WILLIAMS: Okay. Thank you for
18 that. Turning you to page 116 of your evidence. You see
19 the heading at the top? That's page 116.

20 MR. JONATHAN ERLING: That would be
21 "Empirical validity"?

22 MR. BYRON WILLIAMS: Yeah, we're just
23 waiting for people to get there, sir.

24 MR. JONATHAN ERLING: Okay.

25 MR. BYRON WILLIAMS: You see the heading

1 at page 1 -- 6 -- 16 re -- and it relates to the
2 empirical validity of SPLASH.

3 Do -- would that be fair, sir?

4 MR. JONATHAN ERLING: It does.

5 MR. BYRON WILLIAMS: And what you note in
6 this section of your evidence is that there was a limited
7 peer review of SPLASH by Manitoba Water -- conducted by
8 Manitoba Water Stewardship in 2005 in connection with the
9 Wuskwatim hydro-electric proceeding; fair enough?

10 MR. JONATHAN ERLING: That's correct.

11 MR. BYRON WILLIAMS: And what the peer
12 review concluded was that the SPLASH model was
13 sufficiently accurate to represent the changes of the
14 water regime caused by the addition of the Wuskwatim
15 power plant to the system, correct? That's your
16 understanding of it?

17 MR. JONATHAN ERLING: That's my
18 understanding of the conclusions of those reports and --
19 and the scope of their work, yes.

20 MR. BYRON WILLIAMS: KPMG makes a comment
21 that the scope of that review was relatively limited.

22 Is that right?

23 MR. JONATHAN ERLING: That's right.

24 MR. BYRON WILLIAMS: And can you
25 elaborate on how, in the view of KPMG, that scope was

1 limited?

2 MR. JONATHAN ERLING: Well, I think the
3 relevant information is in the prior paragraph. Oh,
4 perhaps it's not worded in the way that would lead you to
5 conclude that that's the limited scope.

6 Essentially, the -- the -- the
7 participants in the peer review or the consultants that
8 were asked to review the SPLASH model were asked
9 specifically to comment on whether it would provide a
10 good representation of the impact on water flows and
11 levels of the addition of the Wuskwatim Dam. Clearly,
12 that's a fairly defined scope. So it was on that basis
13 that we said these were relatively limited reviews.

14 MR. BYRON WILLIAMS: And it's KPMG's view
15 that -- that more comprehensive review might be warranted
16 for evaluating the economics of larger additions, such as
17 Keeyask and Conawapa, and the associated contracts for
18 the long-term sale of firm power, correct?

19 MR. JONATHAN ERLING: Well, the specific
20 statement:

21 "Manitoba Hydro would benefit from a
22 more comprehensive review to ensure
23 that the model is appropriate for
24 evaluating the economics of larger
25 additions such as Keeyask and Conawapa

1 and associated contracts for the long-
2 term sale of firm power."

3 MR. BYRON WILLIAMS: And that's KPMG's
4 view?

5 MR. JONATHAN ERLING: Yes, it is. And I
6 think what we were thinking of here is that the benefit,
7 in particular, would be in relation to bolstering
8 stakeholder confince -- confidence in the models. It was
9 certainly not that we have any concerns about the nature
10 of the models or their sufficiency for this task.

11 MR. BYRON WILLIAMS: And have you made
12 any inquiries subsequent to your report in terms of
13 whether any such comprehensive review has been
14 undertaken?

15 MR. JONATHAN ERLING: We have not made
16 any inquiries to that effect.

17 MR. BYRON WILLIAMS: Mr. Gupta, just a
18 couple of questions for you. I don't think you need to
19 turn to any reference in your evidence quite yet, famous
20 last words, but you'll recall both in your direct
21 evidence and certainly in your discussions with my friend
22 Ms. Southall considerable discussion about calculations
23 of net present value of -- of different scenarios,
24 including sale versus no-sale.

25 You'll recall the high level of those

1 discussions?

2 MR. ANURAG GUPTA: Yes, I do.

3 MR. BYRON WILLIAMS: And are you in a --
4 and -- and again, those calculations, my understanding is
5 KPMG identified the scenarios and then the actual
6 calculations were undertaken by Manitoba Hydro.

7 Is that your understanding?

8 MR. ANURAG GUPTA: We -- we specified
9 what runs we wanted and Manitoba Hydro used, I believe,
10 the SPLASH program -- the SPLASH model to run those
11 scenarios.

12 MR. BYRON WILLIAMS: And could you just,
13 for my client's benefit, outline your understanding of
14 the discount rate that Manitoba Hydro employed?

15 MR. ANURAG GUPTA: The discount rate that
16 they employed in that would be consistent with the latest
17 PRP. I -- I don't know whether that discount rate is in
18 the public domain or not.

19

20 (BRIEF PAUSE)

21

22 MS. MARLA BOYD: My understanding is it's
23 not. I'm just waiting for a nod from the back row.

24

25 (BRIEF PAUSE)

1 MS. MARLA BOYD: Well, the back row
2 advises me that it's an undertaking outstanding, so we'll
3 -- we'll attend to filing of that. It's not on the
4 record as of this point.

5

6 CONTINUED BY MR. BYRON WILLIAMS:

7 MR. BYRON WILLIAMS: And just for my
8 client's comfort, would KPMG in setting out these
9 scenarios have explored the discount rate that Manitoba
10 Hydro was -- was choosing to employ?

11 MR. ANURAG GUPTA: And we -- we -- what
12 we looked at is to make sure the discount rate that was
13 being used in the analysis was consistent with what was
14 used in the IFF, the base financial forecast, as well --
15 as well as the PRP.

16 MR. BYRON WILLIAMS: So the -- the
17 purposes were to be -- be confident that it was the same
18 methodology as -- as used elsewhere?

19 MR. ANURAG GUPTA: That's right, make
20 sure it was consistent with the PRP and the IFF.

21 MR. BYRON WILLIAMS: Mr. Gupta, this will
22 -- will take only a couple minutes, but if you could just
23 pull up your evidence at page 130 -- 136, and, also,
24 CAC/MSOS Exhibit 12, which is the -- the amicus brief
25 filed in the Supreme Court, not of Canada, but the United

1 States.

2 MR. ANURAG GUPTA: Sorry, I have those
3 references.

4 MR. BYRON WILLIAMS: And, Mr. Gupta, you
5 -- I don't -- I don't mean to explore these references in
6 any great detail, but just to put a bit of context around
7 them, you'll agree with me that in KPMG's report they
8 quote extensively from an amicus brief, which is
9 footnoted as footnote number 6, which was -- was filed in
10 the US Supreme Court, correct?

11 MR. ANURAG GUPTA: That's correct, yes.

12 MR. BYRON WILLIAMS: You quote it on page
13 136. You quote it on page 137. And subject to check,
14 you'll agree with me that you quote it as well on page
15 146?

16 MR. ANURAG GUPTA: That's correct.

17 MR. BYRON WILLIAMS: And the document you
18 quoted from, of course, was the document now marked as
19 CAC/MSOS Exhibit number 12, correct?

20 MR. ANURAG GUPTA: That's correct.

21 MR. BYRON WILLIAMS: And -- and I want to
22 be -- to be clear, Mr. Gupta, that I'm not sure my
23 clients disagree with the use to which you put this
24 document, but they just want to make sure the tribunal
25 has appropriate context for it. And it would be fair to

1 I don't think my clients disagree with your ultimate
2 point. I just want to put a bit of context on it. And
3 perhaps if you could turn in the brief to page 8. And --
4 and I'll direct your attention under summary of argument
5 to the third -- the third paragraph, which starts, "The
6 ninth circuit's appro -- approach."

7 Do you see that, sir?

8 MR. ANURAG GUPTA: I -- I see that, yes.

9 MR. BYRON WILLIAMS: Yeah. And just for
10 the purposes of con -- of -- of context, what we're
11 talking about in this specific matter before the court,
12 or are long-term contracts entered into during a market
13 crisis?

14 That would be fair?

15 MR. ANURAG GUPTA: That was -- my
16 understanding was that was one (1) aspect they looked at,
17 yes.

18 MR. BYRON WILLIAMS: And the thrust of --
19 of this evidence in this section is that long-term
20 contracts are a remedy for crisis conditions because they
21 allow buyers to reduce the risk posed by extreme vol --
22 volatility in spot markets.

23 That was the thrust of -- of this
24 particular section?

25 MR. ANURAG GUPTA: I -- I see that

1 quotation in the -- in the brief, yes.

2 MR. BYRON WILLIAMS: And again, did you -
3 - and I think you've answered this already, I just want
4 to be clear. You've not re -- reviewed the decision of
5 Mr. Justice Scalia, whether or not the dec -- it was
6 affirmed or -- or rejected the 9th Circuit Court's
7 decision?

8 MR. ANURAG GUPTA: That is correct, sir.
9 I did not review the outcome of the case.

10 MR. BYRON WILLIAMS: Okay. Well, we'll
11 leave -- we'll leave that then. Mr. -- Mr. Chairman and
12 Mr. Vice-Chair, subject to the conversation I'd like to
13 have with my friend Ms. Boyd at the break, that's the end
14 of our inquiries for -- for right now.

15 MR. ROBERT MAYER: Mr. -- Mr. Erling, I
16 have just one (1) question respecting your conclusions at
17 10. -- sorry, 3.10.2.4, Empirical Validity of SPLASH. My
18 question is, you -- you mentioned that the peer review co
19 -- made a conclusion that SPLASH is sufficiently accurate
20 to represent the change in water regime caused by the
21 addition of Wuskwatim.

22 My question to you is: Did you actually
23 read the reports or was this Hydro's interpretation of
24 that peer review?

25 MR. JONATHAN ERLING: We were provided

1 with copies of those reports and we read them.

2 MR. ROBERT MAYER: Thank you.

3 THE CHAIRPERSON: Okay. We'll take the -
4 - the break, Mr. Williams, although it's a little bit
5 early, to allow you to consult. And then when you come
6 back you can brief us all. Thank you.

7

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

9 --- Upon resuming at 10:49 a.m.

10

11 THE CHAIRPERSON: Mr. Williams...?

12 MR. BYRON WILLIAMS: Yes, thank you for
13 the break, Mr. Chairman. I can just advise that I -- I
14 believe I have two (2) questions for Mr. Erling. And
15 then yesterday I had said I would reflect upon a question
16 for Mr. Chen, and that will be my last question, will be
17 that one.

18 THE CHAIRPERSON: Very good, sir. Please
19 proceed.

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22 MR. BYRON WILLIAMS: Mr. Erling, first of
23 all, just directing your attention to page 65 of your
24 evidence, with some hesitation I will ans -- ask an open-
25 ended question. At the bottom of page 65 you state:

1 "In off-peak periods MH transactions
2 (and whether it is in exporting or
3 importing) appear to affect MISO prices
4 and/or nodal differences while these
5 effects are much less pronounced during
6 on-peak periods."

7 And I'm going to ask you to explain what
8 you -- elaborate on that statement and elaborate, if you
9 can, on the basis for that conclusion.

10 MR. JONATHAN ERLING: Okay. Thank you,
11 Mr. Williams. I enjoy an opportunity to answer an open-
12 ended question. The issue that is being addressed in
13 this statement concerns nodal price differences. The
14 MISO system covers a large geographic area. Manitoba
15 Hydro sells into that system at the MHEB node, which is
16 at the, as I understand it, the border with the US, and
17 therefore it conducts its import and export transactions
18 at that node.

19 The purchased price forecasts that
20 Manitoba Hydro uses are for the MINN node, which is at
21 Minneapolis, and which is a major load centre within the
22 Northwestern quadrant of the MISO system. The overall
23 MISO prices are generally reported for the large
24 geographic area, and so it's important for Manitoba Hydro
25 to consider differences between nodes or -- and more

1 specifically, differences between the MHEB node at which
2 it transacts and the larger MISO system.

3 And the point that we were addressing in
4 this sentence was that differences may vary across time
5 periods, specifically, the -- just by way of background,
6 the northeast -- northeaster -- northwestern quadrant,
7 which is basis -- or the centre of the MINN hub, will
8 tend to be in demand-supply balance in -- on-peak
9 periods. And similarly -- and therefore there will be
10 limited differentials between the MINN hub and MISO
11 system generally.

12 In off-peak periods there may not be such
13 a balance and there will be differentials between the
14 MINN hub and the rest of the system. And to the extent
15 that Manitoba Hydro is importing and exporting during
16 off-peak periods there may, in addition, be differentials
17 between MHEB and the MINN hub. And the data that we
18 reviewed suggested that that -- those differences may
19 vary depending on whether Manitoba Hydro is importing or
20 exporting.

21 In case that's not enough elaboration,
22 I'll just make one (1) final point that the reason for
23 differentials between nodes on a congested transmission
24 system is that there needs to be some re-dispatch of
25 generation units to accommodate the congestion or to

1 address the congestion and to avoid transmission line
2 overloads.

3 One (1) reason for differentials to be
4 large in off-peak periods is, as I understand it, that
5 the US Midwest has a surplus of wind generation that is
6 often come online and transacts at low marginal cost or
7 is offered into the margin at a low marginal cost.

8 MR. BYRON WILLIAMS: Thank you for that.
9 I suspect we could have a lengthy dialogue on that --
10 that answer, but I'll leave that for now. Just turning
11 you to page 114 of your evidence.

12 MR. JONATHAN ERLING: Yes.

13 MR. BYRON WILLIAMS: And you see the --
14 the first paragraph, and I'm directing your attention to
15 the last two sentences of that. You see that there's a
16 statement:

17 "MH maintains that overall MISO prices
18 are not affected by drought in Manitoba
19 since MISO is largely a fossil-based
20 system. Prices at the MHEB node,
21 however, may be affected by the shift
22 from sales to purchases in the event of
23 a drought."

24 And I'd ask you to underline or explain in
25 further detail what you mean by that statement, sir.

1 MR. JONATHAN ERLING: Yes, I would be, of
2 course, pleased to do so. In the event that Manitoba
3 Hydro exports power this will res -- this will reflect or
4 be observed as a flow of power into the MHEB node, so
5 there will be a surplus of power available at that node.
6 And to the extent that there are transmission constraints
7 and to the extent that losses increase, this will
8 increase price differentials at that node relative to the
9 larger MISO system and is likely to result in a decrease
10 in the price at that node.

11 Conversely, if Manitoba Hydro needs to
12 purchase power at the MHEB node, that will result in an -
13 - tend to result in an increase in price at the MHEB node
14 relative to the remainder of the system.

15 Given that price differentials do reflect
16 transmission constraints, that is one (1) rationale for
17 expanding transmission because the expansion of that
18 transmission would, by its nature, tend to reduce the
19 frequency of such differentials and their magnitude.

20 MR. BYRON WILLIAMS: I guess that's a
21 risk when I ask an open question. I get a bit -- a bit
22 of elaboration more than I might have expected. Mr. --

23 MR. JONATHAN ERLING: Well, you knew that
24 risk going into this.

25 MR. BYRON WILLIAMS: Mr. -- Mr. Chen, one

1 (1) question for you. You'll recall our discussion --
2 you'll recall our discussion yesterday in terms of your
3 conclusions that based on 2007 methodology that Hydro's
4 stress testing was conservative; you'll recall that?

5 MR. FRANK CHEN: I do.

6 MR. BYRON WILLIAMS: And you'll also
7 recall that we discussed that the methodology employed in
8 2008 as opposed to 2007 used the second-worst drought in
9 history as opposed to the worst drought.

10 Do you recall that, sir?

11 MR. FRANK CHEN: I re -- yes, I do.

12 MR. BYRON WILLIAMS: And I asked you, and
13 I don't think you need the transcript reference, but if
14 you do, it's page 3,553, I asked you whether you still
15 were of the view that it's still a conservative stress
16 test. Do you recall that question, sir?

17 MR. FRANK CHEN: I do.

18 MR. BYRON WILLIAMS: And I have to tell
19 you, frankly, when I read your answer I wasn't sure what
20 your answer was, and so I'm just going to pose the
21 question to you again, sir.

22 MR. FRANK CHEN: I apologize for that.
23 And, in fact, I was maybe a bit -- a bit confused or
24 misunderstood the -- the initial question. But after
25 having read the -- reread the transcripts, I have a

1 clearer understanding of what you're -- what you're
2 asking. So if you're asking that is the stress test
3 methodology still conservative if they were to use the
4 worst drought in history instead of the second-worst --

5 MR. BYRON WILLIAMS: No, my question is
6 this. If they were recognizing that they are now using
7 the second-worst drought in history, at least in 2008, do
8 you still consider that a conservative stress test?

9 MR. FRANK CHEN: After having...

10

11 (BRIEF PAUSE)

12

13 MR. FRANK CHEN: So having revisited the
14 transcripts and having discussed this with Manitoba
15 Hydro, the stress testing methodology still remains
16 conservative using the second-worst drought history -- or
17 drought period in history given the -- the explanation of
18 the difference in magnitude of financial loss between the
19 worst and the second-worst.

20 MR. BYRON WILLIAMS: And I've overstayed
21 my welcome, Mr. Chairman. So if others want to follow
22 that up, I -- I certainly will leave that. Thank you
23 very much to the KPMG panel.

24 THE CHAIRPERSON: I may have missed
25 something, Mr. Chen, but are you saying then that if they

1 used the period of time, and when -- if I recall
2 properly, it was twelve (12) out of fourteen (14) years
3 in drought in that particular period, or at least '37 to
4 '41, using that would even be more conservative.

5 Is that what you're saying?

6 MR. FRANK CHEN: Not more conservative.
7 It is -- remains conservative.

8 MR. BYRON WILLIAMS: I may --

9 MR. FRANK CHEN: Meaning -- mean --

10 MR. BYRON WILLIAMS: I may have muddle --
11 muddled it, Mr. Chairman. And -- and at the risk of
12 giving evidence, I'll -- you'll -- you'll beat me down if
13 I do, the original conclusion was based -- by KPMG was
14 based on the '37 to '41 drought, which they concluded was
15 conservative.

16 What I was seeking clarification on was
17 whether employing, as they do now, the '87 to '92
18 drought, or they did in the 2008 IFF, whether the KPMG
19 conclusion in terms of conservatism remains or has been
20 altered. I don't know if that helps you, sir.

21 THE CHAIRPERSON: I think so.

22 MR. ROBERT MAYER: I recall, I think, some
23 further evidence in that regard, and I'm not sure whether
24 it was this panel or the other. But there was discussion
25 when they were comparing the earlier drought to the later

1 drought, the later drought being less severe. There was
2 a discussion, if you modelled everything against the
3 earlier drought you would be dealing with a 99-percentile
4 issue, whereas if you were dealing with the -- if you
5 modelled based on the later drought you were to a 95-
6 percentile issue.

7 I don't know what any of those percentile
8 issues mean, but I do recall hearing that evidence, and I
9 don't know whether it was from this panel or the other,
10 and the recommendation was that you were more generally -
11 - you -- you couldn't expect a model to the 99-
12 percentile, but you would be modelling to the 90-
13 percentile and that was satisfactory.

14 I don't know who made that, but I couldn't
15 have possibly made that up.

16 MS. MARLA BOYD: If it helps, Mr. Mayer,
17 my recollection is that's the evidence of ICF.

18 THE CHAIRPERSON: I'll have to think more
19 on -- more about it, but I'm -- I'm -- I'm still sort of
20 pondering this -- this concept of two (2) lengthy
21 droughts interrupted by a short period of time when there
22 wasn't a drought, and I'll -- I'll leave it at that.

23 Mr. Williams, are -- you're -- you're done
24 now?

25 MR. BYRON WILLIAMS: Yes, I am. Thank

1 you, Mr. Chairman.

2 THE CHAIRPERSON: Thank you, sir. We'll
3 move on now to MIPUG, Mr. Hacault.

4

5 (BRIEF PAUSE)

6

7 CROSS-EXAMINATION BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: Good morning,
9 members of the panel. I represent MIPUG, Manitoba Power
10 Industrial Users Group, and we'll ha -- go through some
11 items in your report. The -- I apologize to the rest of
12 the group here because my introduction to a large extent
13 is the same as the one (1) I had presented for ICF
14 because I want to put this panel into a context of why
15 I'm asking questions and the reasons for it, so I
16 apologize in advance to those that have already heard it.

17 First I'm going to cover some general
18 issues related to the report and what is covered and what
19 is not covered in your April 2010 report, which I'll just
20 refer to as the April report, and then there's the May
21 followup.

22 Second, in my progress of the questioning
23 I'll have some general questions about the context of
24 your review and your understanding of the Manitoba
25 electricity area.

1 And then third, I intend to cover, and
2 they do not always fall into nice easy blocks, but four
3 (4) areas specifically identified by this Board, and also
4 by Manitoba Hydro and our client with respect to the risk
5 scoping of the Hearing. We're having an unusual Hearing
6 here, as I understand it, in the sense that we're going
7 very far into risk issues, which has concerned the Board
8 for many years.

9 So there were a couple questions that was
10 -- that were asked, and briefly stated, they fell into
11 four (4) categories, and you've dealt with most of these
12 categories, but perhaps in a more limited basis.

13 The first one related to the internal
14 capabilities and governance structures at Manitoba Hydro,
15 so I'll deal with that.

16 Secondly, the Crown Corporation's approach
17 to risk management, is it appropriate or not, and we've
18 dealt with some of that.

19 Next, the risk-re -- reward tolerance for
20 Manitoba Hydro ratepayers, and that was part of this last
21 discussion.

22 And finally, in the context there's some
23 suggestion that financial reserves are required to target
24 residual risk items that can't be managed, is the quantum
25 of that risk reasonable. And I've seen numbers that

1 range from 2 billion to 4 billion, and there's a 2.8 --
2 or \$2.7 billion amount that's kind of settled on, so
3 we'll have some discussions about that.

4 Now, going through the first theme, which
5 is the report, I just wanted to make sure, with respect
6 to the April report, there's a list of what's called the
7 terms of reference and the scope of review, that's --
8 that's at little 'I', and when I direct questions to the
9 panel, whoever is best able to answer them, please do so.

10 I note that there is a difference between
11 that scope of review and the one stated in your December
12 15, 2009 retainer letter which is part of the Board's
13 book of documents. So if you could take out Tab 3, and
14 at page 3 of the retainer letter, I'll give you the
15 opportunity to read both scopes and then I'll have some
16 questions.

17

18 (BRIEF PAUSE)

19

20 MR. ANTOINE HACAULT: Have you had the
21 opportunity to review both versions?

22 MR. WILL LIPSON: I have.

23 MR. ANTOINE HACAULT: Is -- was the scope
24 of work modified subsequent to the December 15, 2009
25 letter which is at Tab 3 of the Board book of documents?

1 MS. MARLA BOYD: Perhaps Mr. Hacault you
2 -- perhaps you can put to the witness the modification
3 you're talking about. As -- as I read the scope of
4 review from the executive summary and the scope of review
5 from page 3 of the report, they appear to be very
6 similar.

7

8 CONTINUED BY MR. ANTOINE HACAULT:

9 MR. ANTOINE HACAULT: Thank you for your
10 intervention. My question is still the same. Was the
11 scope of review changed after the December 15, 2009
12 letter?

13 MR. WILL LIPSON: The scope of the review
14 that you find in the April report is essentially
15 identical to the scope of review -- scope of work writeup
16 on page 3 of Tab 3, which is our December 2009 letter,
17 with the exception that we deleted the last few words at
18 the end of the fourth (4th) bullet which talks about a
19 deadline of December 31st, 2009, for the work. All
20 right. In terms of the -- you know, comparing the four
21 (4) bullets that are in each document.

22 MR. ANTOINE HACAULT: So the scope of
23 work was not changed, is that the simple answer?

24 MR. WILL LIPSON: Except for that
25 deadline obviously not having been met from the December

1 15th letter, that's correct.

2 MR. ANTOINE HACAULT: Thank you. Now, I
3 apologize if I'm going to -- to some extent go over what
4 was previously covered by other counsel. I've circulated
5 a lengthier extract of the Public Utility Board Order
6 32/'09. And I direct your attention firstly to Tab 1 of
7 the Board book of documents.

8

9 (BRIEF PAUSE)

10

11 MR. ANTOINE HACAULT: Mr. Secretary, are
12 we at Exhibit 8?

13 THE CHAIRPERSON: Okay, so it's MIPUG
14 number 8, and we're talking about the extracts from Order
15 32/'09?

16 MR. ANTOINE HACAULT: That's correct.
17 For the record, I've included the cover page. Secondly,
18 immediately after the cover page, pages 21 to, and
19 including, 28, which covers the discussion of this Board
20 with respect to risks. And then finally pages 47 and 48
21 of the order itself.

22

23 --- EXHIBIT NO. MIPUG-8: Extracts from PUB Order 32/09

24

25 CONTINUED BY MR. ANTOINE HACAULT:

1 MR. ANTOINE HACAULT: Now, as I
2 understand it, chronologically, Manitoba Hydro wrote the
3 November 10, 2009 letter to KPMG requesting for a
4 proposal, and it specifically references Board Order
5 32/'09.

6 And when I ask this question, it's a
7 question of KPMG, when did KPMG receive -- or if it
8 didn't receive it, download it, and review Order 32/'09?

9

10 (BRIEF PAUSE)

11

12 MR. WILL LIPSON: Okay. When we received
13 the terms of reference from Manitoba Hydro, which would
14 have been highly likely to be the 10th of November, the
15 date of the letter, we did have a look at the PUB Board
16 Order 32/'09. I think a couple of days ago I had stated
17 that I didn't have a recollection whether we had done so
18 during the proceedings of developing our Phase 1 report,
19 and I have subsequently gone back and, you know,
20 consulted with colleagues that we had reviewed that work.

21 What I -- I had also said at the time that
22 we had not reviewed other Board orders. That was again a
23 reference to the time of Phase 1. Obviously, you know,
24 as I stated on the record yesterday, we obviously had
25 reviewed other orders and refer to them in Chapter 2 of

1 our report.

2 MR. ANTOINE HACAULT: So it's others at
3 KPMG and not this particular panel that would have had
4 the opportunity to review Board Order 32/'09 in or about
5 the first week of November. Is that correct?

6 MR. WILL LIPSON: No, I believe we all
7 had the opportunity to review, so, at this point, there
8 were only a limited number of us who were -- and I was
9 included in that group, who were preparing a response.
10 Mr. Erling and Mr. Gupta were also included in that
11 group. I don't have a specific recollection whether I
12 reviewed the Board order. I had some knowledge of it,
13 I'm fairly confident, but it might have been through
14 consultation with colleagues.

15 MR. ANTOINE HACAULT: Thank you. So
16 everybody's moving merrily along with two (2) different
17 tasks: the first one to deal with the New York consultant
18 issues, and the second task, being a much wider task, is
19 to deal with the concerns of the -- expressed by the
20 Public Utilities Board on a number of occasions going
21 back to 2004. Is that correct?

22 MR. WILL LIPSON: Well, I -- I spoke to
23 that yesterday. We didn't view these as two (2)
24 separate, discrete tasks. What we understood the Board
25 order to be telling was that the -- for the development

1 of a conceptual outline as to what work could be done to
2 addressing your consultant's assertions and allegations,
3 and more generally, com -- you know, do a risk-management
4 review of Manitoba Hydro's practices.

5 That led to our development of our work
6 plan that was reviewed with our client, and we proceeded
7 ahead and implemented that.

8 MR. ANTOINE HACAULT: I know that's what
9 you've indicated. I'm kind of surprised at that
10 indication, and I direct your attention to page 21 of 48
11 of this Exhibit 8. You'll see that in the second
12 paragraph under the heading, "Risks" -- so, firstly, a
13 discussion of risks would be fairly easy to find in this
14 decision.

15 Do you agree?

16 MR. WILL LIPSON: Yes.

17 MR. ANTOINE HACAULT: and in the second
18 full paragraph is starts, and I'm quoting:

19 "In Orders 143/04."

20 And then it continues listing other
21 orders. Are you saying, sir, that your understanding is
22 that the New York consultant was retained prior to the
23 Board issuing its order in 143/'04 and that was the basis
24 of your understanding, that the Board was only concerned
25 about the New York consultant issues?

1 MR. WILL LIPSON: That was our
2 understanding of our terms of reference. Our -- as again
3 I've stated, our focus was on the -- starting with the
4 New York consultant's assertions, to then extend that as
5 appropriate through -- as a risk-management exercise, but
6 it was very clear our focus was to be on the New York
7 consultant's assertions. And if you read the report,
8 it's very clear that's what we endeavoured to do.

9

10 (BRIEF PAUSE)

11

12 MR. ANTOINE HACAULT: But you do
13 acknowledge, sir, that that understanding could not come
14 from a reading of that second paragraph of the Board
15 Order, it has to come from directives that you would get
16 from Manitoba Hydro?

17 MR. WILL LIPSON: Our dealings were with
18 our client. We were of the understanding our client had
19 reviewed its -- the terms of reference with the PUB and
20 that we basically followed through by responding to the
21 terms of reference. And then when our client accepted
22 our approach, we presumed we had met the requirements of
23 the terms of reference. Otherwise, we would have been
24 told at the end of Phase 1 that we were not doing the
25 right job.

1 MR. ANTOINE HACAULT: I'm sure you did
2 the job that Manitoba Hydro asked you to do. My
3 questions were just probing as to whether or not, and I'm
4 suggesting to you that at one (1) point in time that
5 Manitoba Hydro's priority was dealing with the New York
6 consultant allegations, and as a result it dropped the
7 general scope that was issued in its order to be able to
8 deal with that issue on an expedited basis.

9 MR. WILL LIPSON: Sorry, was there a
10 question or would you like me to comment on your view?

11 MR. ANTOINE HACAULT: Well, I'm -- I'm
12 suggesting that that's what occurred, sir, do you agree
13 or disagree?

14 MR. WILL LIPSON: There was no question
15 there was a lot of focus on the New York consultant's
16 assertions. I do not agree when you say the -- that
17 Manitoba Hydro dropped the, you know, PUB interest in the
18 terms of reference. There was not a change to our terms
19 of reference at all.

20 We changed the description of our scope of
21 work, which, you know, I described already as -- as a
22 consequence of a cease and desist letter, but that we
23 followed through with our work fully in accordance with
24 the Phase 1 report, which again, preceded the cease and
25 desist letter. And therefore, I think both us and

1 presumably Manitoba Hydro believe we have fulfilled the
2 terms of reference fully.

3

4 (BRIEF PAUSE)

5

6 MR. ANTOINE HACAULT: I'll -- I'll
7 explore that a bit further and then I'll move on. But if
8 you review the risk discussion, sir, and I direct your
9 attention to page 24, could you take the time to read the
10 last paragraph of that page and then the following
11 paragraphs up to the heading, "Current Risk Assessment"
12 on page 25. And after having done so, I'll ask a couple
13 questions.

14

15 (BRIEF PAUSE)

16

17 MR. WILL LIPSON: Okay. I've had a
18 chance to review it.

19 MR. ANTOINE HACAULT: Okay. Those
20 paragraphs refer to corporate risk-management report.
21 Are you familiar with that type of document from Manitoba
22 Hydro?

23 MR. WILL LIPSON: Yes.

24 MR. ANTOINE HACAULT: Okay. And are you
25 familiar with the extent of the risks discussed and

1 considered in that report?

2 MR. WILL LIPSON: Generally, yes.

3 MR. ANTOINE HACAULT: Okay. There should
4 be a part of Appendix 77 distributed to all the parties,
5 which is an extract from the corporate risk-management
6 report by Manitoba Hydro, as I understand it. It has
7 three (3) pages, and I'd ask that it be marked as the
8 next exhibit for MIPUG, Exhibit 9.

9 THE CHAIRPERSON: Yes, sir.

10

11 --- EXHIBIT NO. MIPUG-9: Excerpt from the corporate
12 risk-management report by
13 Manitoba Hydro

14

15 CONTINUED BY MR. ANTOINE HACAULT:

16 MR. ANTOINE HACAULT: Now, I
17 appreciate this is not the entire report. The report is
18 a lengthier document. Is this what you would understand
19 to be the Manitoba Hydro corporate risk-management report
20 which has been updated since the one (1) referred to in
21 the decision of Board Order number 32/09.

22 MR. WILL LIPSON: On the surface that's
23 what it appears to be, yes.

24 MR. ANTOINE HACAULT: Okay. Now, on page
25 6 of that report, Hydro sets out its view of what it

1 retained KPMG to do, I'm suggesting to you. Is that
2 correct?

3 MR. WILL LIPSON: I think what I see in
4 that section is a repetition of the scope that we,
5 ourselves, wrote in our own report. As opposed to their
6 interpretation of our work it was a repetition of how we
7 described our scope of review.

8 MR. ANTOINE HACAULT: But I'll submit to
9 you that the first sentence isn't exactly accurate as we
10 now know it. There was, in fact, an exchange of
11 correspondence between Manitoba Hydro and KPMG in 2009
12 which specifically incorporated the wording of Board
13 Order number 32/09 and in addition to that set out these
14 issues with respect to the New York consultant.

15 MR. WILL LIPSON: Yeah, the wording at
16 the top of that section under "KPMG" tracks very -- well,
17 I think tracks almost identically to the second paragraph
18 of our Executive Summary. So once again I think Hydro
19 are just extracting from our work, our description of our
20 services and our mandate.

21 MR. ANTOINE HACAULT: And this is a very
22 narrow mandate, it's a mandate to assess the management
23 practices and address the assertions raised by a former
24 consultant of Manitoba Hydro. And it sets out the
25 specific scope of review, which does not cover many of

1 the risks identified on the next photocopied page, which
2 is page 14 of this corporate management -- or corporate
3 risk-management report. Is that correct?

4 MR. WILL LIPSON: Well, let -- let me
5 offer at least two (2) comments on your question. The
6 first is the -- the scope of review, we do describe later
7 in Chapter 1, how the scope was somewhat broadened beyond
8 the narrow questions of the four (4) bullets that we
9 describe. Particularly, how it went beyond just the
10 narrow assertions of the New York consultant. Mr. Erling
11 was talking about one (1) of those aspects in my mind
12 this morning.

13 So I don't want it to be characterized
14 that our -- our scope was to take an assertion and
15 provide, you know, a yes or no type answer or an analysis
16 of each assertion, that's all we did. Our -- our mandate
17 was somewhat broadened, but you are correct that it did
18 not cover everything possible under the sun in terms of
19 risks.

20 And -- and like we, again, only had about,
21 you know, a three (3) month horizon that we carried out
22 the bulk of our work after, you know, our Phase 1
23 conceptual outline. And as a consequence, you know, I
24 think the report -- I would not describe it as a narrow
25 report, it did not describe everything but it was quite

1 thorough and quite rigorous on a whole range of relevant
2 matters and relevant issues. Of course it didn't
3 describe all that matters and all issues that potentially
4 could have been studied.

5 MR. ANTOINE HACAULT: Thank you for that
6 answer. Could you go to page 2 of your report and
7 explain why you state something different at page 2 of
8 your report at the first full paragraph? I'll quote it
9 for the record:

10 "As a consequence of the above, KPMG's
11 review is limited to certain risk
12 management practices of MH [that's for
13 Manitoba Hydro] stemming from the
14 assertions. Our scope is limited to
15 key aspects of hydro-electric
16 operations of MH and related corporate
17 functions but does not include
18 reviewing MH's risk-management
19 practices as they apply to any other
20 business products, such as natural gas,
21 et cetera."

22 The very first sentence seems inconsistent
23 with what you've just stated, sir.

24 MR. WILL LIPSON: I do not believe so.
25 What's said there is there are certain limitations to our

1 scope. And I believe what's said there is accurate.
2 It's very clear we did not do a review of the natural gas
3 operations, for example. But if you continue on to page
4 5 of our report, we have in the third paragraph on that
5 page -- let -- let me read the third paragraph.

6 "In utilizing the approach of grouping
7 related assertions into issues, and
8 then addressing the issues, our scope,
9 in certain instances, extends beyond
10 the specific matters addressed by the
11 assertions. In general, we applied
12 this -- [sorry] in general, we applied
13 this general approach for the following
14 two (2) reasons: [And just to keep it
15 short] to appropriately address an
16 issue [and we explain what we mean
17 there] and to add value for Manitoba
18 Hydro in instances where it was
19 efficient for us to do so."

20 So I think you can't just read that
21 paragraph in isolation of a page or two (2) later where
22 we describe how the scope was somewhat extended. Again,
23 I don't mean to suggest our scope was limitless, and we
24 had no boundaries around ourselves, and that, pretty
25 clearly, you know, we were hopefully quite thorough in

1 describing what we did and didn't do as you read through
2 the, you know, several hundred pages of our April report.
3 And if there are questions as to what we did and didn't
4 do, we'd be happy to answer them.

5 MR. ANTOINE HACAULT: But you'll
6 acknowledge that they always started from the basic
7 principle that you looked at the assertions, the specific
8 issues. And then there may have been, as you say, some
9 collateral issues that were raised by those specific
10 issues, but every -- the real driver was the assertions
11 by the New York consultant. Is that correct?

12 MR. WILL LIPSON: I think that's a fair
13 characterization. In the time frame we had and with the
14 focus of our understanding of our scope, we very much
15 focussed on the issues that were on the table from the
16 New York consultant's work.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: Sir, were you directly
21 instructed not to meet with the Board staff and advisors?

22 MR. WILL LIPSON: no, we were not.

23 MR. ROBERT MAYER: So -- so you chose to
24 ignore that part of the order that you now fully
25 understand that you read and took your direction from

1 despite the fact you'd discussed meeting with the -- with
2 the Board's advisors and staff. You on your own
3 volition, with no influence by Hydro, chose not to -- not
4 to meet with our staff or our advisors.

5 Is that correct?

6 MR. WILL LIPSON: That's correct. Again,
7 I -- I've touched on this, but let me provide a bit more
8 context to -- to our rationale. Again, we had started
9 not with a full understanding of what the nature of the
10 work would be. You know, when -- we were just writing
11 our November proposal letter to be engaged in the first
12 place.

13 We did our, you know, couple of week
14 exercise to get a pretty good idea of what needed to be
15 done. We scoped that out. We went back to our client to
16 say, Does this fulfill the terms of reference, because we
17 were hired by Manitoba Hydro to fulfill a terms of
18 reference. And we were basically given a go-ahead to
19 say, Yes, you can now go ahead and do those activities,
20 those tasks, those various analyses, and in doing so,
21 that would be a fulfilment of our terms of reference.

22

23 CONTINUED BY MR. ANTOINE HACAULT:

24 MR. ANTOINE HACAULT: I'd ask you to have
25 two (2) documents in front of you before you answer this

1 question, sir. Firstly, the MIPUG number 8, which is the
2 Board Order number 32/09, and the last page of Exhibit 9,
3 which is a corporate risk map which forms part of the
4 Manitoba Hydro corporate risk-management report.

5 First, with respect to the corporate risk
6 map, what's your understanding of what Hydro tried to do
7 in this map? I'm going to suggest to you that it tried
8 to identify all of the operational and business risks
9 facing the Corporation.

10 Do you agree or disagree?

11 MR. FRANK CHEN: This map relates to
12 their corporate risk-management program, and in using
13 kind of general industry terms that's -- that are known
14 as an enterprise risk-management framework.

15 So the depiction or graph here is
16 essentially a -- a common used tool called a heat map.
17 And it depicts what Hydro has identified as key business
18 risks throughout the entire enterprise and mapped them
19 accordingly ac -- across two (2) variables, which is the
20 consequence termed here, which is the -- the financial --
21 potential financial impact of a risk event, and the
22 probability of that event, qualitatively here labelled,
23 low, medium, and high.

24 And by depicting the risks in this chart
25 they're able to identify risks that are obviously high

1 probability events with high -- high potential financial
2 impact, and those with low financial impact and low
3 probability and they can draw their attention to mitigate
4 those risks that fall into a high -- you know, the
5 quadrant that's high impact, high likelihood.

6 MR. ANTOINE HACAULT: Thank you. So to
7 create the link, in the Board order we've seen that
8 Manitoba Hydro had provided a previous version of such a
9 report to the Board and the Board said, Okay, we've got
10 all these operational risks from a business and an
11 operational perspective. We want an independent study of
12 these risks.

13 Now, I'd like to take you then to
14 paragraph 4 of the Board Order at page 47.

15

16 (BRIEF PAUSE)

17

18 MR. ANTOINE HACAULT: And I read for the
19 record:

20 "MH to file by September 30, 2009, for
21 Board approval, a conceptual outline
22 for an in-depth and independent study
23 of all operational and business risks
24 facing the Corporation."

25 I would suggest to you that this was part

1 of the first mandate set out in the first letters. There
2 was supposed to be a conceptual outline of all
3 operational and business risks.

4 Do you agree with that suggestion?

5 MR. WILL LIPSON: I don't think you said
6 it quite precisely. There was to be a conceptual outline
7 for an in-de -- for an in-depth and independent study as
8 called for under 32/'09 to be carried out on behalf of
9 Mani -- by us on behalf of Manitoba Hydro. And then once
10 approved, the -- you know, the next task was to go ahead
11 and implement that work.

12 MR. ANTOINE HACAULT: So that at Tab 1 of
13 the Board's book of documents, at page 1 of 2, in the
14 terms of reference, at paragraph 2, and I'm quoting,
15 Hydro is requesting as follows:

16 "Provide a conceptual outline to
17 Manitoba Hydro for the in-depth and
18 independent study as directed in PUB
19 Order 32/'09 [and it continues] and
20 meet with PUB staff and/or advisors as
21 necessary to review the PUB's orders
22 and concerns with respect to Manitoba
23 Hydro's risks."

24 But the first part of that sentence, which
25 I was -- is that -- one (1) I wanted to draw your

1 attention to. So consistent with that fourth paragraph,
2 at least in the very first instructions, there was a
3 matching between the Board's order and the terms of
4 reference. Is that correct?

5 MR. WILL LIPSON: I've lost track of what
6 you're comparing to what. I do see the page 1 of 2, the
7 last item on that page, but you're asking me to compare
8 it to -- to what?

9 MR. ANTOINE HACAULT: To the very first
10 sentence of Board Order number 4, which I referred you
11 to, and I'll quote again:

12 "MH to file by September 30, 2009, for
13 Board approval, conceptual outline for
14 an in-depth and independent study of
15 all operational and business risks
16 facing the Corporation."

17 MR. WILL LIPSON: Yes, there is a
18 tracking of language between those two (2).

19 MR. ANTOINE HACAULT: Thank you. Now the
20 next sentence in Board Order number 4, or the fourth
21 paragraph of Board Order 32/09 reads as follows:

22 "The study to be a thorough and
23 quantified risk analysis, including
24 probabilities of all identified
25 operational and business risks."

1 And I'm suggesting to you that in the
2 context of the Board having seen and referred explicitly
3 to the corporate risk-management plan, that this report,
4 which was prepared by KPMG dated April of 2010 and May
5 2010, does not achieve that result.

6 MR. WILL LIPSON: Yeah, this report does
7 not do a analysis of all identified operational and
8 business risks and quantify those analyses with
9 probabilities. Again, you can read the report, you know,
10 at your leisure and you can see what it does contain and
11 what it doesn't contain.

12 MR. ANTOINE HACAULT: Thank you. The
13 reason I was asking this, sir, is not to try and be
14 difficult with you. It's my sense, this is my first
15 hearing in all of this, but if I wanted to deal with the
16 issue I'd want to quantify the risk and know what it is,
17 and once I know what it is then I can make a decision
18 with respect to what to do.

19 Do you agree with me that would be a
20 logical approach to dealing with risk issues?

21 MR. WILL LIPSON: In general, yes. Yeah,
22 I wasn't suggesting in any way you were being difficult.
23 I'm sort of struggling with whether I'm making myself
24 clear or whether other language would be helpful to the
25 Board. But, you know, it -- I mean, in many senses -- I

1 think I commented yesterday on the practicality of
2 fulfilling that sentence that you were just reading.

3 There is no limitation on the types of
4 risks, it talks about all risk. I would suggest that
5 that's an impossible task, you know, because that can
6 include things like a risk that a janitor falls down at
7 night and -- you know, on a stairwell and injures himself
8 or any sorts of risk.

9 And to sit there and assess the
10 probabilities and things of that sort within the time
11 frame, which at this point was September 30th, '09, which
12 is again preceding -- two (2) months preceding when we
13 were engaged, you know, was a concept as opposed to a
14 specific direction. And again, we have said several
15 times how we interpreted the direction we received and,
16 you know, eventually carried out our assignment.

17 MR. ANTOINE HACAULT: Sir, I'll suggest
18 to you in fairness to the Board, though, it didn't say in
19 its fourth numbered paragraph of Board Order -- Board
20 Order number 32/'09 that you identify -- that you deal
21 with all operational business risks, it says all
22 identified in the context of this corporate risk-
23 management report.

24 And you had a pretty extensive list at
25 page 14 here of what those identified risks were. Do you

1 agree with that?

2 MR. WILL LIPSON: Well, if you go back a
3 sentence, the conceptual outline is for the in-depth and
4 independent study of all the operational and business
5 risks facing the Corporation. So presumably since you're
6 providing an outline to ide -- to address all the risks,
7 you've identified them all and then presumably you've got
8 to assess them all. I don't -- I didn't write that
9 paragraph obviously so I don't quite know what the
10 author's intent there is, but...

11 THE CHAIRPERSON: You didn't ask, sir.

12 MR. WILL LIPSON: That's correct.

13

14 (BRIEF PAUSE)

15

16 CONTINUED BY MR. ANTOINE HACAULT:

17 MR. ANTOINE HACAULT: Thank you very much
18 for making an effort to clarify these issues. The next
19 question or questions I have was with respect to whether
20 or not this panel had the opportunity to review the ICF
21 Report. I think there was some indication that it had,
22 but to what extent and by who, if I could ask that
23 question please. Each panellist could respond, please.

24 MR. ANURAG GUPTA: You're referring to
25 the ICF Report which they filed? Sorry?

1 MR. ANTOINE HACAULT: Just to let you
2 know. It will help me ask questions because I -- I don't
3 know who -- whose bailiwick it was to review what portion
4 and --

5 MR. ANURAG GUPTA: Sure.

6 MR. ANTOINE HACAULT: -- and whether or
7 not you -- it was part of what you had to do. If it
8 wasn't it will save me a lot of questions. If people had
9 particular areas, it will help me know what question to
10 ask of who -- that's the only reason I'm asking, to give
11 you some context.

12 MR. ANURAG GUPTA: I -- I read the
13 report, yes, the -- that ICF report.

14 MR. JONATHAN ERLING: I think we all read
15 the report because it was a reasonably good summary of
16 many issues. We may have focussed on different aspects
17 of the report, but I'm sure we all did.

18 MR. WILL LIPSON: Yeah, and I can confirm
19 that too. I'm sure Mr. Chen was about to say the same,
20 but we were -- we all read the report.

21 MR. ANTOINE HACAULT: Thank you very
22 much. Now, continuing along the terms of reference and
23 what was done and not done by let's say the superstars of
24 KPMG, the all-star team, just to make it clear, as I
25 understand it, KM -- KPMG is not sitting here today

1 saying is -- it has assessed all the relevant factors and
2 risks and has conducted all required due diligence with
3 respect to a recommended plan with respect to going ahead
4 to build capital projects. That isn't something you've
5 done?

6 MR. WILL LIPSON: Yeah, again, we assess
7 the methodologies and the processes, which included the
8 capital planning exercise. We did some analyses, and
9 many of them are described in, particularly Chapter 4, of
10 our report. We assessed models that obviously used to --
11 as a -- as key tools in doing capital planning. But I
12 think the short answer to your question is, no, we did
13 not assess all aspects of all capital projects in
14 Manitoba Hydro.

15 MR. ANTOINE HACAULT: And as I understood
16 it, you also didn't assess the reasonableness of the term
17 sheets that have been entered into more recently between
18 WPS and MP?

19 MR. WILL LIPSON: Sorry, when you say,
20 "more recently," do you mean subsequent to our report or
21 --

22 MR. ANTOINE HACAULT: No, I --

23 MR. WILL LIPSON: -- at the ti -- the
24 term sheets that existed at the time?

25 MR. ANTOINE HACAULT: That's correct.

1 MR. ANURAG GUPTA: I -- I guess to answer
2 that question I'd have to ask you, what do you mean by
3 reasonableness?

4 MR. ANTOINE HACAULT: As I understood the
5 evidence of this panel in the last couple days is it
6 assessed the methodology, the approach of Manitoba Hydro
7 to negotiating these term sheets, but didn't actually
8 look at, Well, if I had done it, would I have done it the
9 same way or would I have achieved the same results or did
10 they -- did somebody screw up and -- and not achieve good
11 results.

12 MR. ANURAG GUPTA: I think our analysis
13 of the term sheets focussed very much on certain aspects
14 of it. And I -- I wouldn't say that we did a wholesale
15 analysis of the term -- of the proposed term sheets, but
16 we did assess its impact on the economics, as we've
17 described: sale or no-sale. We assessed the process and
18 the methodology by which Manitoba Hydro sets the price
19 and some other terms and conditions, the -- the risk
20 mitigation provided in these proposed term sheets, such
21 as curtailment, provisions, and -- and other things, but
22 certainly we didn't do a cover-to-cover analysis of the
23 term sheet, no.

24

25 (BRIEF PAUSE)

1 MR. ANTOINE HACAULT: I'll just flip back
2 a little bit to the recommended plans of Manitoba Hydro.
3 I'm suggesting to you that in this province there is
4 usually some entity that is assigned that specific task,
5 and that is not part of this Hearing, to review major
6 capital project proposals. And I just want to confirm
7 that that is not something that you were asked to do.

8 MR. WILL LIPSON: I believe that's
9 correct. If -- if I understood your question properly,
10 we were not engaged to come in and do a major capital
11 projects review. You know, again, I've described our
12 scope several times. I don't think I need to repeat it,
13 but it was not what I might characterize as a major
14 capital projects review.

15 Sorry, that's not to say there weren't
16 elements of a major capital projects review that were
17 within our scope, but that was not our assignment.

18 MR. ANTOINE HACAULT: Thank you. Now,
19 I'm getting into the regulatory context in Manitoba. And
20 direct your attention to page 181 of the April report;
21 page 181 of the April report.

22

23

(BRIEF PAUSE)

24

25 MR. ANTOINE HACAULT: In the middle of

1 the page there's a discussion with respect to dividends.

2 Do you see it in the second paragraph?

3 MR. ANURAG GUPTA: Yes, I see that.

4 MR. ANTOINE HACAULT: Okay. What do you
5 mean by "dividends" in this paragraph?

6 MR. ANURAG GUPTA: The concept that as
7 retained earnings are built up they're not taken out of
8 the Corporation, and -- and the general term we're using
9 for the monies taken out of the Corporation rather than
10 being put into retained earnings is "dividends."

11 MR. ANTOINE HACAULT: Okay. So here,
12 because it's a Crown corporation and there was a payment
13 out to the province, you're categorizing that as
14 dividends. Is that it?

15 MR. ANURAG GUPTA: Again, what we are
16 talking about in this cont -- cont -- in this paragraph
17 is the general concept that if you took money out of --
18 if you -- if you had retained earnings and you paid out a
19 proportion of it, the general corporate finance term for
20 that is "dividends." I cannot categorize what the last
21 payment is or is not.

22 MR. ANTOINE HACAULT: So you intended
23 more to refer to a concept, the retained earnings will be
24 'X', as long as the province owns -- this Crown
25 corporation doesn't come knocking on Manitoba Hydro's

1 door saying, I want a billion dollars out of your
2 retained earnings to help my financial situation. Is
3 that the type of concept you were referring to?

4 MR. ANURAG GUPTA: Again, I -- I don't
5 think we had a specific entity in mind which would come
6 knocking on Manitoba Hydro's doors. Again, the concept
7 was this is a pool which is -- which is growing and our --
8 -- and our analysis does not -- there -- there's no taking
9 away from that retained earnings pool. It accumulates
10 year over year.

11 MR. ANTOINE HACAULT: But you do make the
12 statement, and that's why I was trying to understand it,
13 the second sentence in that second paragraph, and I'm
14 quoting:

15 "Thus, retained earnings for the base
16 case may be overstated in the event
17 that dividends are required to be paid
18 by Manitoba Hydro."

19 And that's why I was asking the question,
20 who's this shareholder in this Crown corporation. It
21 really doesn't exist, does it?

22

23 (BRIEF PAUSE)

24

25 MR. JONATHAN ERLING: I don't think we

1 were tak -- trying to take any view as to what the
2 relationship of the Manitoba government would be to
3 Manitoba Hydro. We just have not looked into the issue
4 of that legal relationship and how you would characterize
5 it, if that's a fair comment.

6 MR. ANTOINE HACAULT: Okay. Thank you.
7 Now, the reason I was asking the question is, you may not
8 have been privy to this discussion, but are you aware of
9 agreements that are being put into place with respect to
10 major projects such as Wuskwatim and Keeyask, and I'll
11 call it profit-sharing mechanisms?

12 MR. ANURAG GUPTA: As -- as between
13 Manitoba Hydro and the province, the profit-sharing
14 agreements?

15 MR. ANTOINE HACAULT: No, between First
16 Nations entities.

17 MR. JONATHAN ERLING: I am aware there
18 are profit-sharing arrangements but have no knowledge of
19 the details.

20 MR. ANTOINE HACAULT: Okay. So just as a
21 conceptual basis then, when you're talking about retained
22 earnings and income, do you know whether or not, when
23 you're conceptually talking about the retained earnings
24 and income, whether the models have accounted for the
25 distributions to these third-party entities?

1 MR. JONATHAN ERLING: We do not know the
2 assumptions made by the models with respect to that
3 issue.

4

5 (BRIEF PAUSE)

6

7 MR. ANTOINE HACAULT: Do you agree that
8 it could impact your conclusions if -- and I could point
9 you to some summaries which exist in the filings that
10 these formulas have a certain percentage of, call it,
11 income which goes to a third party, may impact the
12 numbers that you provide to us on income and retained
13 earnings going forward?

14 MR. WILL LIPSON: Yeah, again, we have,
15 as we've discussed, relied on Manitoba Hydro's models in
16 doing these types of analyses. We specify the input - or
17 sorry, specify the nature of the input and the --
18 directed what runs were to be made and then relied on
19 Manitoba Hydro's, you know, tools that it has, you know,
20 spent lots of effort in developing and that we had
21 reviewed to carry out the analyses.

22 So to the degree that those tools have
23 errors of any sort in terms of inputs or lack of, you
24 know, incorporation of aspects of cashflow such as a
25 payment to a third party then yes, the tool would

1 generate an inappropriate result. It may not be
2 materially inappropriate but it would be something that's
3 inappropriate.

4 We have no knowledge that they fail to
5 incorporate those things. I just don't think we, today,
6 are in a position that we recall for certain how if at
7 all they are captured. and I'm sure Manitoba Hydro can
8 confirm that.

9 MR. ANTOINE HACAULT: Thank you very
10 much.

11 MR. JONATHAN ERLING: Actually, can I add
12 to that? I think a point that's relevant is that what we
13 were looking at and what I believe the models produce is
14 an estimate of the economic case for a sale scenario
15 versus a no-sale scenario, which is the, you know, net
16 benefits of the difference in the two (2) runs.

17 And I -- even if they were not to account
18 for payments through a profit-sharing mess -- mec --
19 mechanism, I think that the models would therefore
20 accurately characterize the economic case. The question
21 of any profit-sharing arrangements would go to the issue
22 of how the benefits of a transaction or a sequence would
23 be distributed, and that's really not part of our scope.

24 MR. ANTOINE HACAULT: And -- and I thank
25 you for that. And at risk of oversimplifying it, if --

1 that's why I was going to the regulatory context here and
2 determining when we're setting rates and we're looking at
3 the impact, I'm going to suggest to you in subsequent
4 questions, I'm not asking a question now, that the main
5 concern is with our ratepayers. And if it's a third
6 party getting the benefit, of course that wouldn't fall
7 to the ratepayers it would fall to the third party.

8 So I'll deal with that later. I'm not
9 asking a question, just giving you some direction with
10 respect to my thought process.

11 Now, I'm suggesting that in Manitoba,
12 Manitoba Hydro is required to operate its business on a
13 cost-of-service basis. Does anybody have any knowledge
14 with respect to that contextual matter?

15

16 (BRIEF PAUSE)

17

18 MR. JONATHAN ERLING: We have not looked
19 at the framework used to set rates at Manitoba Hydro.

20 MR. ANTOINE HACAULT: Okay. I'll just
21 ask to be marked as the next exhibit, Exhibit 10, the
22 extract from the Manitoba Hydro Act, in particular
23 Section 39.

24

25 --- EXHIBIT NO. MIPUG-10: Extract from the Manitoba

1 Hydro Act

2

3 THE CHAIRPERSON: We have it, sir.

4 MR. ROBERT MAYER: Gentlemen, you were
5 looking at the Order in Council, not the legislation?

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: I guess my point is
9 that this panel doesn't have any legal training and
10 wouldn't be suggesting that it has the expertise to
11 interpret statutory intent and statutes.

12 Is that correct?

13 MR. WILL LIPSON: That is correct.

14 MR. ANTOINE HACAULT: I just note, for
15 the record, 39(1)(a) refers to the word, "necessary
16 operating expenses" in the context of cost of service to
17 the Manitoba ratepayers.

18 Now, proceeding on, it's not -- Manitoba
19 Hydro isn't in -- like a private enterprise looking to
20 make profit on transactions, to give dividends to
21 specific shareholders.

22 Is that correct?

23 MR. WILL LIPSON: Yeah, Manitoba Hydro's
24 mandate is more complex than that. It has a clear
25 requirement to meet domestic load. It has efficiency

1 requirements to do so at a, you know, reasonable cost.
2 And -- and probably being in the public sector, it has a
3 much broader mandate than merely sort of maximizing
4 profits, which some people would argue applies to the
5 private sector.

6 MR. ANTOINE HACAULT: Thank you. I'm
7 suggesting to you that the Government of Manitoba, for
8 this Crown Corporation, generally limits its take on what
9 Manitoba Hydro makes as far as income through water
10 rental charges and debt guarantee fees.

11 Do you know that?

12 MR. WILL LIPSON: We didn't, again,
13 assess that aspect of the relationship between Manitoba
14 Hydro and the province.

15 MR. ANTOINE HACAULT: Thank you. I'm
16 suggesting to you that Manitoba ratepayers should only
17 pay for what is used and useful in the production of
18 electricity for them.

19 Do you have any knowledge with respect to
20 that rate-making principle as a panel?

21 MS. MARLA BOYD: Mr. Chairman, these are
22 matters of argument; they're not matters to be put to the
23 KPMG panel in the context of their report.

24 MR. ANTOINE HACAULT: Well, with due
25 respect, if they're making recommendations on risk

1 management and risk mitigation and how -- what's
2 reasonable, that has to be done in a context.

3 If we're doing it for a private
4 corporation it's totally different than for a Crown
5 corporation, and if these witnesses don't have any
6 understanding of the fundamental principles on which this
7 corporation is to run, how are they then going opine on
8 whether or not it's a reasonable approach?

9 MS. MARLA BOYD: I understood Mr. Ha --
10 Hacault's question to be addressed to the rate-making
11 principles, and perhaps the question can be reframed to -
12 - to capture the point that I believe he's already made
13 on the record, in any event, that -- that this panel has
14 recognized that Manitoba Hydro is a Crown corporation.

15 THE CHAIRPERSON: Do you want to restate
16 your question, Mr. Hacault?

17

18 CONTINUED BY MR. ANTOINE HACAULT:

19 MR. ANTOINE HACAULT: Did you prepare the
20 report on the fundamental assumption that Manitoba Hydro
21 ratepayers should only pay for what is used and useful to
22 them in the production of electricity?

23 MR. WILL LIPSON: That assumption wasn't,
24 in my view, germane to the preparation of our report.

25 Again, you know, in describing, you know,

1 aspects like the risk governance as an example, you know,
2 we did compare it to industry practices among peer
3 groups, some of which are public Crown corporations or
4 equivalent, like BC Hydro or a Hydro Quebec, and we also
5 compared it to leading practices; you know, what the
6 literature says, what experts say, et cetera.

7 So that aspect that you brought up wasn't
8 really, in my mind, germane to how we conducted our work.
9 And, again, I hope we were as expansive as possible as to
10 the basis upon which we conducted our work and drew our
11 conclusions.

12 MR. ANTOINE HACAULT: Thank you.

13 THE CHAIRPERSON: I'll think we'll take
14 our lunchbreak now. We'll be back at 1:15. Thank you
15 very much.

16
17 --- Upon recessing at 12:01 p.m.

18 --- Upon resuming at 1:18 p.m.

19

20 THE CHAIRPERSON: Okay. Welcome back,
21 everyone. Please, sir.

22 MR. ANTOINE HACAULT: Thank you, Mr.
23 Chairman and members of the Board -- or member.

24

25 CONTINUED BY MR. ANTOINE HACAULT:

1 MR. ANTOINE HACAULT: I'm still in the
2 cont -- contextual matters, but you'd -- when I say
3 "you", the panel and KPMG, I -- as I understand it,
4 although they say...

5 "We are of the view that there is no
6 material risks that Manitoba Hydro is
7 face -- facing bankruptcy as a direct
8 consequence of Manitoba Hydro's export
9 sales and practice."

10 ...I gather that's the opinion of KPMG;
11 it's not just one (1) of -- a view amongst many?

12 MR. WILL LIPSON: That's correct.

13 MR. ANTOINE HACAULT: Okay. And I
14 suggest to you that part of this would be because we've
15 got a Crown utility here, and in fact this utility is
16 backed by the Province of Manitoba.

17 So I'd suggest to you that it'd be hard
18 pressed to put a utility into bankruptcy if -- you'd have
19 to go further; you'd have to put the province in
20 bankruptcy too?

21 MR. WILL LIPSON: Yeah. Let me provide
22 some context for that statement you're making reference
23 to. It really was in the context of what I would say are
24 more extreme assertions by the consultant, and so really
25 our conclusions are on the basis of the matters we looked

1 at. It isn't a complete independent review of every
2 aspect of the Corporation. Again, for example, the --
3 the gas operations, we've said several times, is not part
4 of our scope.

5 And when we looked at these things we
6 said, Nothing looks so far amiss that, you know, people
7 should be talking about potential bankruptcies.

8 MR. ANTOINE HACAULT: Hydro is doing a
9 reasonable job, correct?

10 MR. WILL LIPSON: Well, again, our
11 conclusions stand on their own, but in essence, yes.

12 MR. ANTOINE HACAULT: Dealing with
13 liquidity crunches, aren't we dealing with a temporary
14 liquidity crunch based on graphs that we've seen?

15 Let me explain, flows are actually mean
16 reverting. Isn't that correct? I mean, you may have
17 some low flows, but you'll have high flows so that, based
18 on the graphs that you've done, there's some liquidity
19 pressures, but they do come back?

20 MR. WILL LIPSON: That's right. On
21 average things are more on the positive than on the
22 negative. It is a viable Corporation and there are
23 reserves in place to, you know, mitigate a lot of the
24 risk of the low flows.

25 MR. ANTOINE HACAULT: And I'd suggest to

1 you, sir, that in the Manitoba context, we've got a
2 strong monopoly with no competition in Manitoba, so the
3 Corporation has the ability to seek increases in prices.

4 Is that correct?

5 MR. WILL LIPSON: Yeah, that's our
6 understanding.

7 MR. ANTOINE HACAULT: Now, you -- I don't
8 know whether the panel has an knowledge with respect to
9 this context, but what's the understanding of the panel
10 with respect to Manitoba Hydro debt? Is it Manitoba
11 Hydro that goes and gets it, or is it government backed?

12 MR. WILL LIPSON: Yeah, I actually think
13 we do touch on it in chapter 2. I think all but
14 approximately 1 percent is government backed, and I do
15 believe Manitoba Hydro is the issuer.

16 MR. ANTOINE HACAULT: So that, I'd
17 suggest to you, that the rating agencies do a flow
18 through of the province's rating as a general rule?

19 MR. WILL LIPSON: That would be logical.

20 MR. ANTOINE HACAULT: I'm skipping to the
21 third part of what I said I would do, the four (4) risk
22 issues, and it's the organizational issue. And I have a
23 series of questions that break down that statement of
24 issue as outlined in the Board's scoping order.

25 The first one: In the panel's opinion, or

1 KPMG's opinion, does Hydro have the required capabilities
2 needed to appropriately manage the export and drought
3 risks?

4 MR. FRANK CHEN: So, in general terms,
5 capabilities comprise, I'll say generally -- in general
6 terms, the people, the processes, and the infrastructure
7 or technology, and I would say, yes.

8 MR. ANTOINE HACAULT: Okay. Now, there
9 are recommendations that were made; are they all
10 contained in the April and May reports?

11 MR. WILL LIPSON: Yes, those are the only
12 recommendations we've made in this regard, yes.

13 MR. ANTOINE HACAULT: Okay. Breaking it
14 down further down again; in KPMG's opinion, does Hydro
15 have the required internal organization needed to
16 appropriately manage the export and drought risks?

17 We've heard some discussion about the
18 middle office and the general organization of Manitoba
19 Hydro. Can I have a response to that question? I'll
20 repeat it again.

21 In KPMG's opinion, does Hydro have the
22 required internal organization needed to appropriately
23 manage the export and drought risks?

24 MR. FRANK CHEN: So, yes, we did have an
25 extensive discussion on middle -- middle office and the

1 governance structure and oversight structure. When you
2 refer to the internal organization, broadly or generally,
3 are you referring to just the people themselves?

4 MR. ANTOINE HACAULT: I'd distinguished
5 internal organization from seeking outside counsel and
6 help, so, you know, is it structured appropriate
7 internally as a hydro corporation; because you've dealt
8 with organizational issues and you've made
9 recommendations. So it's in that context I was asking
10 the question, sir.

11 MR. FRANK CHEN: So given the review of
12 the power supply operations and the various departments
13 that support all the planning and the production
14 schedules and managing the drought issues and the
15 engineers involved and the oversight in the -- in the
16 middle office and such, I would say that it does have the
17 required internal organization.

18 But like any other organization, it
19 doesn't operate in -- in a bubble and, therefore, would
20 always seek periodic independent review of their
21 processes to gauge themselves against what other -- what
22 -- what their peers are doing as well.

23 MR. ANTOINE HACAULT: Thank you. Again,
24 KPMG's recommendations with respect to any improvements
25 are all in the April and May reports.

1 Is that correct?

2 MR. WILL LIPSON: Yes.

3 MR. ANTOINE HACAULT: The next item,
4 breaking down again that first section in the scoping,
5 focusses on a more particular matter. In the panel's
6 opinion, does Hydro have the required qualified staff
7 needed to appropriately manage the ex -- export and
8 drought risks?

9 MR. WILL LIPSON: Yeah, it wasn't
10 explicitly within our mandate to assess the capabilities
11 of staff. We didn't go out and interview everyone and
12 say, you know, What qualifications have you got for your
13 job? But I would say, you know, on behalf of my
14 colleagues too, that we were quite favourably impressed
15 with the capabilities of the people we did deal with.

16 You know, again, we have experience from
17 other utilities and other circumstances, and in the
18 context of the challenges that Manitoba Hydro faces, it's
19 got a very capable staff. And, I think, again, KPMG was
20 favourably impressed.

21 MR. ANTOINE HACAULT: And I guess a
22 subset of that, is it KPMG's opinion that the staff knows
23 when to seek outside help when it requires it?

24 MR. WILL LIPSON: Again, that's -- that's
25 a very specific question. I would say that the staff, in

1 general, have on, you know, several occasions gone out to
2 seek outside help; and presumably that's good, you know,
3 prima facie evidence of -- that they do have that
4 sensitivity as to when they need the help and when they
5 don't. I -- I think, again, we have commented on our
6 recommendations on the potentially increased need for
7 peer review on a more structured basis, but, you know, in
8 general the answer would be yes.

9 MR. ANTOINE HACAULT: And we've seen a
10 number of examples, for example, I think in your
11 evidence, on a monthly basis they're getting updated
12 forecasts to input into the HERMES software as I -- I
13 think.

14 Is -- is that correct?

15 MR. JONATHAN ERLING: Yeah, they purchase
16 monthly forecasts for use in developing price assumptions
17 within HERMES, yes.

18 MR. ANTOINE HACAULT: Again, all the
19 recommendations that KPMG has and it -- they're fairly
20 exten -- extensive on the issue of qualified staff and --
21 and looking for external advice for all contained in your
22 April and May reports.

23 Is that correct?

24 MR. WILL LIPSON: Yes, all the
25 recommendations, as we've said it twice now, are in the

1 April and May reports, that's correct.

2 MR. ANTOINE HACAULT: Sorry for the
3 redundancy but I don't know, for example, whether or not
4 there was follow-ups to the May report where there were
5 additional recommendations made, so that's why I'm asking
6 with respect to each area of whether or not we have to
7 look further than the reports. And if your answer is
8 "there are no other recommendations or discussions that
9 have occurred since May on all the issues in your
10 report," I won't keep on asking the question.

11 MR. WILL LIPSON: And that is the case.
12 The end of our assignment prior to being engaged to
13 prepare for this hearing and to attend this hearing was
14 with the delivery of the second report, the one in May
15 2010, and there were no subsequent follow-up assignments
16 of any sort or further recommendations.

17 MR. ANTOINE HACAULT: Subject to the
18 recommendations made in the April and May reports, is it
19 KPMG's opinion that Hydro has in place the required
20 policies and procedures needed to appropriately manage
21 the export and drought risks?

22 MR. FRANK CHEN: So, Manitoba -- Manitoba
23 Hydro has the appropriate policies and procedures,
24 however, those documents will -- will obviously keep or
25 rec -- Manitoba Hydro recognizes the need that they will

1 continually -- continually change, given the changing
2 business environment as well as the internal processes
3 that change. So those documents need to keep pace with
4 internal and external changes.

5 At the moment they're -- you know, the
6 policies and procedures are, as I've referred to in the
7 May report, a collection of a number of different
8 documents such as the G190 and 195, delegation of
9 authority. So it's a collection of documents that kind
10 of fall under that umbrella "policies and procedures,"
11 but yes, they do.

12 MR. ANTOINE HACAULT: Thank you. This is
13 a very general question with respect to the
14 recommendations: Is KPMG aware of any of its
15 recommendations being rejected by Manitoba Hydro?

16 MR. WILL LIPSON: Not to our knowledge.

17 MR. ANTOINE HACAULT: In fact, I think
18 you testified earlier that to your knowledge Manitoba
19 Hydro has implemented a plan, at least with -- with
20 respect to some of the recommended improvements. We
21 talked about software and other things. So they seem to
22 be taking your very thorough work very seriously.

23 MR. WILL LIPSON: I agree. Again, we
24 have put in our direct evidence and subsequently a couple
25 of times we've mentioned a few of the initiatives that we

1 understand have been followed up on and, you know, some
2 intentions that they're in the process of following up on
3 -- or some recommendations they're in the process of
4 following up on.

5 MR. ANTOINE HACAULT: Now I realize there
6 may be a little bit of overlap in this next question but
7 it's also part of the scoping question so bear with me.

8 In KPMG's opinion does Hydro have the
9 required oversight and governance structures -- that
10 relates to the internal organization, again -- needed to
11 appropriately manage the export and drought risks? It's
12 re-worded but would that re-wording make any difference
13 in your opinion?

14 MR. FRANK CHEN: No, it doesn't change
15 our opinion. Yes, they do have the adequate oversight
16 structure in place.

17 MR. ANTOINE HACAULT: Now, when we talked
18 about different policies and procedures I'd like to just
19 draw your attention to the issue of what I would call a
20 "drought preparedness plan."

21 I'd asked earlier whether you had read the
22 ICF report. ICF recommended that there be a more
23 explicit drought preparedness plan, although, it
24 acknowledged that -- and I'm paraphrasing, de facto,
25 Manitoba Hydro really had one, it's just that they hadn't

1 taken time to formalize it in a written -- written
2 comprehensive format.

3 Do you have any comments with respect to
4 that recommendation?

5 MR. WILL LIPSON: Yeah, we actually
6 commented on it either yesterday or the -- or the day
7 before. I guess, first, we also recognize that drought
8 awareness and management of drought risk permeates
9 through the organization. This is not something people -
10 - because there isn't a formal plan, and there hasn't
11 been a -- a formal plan in the past -- there is a draft
12 plan that we're aware of, but there wasn't in the past --
13 it wasn't an issue that people were unaware of because of
14 the absence of such a plan.

15 And, you know, I guess I personally see
16 some merit in having a plan prepared, but again, I don't
17 think it is a significant deficiency that is being
18 addressed by preparing such a plan. It is an improvement
19 in terms of documenting it all in one (1) place and
20 communicating it out to stakeholders and other interested
21 parties.

22 MR. ANTOINE HACAULT: Thank you. Now,
23 I'll go into an area which I understand was the subject
24 of some criticism by the New York consultant, implying
25 that perhaps Manitoba Hydro wasn't doing the best job it

1 could in carrying out negotiations for long-term export
2 contracts.

3 In the opinion of KPMG -- this is a very -
4 - a -- a more specific issue here -- does Manitoba Hydro
5 have qualified people and seek infor -- information as
6 and when appropriate to carry out those negotiations?

7 MR. ANURAG GUPTA: It is our opinion that
8 Manitoba Hydro brings the right level of people to the
9 negotiations with the right level of experience and the
10 background necessary, and they do go out and seek
11 information as required to help them in -- in the
12 negotiation's process.

13 MR. ANTOINE HACAULT: Thank you. Does
14 KPMG have any recommendations on additional information
15 which Manitoba Hydro should have going forward in
16 negotiating such term sheets and contracts?

17 MR. ANURAG GUPTA: I think our -- our
18 recommendations are as they are in the report; I don't
19 think we have anything further than what -- what we wrote
20 up in -- in our April report.

21 MR. ANTOINE HACAULT: Thank you. The
22 second area of questioning deals with whether Manitoba
23 Hydro's approach to risk management is appropriate for a
24 Crown owned regulated public utility. And I'd like to
25 direct your attention to pages 254 to -- up to 257. It's

1 the section dealing with merchant trading. This is in
2 the April report.

3

4

(BRIEF PAUSE)

5

6 MR. ANTOINE HACAULT: The first question
7 is for my own education. On page 255 there is a table,
8 Exhibit 6-4, and one (1) line is entitled, "Related
9 Merchant," and the next line is entitled, "Pure
10 Merchant." Could somebody from the panel educate me as
11 to what the difference is between the two (2).

12

13 MR. FRANK CHEN: On page 254 there's a
14 footnote denoted number 27 that provide respective
15 definitions for related merchant and pure merchant
16 transactions that hopefully will provide a -- a summary
description and understanding of the difference.

17

18 MR. ANTOINE HACAULT: Is it possible to
19 give me an example which might help me understand this
technical wording that's at the bottom of page 254?

20

21 MR. FRANK CHEN: Some merchant gen --
22 general merchant transactions are essentially sales and -
23 - and purchase of electricity with third parties on an
24 opportunistic basis. It's the sale of excess supply
25 energy on a short-term basis with third parties that do
not -- are not intended to -- to serve load. It's -- the

1 intent is to crease incremental revenue by selling off
2 excess supply once the load has already been served or
3 met. These are short-term transactions with third
4 parties and con -- typically, bilateral tran --
5 transactions with -- directly made with either the ISO or
6 the MISO specifically, or with commercial counterparties.

7 MR. ANTOINE HACAULT: Now, could you
8 explain the difference in the risk between a related
9 merchant transaction and what's been defined as a pure
10 merchant transaction?

11 MR. FRANK CHEN: Essentially, the risk is
12 -- is essentially the same; there's no difference in
13 magnitude or risk. The inherent risk in both type of
14 transactions are pretty much the same.

15 MR. ANTOINE HACAULT: That's the inherent
16 risk. Is there more control in a related merchant
17 transaction as compared to a pure merchant transaction?

18 MR. FRANK CHEN: The pure merchant
19 transactions, as indicated by the stop loss limit, have -
20 - or carry incremental greater risk given that the stop
21 loss limit -- I'm sorry, the related merchant
22 transactions carry a greater amount of risk given the
23 lower stop loss limit, and the mer -- pure merchant
24 transactions carry a lesser degree of risk given the
25 larger stop loss limit.

1 MR. ANTOINE HACAULT: In Mr. Rose's
2 testimony on behalf of ICF he uses the words "arbitrage
3 transactions" and "non-arbitrage transactions." Is there
4 any equivalency between the terms that were used in the
5 report to the terms used by Mr. Rose, do you know?

6 MR. FRANK CHEN: Arbitrage is intended as
7 -- as a descriptive -- or term used as -- as a type of
8 transacting strategy. And I would say just -- that that
9 type of strategy would fall under the merchant type --
10 the merchant transaction type.

11 MR. ANTOINE HACAULT: And is there an
12 industry meaning that people would ascribe to a non-
13 arbitrage transaction then? Wou -- that wouldn't be
14 related to either one of these headings, or would it?

15 MR. FRANK CHEN: An arbitrage -- well, to
16 make the distinction for everyone's understanding, an
17 arbitrage is essentially a low risk type transacting
18 strategy to take advantage of pricing differences, either
19 locationally or -- or by quality type. And that's just
20 due to market inefficiencies and -- and transfer of
21 information or one (1) party having better information
22 than ano -- another, where a similar product has
23 different pricing discrepancies, and then a market
24 participant is able to take advantage of a spread.

25 A non-arbitrage is then a full

1 universitive (phonetic) type transactions that are
2 considered just non-arbitrage, so they may greater risk,
3 or they may have similar risk or less risk. Non -- non-
4 arbitrage is a pretty broad term.

5 MR. ANTOINE HACAULT: So there's some
6 comment here as to what Hydro does engage in. Would you
7 qualify Hydro's engagement in this market as arbitrage or
8 non-arbitrage?

9

10 (BRIEF PAUSE)

11

12 MR. FRANK CHEN: At the moment when we
13 did this and at the time that these limits were
14 developed, all these transactions were arbitrage related,
15 which were the -- the lower risk type.

16 MR. ANTOINE HACAULT: Thank you. Am I
17 right in understanding your answers, that merchant
18 trading activity, whether it's what you qualified as a
19 pure merchant trading activity or related merchant
20 trading activity introduces risks to Manitoba Hydro which
21 are different than those that it experiences in -- I'm
22 going to say the pure export power business.

23 MR. FRANK CHEN: My understanding is with
24 respect to these type of merchant transactions -- again,
25 these transactions are solely related to selling excess

1 supply. And to the extent that excess supply is exported
2 out to a counterparty then they're -- they could be
3 overlapping; meaning a related or pure merchant
4 transaction can be considered an export sale as well,
5 depending on who that counterparty is on the other side
6 of the transaction.

7 MR. ANTOINE HACAULT: What I was trying
8 to distinguish between was Manitoba Hydro selling its own
9 power, which is asset-based into the export markets from
10 what I understood to be a different function being
11 undertaken by Manitoba Hydro and its merchant trading.

12 MR. FRANK CHEN: The related merchant
13 transactions could be power that's generated, you know,
14 off their equity system and sold to a counterparty
15 that's, you know, across border as an export sale.

16 The pure merchant transaction, just to
17 clarify, again that's where Hydro may act as a middle
18 pers -- middleman or as a broker-type participant to
19 match up two (2) parties and earns a spread off of that
20 transaction with no -- where that energy is not
21 necessarily generated from their equity -- equity
22 generation assets are off system.

23 MR. ANTOINE HACAULT: Sir, and here it
24 may just be a question of definition, that's why I was
25 trying to understand it. Because to the uneducated

1 fellow like me, I thought I heard in Manitoba's Hy --
2 Hydro's direct evidence, or in cross-examination, that
3 some of the transactions it undertook were exactly of the
4 nature you just immediately described in your previous
5 answer, was that they would know there was a spread with
6 a certain amount of certainty because of their knowledge
7 of the market and they felt that they had a certain
8 measure of sophistication which would guarantee them some
9 kind of a profit on the transaction, and that was between
10 two (2) positions.

11 Say, for example, in the MISO market there
12 might be certain amount of energy available at a certain
13 price and they knew they could get a better price in
14 Ontario and then they would engage in that transaction
15 with the hope of generating a profit.

16 Is that what you would qualify as a pure
17 merchant transaction?

18 MR. FRANK CHEN: No, that transaction is
19 -- that type of strategy or arbitra -- arbitrage strategy
20 is with power that Manitoba Hydro is generating. So
21 that's a related merchant transaction.

22 Merchant transactions are aware -- the
23 transaction involves power that's not generated at all by
24 the system and where Mano -- Manitoba Hydro is matching
25 up two (2) parties as part of a transaction and earning a

1 spread off of that transaction in which that type of
2 activity is not currently conducted. The arbitrage is a
3 related type mer -- merchant transaction where that
4 excess supply generated off of Hydro's system is sold off
5 into the export markets to earn that arbitrage or locate
6 that price diff -- difference.

7 MR. ANTOINE HACAULT: I think I
8 understand your question. I think there's a disconnect
9 between what Manitoba Hydro has said it -- or has
10 communicated to you that it does and the evidence on the
11 record as to what it says it does, and that's why I was
12 asking my questions.

13 If -- unless I have misunderstood the
14 evidence, the evidence on the record is that it does
15 engage into transactions which do not have hydro coming
16 from its system at all. It engages in transactions where
17 it is buying a position of another party and selling it
18 to a third party. So in my example, a US counterpart.
19 It's buying that position and then selling it to Ontario.
20 And that would be a pure merchant transaction.

21 MR. FRANK CHEN: I can't confirm that
22 except for what I can tell you in -- on page 255 under
23 footnote 3, that footnote specifically says:

24 "No pu -- no pure merchant transactions
25 have occurred from 2005 through January

1 position -- hopefully I'm explaining this in correct
2 terms, of a third-party in the US, with a view of selling
3 it to a third-party in Ontario, that would be the type of
4 transaction which KMB -- KPMG is saying should not occur
5 for this type of utility?

6 MR. FRANK CHEN: We're not -- KPMG has no
7 position on whether these transactions should or should
8 not occur. We're saying that the -- the fact that these
9 transactions do occur and that they're approved
10 transactions, that limits should be developed to control
11 those types of act -- the exposure associated with those
12 types of activities.

13 MR. ANTOINE HACAULT: So then it would be
14 a matter for others to comment on as to whether or not
15 getting into this pure merchant type transaction is
16 something that a Crown utility like Manitoba Hydro should
17 be doing?

18 MR. FRANK CHEN: That's a business
19 decision. That's a -- a mana -- senior management and
20 board decision to decide what activities Manitoba Hydro
21 should and should not engage in.

22 MR. ROBERT MAYER: The -- this whole line
23 of question is confusing me, quite frankly. I read what
24 it says on page 255, that you don't do -- no merchant --
25 no pure merchant transactions have occurred from 2005

1 through January 2010.

2 I've heard about the same kind of
3 transactions that -- that Mr. Hacault over here has
4 talked about. I understand they happen. Are they pure
5 merchant transactions?

6

7 (BRIEF PAUSE)

8

9 MR. FRANK CHEN: It's my understanding
10 that the -- the transactions that you're referring to are
11 -- fit the definition of a related merchant transaction,
12 and that pure merchant transactions, again, are not, and
13 have not occurred, according to the footnote, from 2005
14 through January 2010.

15 MR. ROBERT MAYER: That's not helpful. I
16 guess we're going to have to get back to, and maybe I
17 won't pursue it, because My Learned Friend to the left
18 here probably will, but I thought we had a definition of
19 pure merchant trading where Manitoba Hydro is not selling
20 its generated power, is acquiring a position and, in
21 fact, transporting it into Ontario through US lines.

22 Their power is not involved, tha -- is
23 that not a pure merchant transaction?

24 MR. FRANK CHEN: That fits the definition
25 of a pure merchant transaction, but that's not what

1 Manitoba's Hydro -- that's not what Manitoba Hydro is
2 doing; that's my understanding.

3 MR. ROBERT MAYER: We'll test that, I
4 guess, with the Hydro panel when they come back. Thank
5 you.

6

7 CONTINUED BY MR. ANTOINE HACAULT:

8 MR. ANTOINE HACAULT: Thank you. I think
9 that last ques -- answer clarifies. Again, if I look at
10 page 254, the definition of pure merchant transactions
11 involves the purchase of power by Manitoba Hydro from one
12 (1) or more parties, so that would be a third party in
13 the US, for resale to one (1) or more parties; that would
14 be, for example, transmission through the US to Ontario.

15 So that type of transaction fits squarely
16 into the definition at the bottom of page 254, doesn't
17 it?

18 MR. FRANK CHEN: It fits squarely as a
19 considered pure merchant transaction.

20 MR. ANTOINE HACAULT: Thank you. I'll
21 move on.

22 MR. JONATHAN ERLING: Actually, I just --
23 just a point of clarification. I do note that the first
24 definition, which is the related merchant transmission,
25 does specify:

1 "Involve the resale of power purchased
2 from third parties in which either
3 flows over transmission owned or
4 reserved by Manitoba Hydro."

5 So it's possible that that is an issue
6 that bears on the confusion. We can likely clarify this
7 at the -- during the break and come back with an
8 explanation for what is an apparent disconnect, if that's
9 appropriate.

10 MR. ANTOINE HACAULT: We can do that.

11

12 --- UNDERTAKING NO. 76: Mr. Erling to provide an
13 explanation for what is an
14 apparent disconnect re
15 related merchant
16 transmission.

17

18 CONTINUED BY MR. ANTOINE HACAULT:

19 MR. ANTOINE HACAULT: The definition of
20 twenty-seven (27), how is it read at the very end then,
21 that related merchant transactions at the bottom of page
22 254 of the April report? And I just remind this panel
23 that it is providing an independent opinion. I'm
24 reading, for the record, what it says.

25

"Related merchant transactions involve

1 the resale of power purchased from
2 third parties, and which either flows
3 over transmission owned or reserved
4 by/for Manitoba Hydro or was purchased
5 for Manitoba Hydro system requirements
6 and has been deemed surplus."

7 So let's break it down. Transmission, in
8 this example, where we're buying from a US party wouldn't
9 be owned by Manitoba Hydro. What is considered reserved
10 by Manitoba Hydro? Is it like a two (2) hour or an
11 instantaneous reservation, or is it reserved power in the
12 sense that it's been negotiated and -- and they actually
13 have a long-term position on those lines?

14 MR. JONATHAN ERLING: I'm not sure what
15 the general practice is in terms of -- certainly I know
16 that it is possible in most transmission systems to
17 reserve transmission capacity for shorter periods of time
18 through OASIS or other market structures within market
19 constructs.

20 So, you know, I think there is a range of
21 possibilities for the reservation of transmission, and it
22 could be for short-term purposes.

23 MR. ANTOINE HACAULT: Okay. In the
24 example I gave it's an instantaneous transaction between
25 the US party to an Ontario party; there would have to be

1 some capacity reserved on transmission to get it to
2 Ontario.

3 I'm trying to understand the difference
4 between the two (2), and is there any difference in the
5 portion that talks about reservation of transmission
6 rates?

7 MR. FRANK CHEN: There's two (2) types.
8 Well, in this instance or in this context, reserve
9 transmission is transmission that Manitoba Hydro has
10 purchased through a transmission capacity or a
11 transmission contract of -- of transmission lines that's
12 not owned or -- or not equity transmission that's
13 Manitoba Hydro line.

14 So if it's owned or operated by another op
15 -- by another owner and they've purchased transmission
16 capacity on that line for purp -- for use by Manitoba
17 Hydro through -- through a contractual agreement. That's
18 reserved or Manitoba Hydro has rights to that
19 transmission capacity, so that's reserve in addition to
20 their own equity transmission that -- that Hydro owns.

21 So though -- that power will flow across
22 either -- either those -- either lines.

23 MR. ANTOINE HACAULT: But I was trying to
24 understand the difference between when you make a -- you
25 have to have some transmission capacity to do the related

1 -- or pure merchant transaction, don't you?

2 MR. JONATHAN ERLING: Actually, I'll jump
3 in here. I think no, it's possible to do transactions
4 that simply settle financially and involve no
5 reservations of transmission capacity and that would fall
6 under, I believe, pure merchant and not be associated
7 with physical delivery, but a financial settlement.

8 MR. ANTOINE HACAULT: So am I to take it
9 that in my example if there is not the notion -- you
10 don't have to pay for any transmission and it's just as
11 you say a financial settlement, that's a pure merchant
12 transaction?

13 MR. JONATHAN ERLING: Subject to check,
14 that's my understanding within the definitional framework
15 here, yes.

16 MR. FRANK CHEN: That's one (1)
17 characteristic -- characteristic of it, but that's not
18 the sole or exclusive characteristic that defines a pure
19 merchant transaction. But, yes, that -- that essentially
20 is one (1) dimension of it.

21 MR. ANTOINE HACAULT: I'll hold off on my
22 questions and move on, members of the Board.

23 Could you undertake to provide us with I'm
24 going to say industry definitions which might give those
25 additional characteristics to help us better understand

1 whether the -- where the evidence makes it fit within
2 these definitions?

3 MR. FRANK CHEN: I don't think there's a
4 standard industry definition for the term "merchant," I
5 mean, there's many different meanings and -- and
6 depending on market participants and how they view
7 "merchant".

8 There is an industry lens in terms of the
9 term "merchant" viewed generally or broadly as -- as kind
10 of a proprietary mar -- or taking a market view or
11 speculative type position. I don't know if that industry
12 definition would apply or is relevant to how the term
13 "merchant" is used within Manitoba Hydro.

14 MR. ANTOINE HACAULT: So to use an
15 analogy, "merchant" would be an animal, but we don't know
16 whether and when "pure merchant" is a cat and related
17 "merchant" is a dog?

18 MR. FRANK CHEN: No, that's not what I'm
19 saying. I'm saying that merchant transactions in the
20 industry are viewed as speculative trading positions or
21 trading activity, and I can -- and I've confirmed and can
22 -- can say with high -- high confidence that Manitoba
23 Hydro does not engage in speculative, quote/unquote,
24 merchant transactions. They do not take positions to
25 earn a profit or incremental revenue from a market view.

1 MR. ANTOINE HACAULT: I'll move on. With
2 respect to the avoided cost analysis at page 154 of the
3 report.

4 First I'd like to put some context.
5 First, the avoided costs analysis reflects the best
6 information at the time it was prepared; is that correct?

7 MR. ANURAG GUPTA: That's correct, yes.

8 MR. ANTOINE HACAULT: Okay. And that
9 analysis may be time sensitive. In other words, as the
10 facts change, the avoided costs to the other utility may
11 change; is that correct?

12 MR. ANURAG GUPTA: Generally speaking
13 that's true, yes.

14 MR. ANTOINE HACAULT: And with respect to
15 the export contracts, there's actually a fairly
16 sophisticated system in the states that Manitoba Hydro
17 and its counterparties have to deal with that reviews the
18 whole avoided costs or alternative proposals options; is
19 that correct?

20 MR. ANURAG GUPTA: That's correct, yes.

21 MR. ANTOINE HACAULT: So is it fair to
22 say that there would be a high degree of sophistication
23 between the negotiating parties to long term export
24 contracts between Manitoba Hydro and its counterparties?

25 MR. ANURAG GUPTA: I would assume that

1 both parties would bring the best information they have
2 to a negotiating process because they're both -- they are
3 both trying to get the best possible outcome.

4 MR. ANTOINE HACAULT: And as I understand
5 it, there is a fairly stringent review process, for
6 example, the NSP sale underwent a fairly stringent
7 process on the whole avoided-cost issue. NSP had to
8 demonstrate that the contract it negotiated was the best
9 option. Do you have any knowledge with respect to that?

10 MR. ANURAG GUPTA: I'll -- I'll -- I'll
11 accept it. I don't have personal knowledge of it, but
12 I'm sure it's done.

13 MR. ANTOINE HACAULT: The next thing I'm
14 moving to is page small Roman Numeral vii, second to the
15 last paragraph of the April report.

16 MR. ANURAG GUPTA: Sor -- sorry, can you
17 -- I -- I didn't follow that.

18 MR. ANTOINE HACAULT: So it's at the very
19 beginning of the -- the April report. It's small Roman
20 Numeral vii, so v-i-i.

21 MR. ANURAG GUPTA: Yes, I have that now,
22 thank you.

23 MR. ANTOINE HACAULT: And the discussion
24 I'd like to have is with respect to the second-last
25 paragraph, which starts with the words:

1 "In general forward opportunity sales."

2 Have you located that?

3 MR. ANURAG GUPTA: Yes, I am. I'm on
4 that paragraph.

5 MR. ANTOINE HACAULT: Could you describe
6 to me what "forward opportunity sales" means?

7

8 (BRIEF PAUSE)

9

10 MR. ANURAG GUPTA: My understanding of
11 forward opportunity sales are the very short-term sales
12 that Manitoba Hydro does, as in when they -- so -- so
13 this is not long-term contracts, this is in the very
14 short-term. Manitoba Hydro on a day-ahead or real-time
15 basis will sell the -- the surplus energy that is
16 producing into -- into the interconnected markets.

17 MR. ANTOINE HACAULT: And those are only
18 made if Manitoba Hydro's personnel believes that Hydro
19 has sufficient firm capacity and energy resources to a 95
20 percent factor. Is that correct?

21 MR. JONATHAN ERLING: That's my
22 understanding. And just to clarify, the opportunity
23 sales terminology would certainly cover day-ahead, but
24 could cover somewhat longer time frames, you know, a
25 month or so.

1 get into a drought mode, the guarantee the Manitobans
2 will be served, seems to take a higher priority?

3 MR. JONATHAN ERLING: Well, I think that
4 Manitoba firm load always stands at the top of the
5 priority list in a -- in Manitoba Hydro's operations.

6 MR. ANTOINE HACAULT: Okay. Do you know
7 if this is actually a policy of Manitoba Hydro, or is it
8 just something that ends up being done?

9 MR. JONATHAN ERLING: If your question is
10 is there a written statement to this effect, I do not
11 know. I think this is reflective of operating practice.

12 MR. ANURAG GUPTA: Well, just -- just if
13 I could add to that. I thi -- I think if -- if the
14 question is is the priority of Manitoba load -- the fact
15 that Manitoba load should take priority in its planning,
16 that is absolutely fortified. And -- and if you look at
17 the chapter on --

18 MR. ANTOINE HACAULT: I'll accept that.

19 MR. ANURAG GUPTA: Yeah, so --

20 MR. ANTOINE HACAULT: Okay. And the next
21 answer was it reflects the practice of Manitoba Hydro to
22 actually increase the certainty during a drought risk. I
23 mean, 95 percent, nobody will quibble that that's giving
24 a substantial amount of priority to your Manitoba load.

25 Now, in KPMG's view, is it appropriate if

1 we're in a drought to commit to new forward sales if you
2 have that 99 percent probability?

3 MR. JONATHAN ERLING: Sorry, I think
4 that's a hypothetical question. I -- I think I'd have to
5 understand the fuller details with respect to the
6 specific transaction you might have in mind.

7 MR. ANTOINE HACAULT: Well, it could be
8 any -- a forward opportunity sale is the paragraph,
9 right. So if you have ninety-nine (99) -- I -- I thou --
10 quite frankly, I would have thought the answer was "yes".
11 I mean, if you have 99 percent certainty of what's going
12 to happen, why wouldn't you sell power if -- if you knew
13 you were protected, but there may be a more complicated
14 answer than that.

15 MR. JONATHAN ERLING: No, that sounds
16 reasonable. I would think, though, in a drought
17 situation the actual quantum of export sales that you
18 would in practice be contemplating would be fairly
19 limited and might be, you know, sales over a time horizon
20 of a day or two (2), perhaps, to avoid spilling water, to
21 -- to take advantage of some inter-day price differences,
22 but wouldn't be much more than that.

23 Sorry, I'm not sure in practice there's a
24 huge amount of power that one would expect to be selling
25 under those circumstances.

1 MR. ANTOINE HACAULT: I think in direct,
2 Mr. Cormie explained that there might be situations where
3 buying power was a lot cheaper, and, for that reason,
4 they might have some transactional opportunities, so it
5 might be appropriate to have those types of sales.

6 MR. JONATHAN ERLING: Although I would
7 have thought that's a purchase and not a sale.

8 MR. ANTOINE HACAULT: Sorry, you're
9 right. I stand corrected. Now, has KPMG assessed these
10 thresholds in any way? Was there a quantitative analysis
11 that would suggest that ninety-five (95) is the number as
12 opposed to eighty (80)? Why do we have to up to ninety-
13 five (95)?

14 MR. JONATHAN ERLING: We didn't make any
15 assessment of the particular level chosen by Manitoba
16 Hydro. And I think, ultimately, the decision on what
17 type of confidence level to entertain is a management
18 decision, and, obviously, a somewhat subjective decision
19 and depends on stakeholders' risk tolerances.

20 MR. ANTOINE HACAULT: You would agree
21 that this would be a very conservative view of what is
22 done. Some -- some utilities might have a more generous
23 view and a more -- a greater flexibility?

24 MR. JONATHAN ERLING: I agree, it's a
25 very conservative objective.

1 MR. ANTOINE HACAULT: Now, have you
2 thought of this issue, that if there were different
3 thresholds adopted, would there be financial consequences
4 for the ratepayers?

5 MR. JONATHAN ERLING: I would certainly
6 expect that different thresholds would have different
7 financial consequences.

8 MR. ANTOINE HACAULT: Have you given some
9 thought as to whether if you put a higher threshold than
10 95 percent as your general operating, if you bumped it up
11 to ninety-nine (99), what that would do?

12 MR. JONATHAN ERLING: I would expect it
13 would somewhat limit the opportunity sales that you would
14 make and therefore potentially lead to somewhat reduced
15 profits relative to a lower-percentage threshold.

16 THE CHAIRPERSON: Mr. Hacault, if I
17 could, and I certainly don't want to interrupt your
18 cross, could -- given the time restrictions today I'm
19 just wondering if it's possible if you could give us an
20 estimate. I was going to ask Mr. Gange as well. Because
21 we have a few questions too, and I know there might be
22 some redirect. So I'm just trying to get a bird's eye
23 view, so to speak.

24 MR. ANTOINE HACAULT: I think I have an
25 hour.

1 THE CHAIRPERSON: Mr. Gange...?

2 MR. JONATHAN ERLING: Excuse me, Mr.
3 Chair. I'm between half an hour and forty-five (45)
4 minutes.

5 THE CHAIRPERSON: Okay, the break is
6 going to be very short, please.

7

8 CONTINUED BY MR. ANTOINE HACAULT:

9 MR. ANTOINE HACAULT: So if you keep
10 water levels high in the Lake Winnipeg, which is, I
11 understand, about three-quarters (3/4) of the production
12 capacity for Manitoba Hydro, as a result of this decision
13 what financial effects does that have on the Corporation?

14 MR. JONATHAN ERLING: Well, directionally
15 I would say that keeping water levels higher always
16 results in some increase in the risk of water spills in
17 subsequent periods given the greater chance of reaching
18 maximum storage limits.

19 MR. ANTOINE HACAULT: To your knowledge
20 has there been any input or analysis with respect to
21 these thresholds as opposed to adopting other alternative
22 values?

23 MR. JONATHAN ERLING: Again, I think that
24 specific thresholds are subjective. I have not seen any
25 analysis of the implications of alternative thresholds.

1 MR. ANTOINE HACAULT: And specifically,
2 unless it's through this hearing, there wouldn't have
3 been any input or -- sought or obtained from ratepayers
4 in this province to changing those thresholds?

5 MR. JONATHAN ERLING: I have no knowledge
6 of what discussions have taken place with ratepayers on
7 that issue.

8

9 (BRIEF PAUSE)

10

11 MR. ANTOINE HACAULT: Direct your
12 attention to page 114, it relates to spill and
13 maintaining reservoirs at high levels. It's the second
14 to last paragraph. It talks a little bit about what you
15 had indicated just in a couple of answers previous to
16 this question, and it relates to the New York
17 consultant's assertions with respect to high water
18 levels. There's a comment in there and it says:

19 "Man -- management's tendency to
20 maintain higher water levels."

21 Do you see that?

22 MR. JONATHAN ERLING: I do and I would
23 quickly note that's in reference -- higher waddles --
24 water levels than would be assumed by SPLASH is the
25 important context here, if that -- that -- which may have

1 some relevance, but certainly the statement that you've
2 alluded to is there.

3 MR. ANTOINE HACAULT: Okay. So how does
4 management have to interpret that to properly manage the
5 water then?

6 MR. JONATHAN ERLING: Sorry, I'm not
7 understanding --

8 MR. ANTOINE HACAULT: Well, you said it
9 was --

10 MR. JONATHAN ERLING: -- the question.

11 MR. ANTOINE HACAULT: -- in the context
12 of SPLASH and the assumptions in SPLASH and deciding what
13 was going to happen.

14 MR. JONATHAN ERLING: Well, the context
15 is that in the actual midst of a drought, management does
16 not know the ultimate lengths or severity of the drought
17 and will, to the extent possible, maintain reservoir
18 levels. Whereas SPLASH, because it does not have access
19 to non-firm imports, will -- the way -- because of the
20 way it is cal -- calibrated, draw down -- be forced to
21 draw down reservoir levels if it is running a sequence
22 wherein the -- a 1940/'41 critical drought period is
23 being analyzed.

24 MR. ANTOINE HACAULT: Now, here I may not
25 understand the models correctly, but as I understand it

1 HERMES is a more short-term model. Is that correct?

2 MR. JONATHAN ERLING: That is correct.

3 MR. ANTOINE HACAULT: So during the
4 drought -- drought, given the Manitoba Hydro's policy,
5 would the water levels be maintained higher than HERMES
6 would suggest, based on assumed average fur -- future
7 inflows?

8 MR. JONATHAN ERLING: No, it would not be
9 higher than HERMES would suggest. And to clarify, in
10 near-term runs, which is to say runs for the current
11 water year, HERMES is typically using water flow
12 forecasts based on the antecedent process, which would
13 not be the median historical flows but would be some
14 output from the antecedent regression process.

15 Although, it -- it -- it may be
16 characterized as the median of the predicted value, it
17 wouldn't be the median historic water flow.

18 MR. ANTOINE HACAULT: Now, one (1) of the
19 sentences here that I want to understand a bit better,
20 it's in the middle of the paragraph, and I'm quoting:

21 "The spill of water is a true economic
22 cost since the value of energy
23 production from the associated water is
24 foregone."

25 If -- why isn't ignoring -- well, maybe

1 I've got this wrong on what you've said here. It's like
2 -- could you just explain the two (2) economic costs,
3 firstly?

4 MR. JONATHAN ERLING: Yes. What I was
5 getting at in that sentence is that if you spill water
6 you have lost the ability to produce energy by flowing
7 that water through the hydro-electric dam. So any
8 revenue potential with that water is foregone and you
9 have no opportunity to recover that revenue.

10 Some of the other issues that are being
11 discussed in this section relate to timing differences,
12 which is when does a cost occur. Really, what I was
13 emphasizing with the sentence, this is a true economic
14 cost, is that this is a -- a cost -- an absolute cost.
15 It's not a timing-issue cost.

16 MR. ANTOINE HACAULT: Is -- so the -- you
17 could be selling that power to the states. It would only
18 call it -- cost your water rental costs, but you're
19 spilling it so you get zero dollars for it?

20 MR. JONATHAN ERLING: Well, to -- to
21 clarify, you would -- at the time that you spill the
22 water, you would not have been able to sell it to the
23 states. The only reason that you spill water is that for
24 some reason at that moment in time you cannot sell the
25 power because there may be constraints on transmission

1 capacity, for example.

2 And when in the midst of a drought -- and
3 -- and I think this is another important point, is that I
4 think it would be a rare event that within the drought
5 period you would need to spill water. I may stand
6 corrected on that, but in general the risk of water
7 spillage is not in the period of a drought, but it is in
8 a subsequent period if the drought suddenly ends and you
9 are faced with a sudden influx of water and then you
10 realize that you didn't need to hold so much water in the
11 reservoir.

12 But I think the -- if you would look at
13 the model outputs, the number of times that you would
14 spill water during the period of drought would be
15 limited, although I -- conceivably, there's some
16 circumstances that might lead to that outcome.

17 MR. ANTOINE HACAULT: In that context,
18 isn't this a generic caution that you don't want to
19 operate your reservoirs too high at any time lest you
20 risk future true costs from a spill?

21 MR. JONATHAN ERLING: Yes, absolutely.

22 MR. WILL LIPSON: Sorry, maybe if I can
23 just add one (1) point. Wha -- what I'm hearing from
24 this conversation is that there's largely a balancing
25 act. You don't want to have the reservoirs too high for

1 the risk you just described. You also don't want to have
2 them too low in the event the drought comes along. And
3 that's why this is not a -- specifically a science that
4 models can drive the Company. It needs humans and it
5 needs management to make good judgment calls and
6 appropriate judgments and have experience with how to
7 optimize the operations of the company.

8 MR. ANTOINE HACAULT: So if you have a
9 calculator and it says five (5) plus five (5) equals
10 twelve (12) you still have to use common sense?

11 MR. WILL LIPSON: That's correct.

12 MR. ROBERT MAYER: Was KPMG aware that
13 Manitoba Hydro doesn't have control over its reservoirs
14 at all times?

15 MR. JONATHAN ERLING: Tha -- we are cur -
16 - we are aware that there are operating restrictions that
17 require it to maintain reservoirs within certain limits.
18 We are aware that some of the water that's considered
19 within the planning process is under the control of other
20 entities. For example, some of the water comes from
21 Ontario and is controlled by dams in that jurisdiction.

22 And we're aware that -- that some lakes
23 are in fact not controlled. So, yes, there are a variety
24 of restrictions on its abil -- on Manitoba Hydro's
25 ability to manage water and -- and that -- that limit its

1 ability to -- to shift production and avoid spilling
2 water.

3 MR. ROBERT MAYER: And if we have a flood
4 this spring and all indications are -- and Lake Winnipeg
5 goes above a certain level, that it is the minister of
6 water stewardship who takes control of those water
7 releases from that point forward until that emergency's
8 over.

9 MR. JONATHAN ERLING: I didn't know that
10 specifically, but that does not surprise me.

11

12 CONTINUED BY MR. ANTOINE HACAULT:

13 MR. ANTOINE HACAULT: If that
14 discussion's finished I'd move on to page 124. it's the
15 sale/no-sale scenarios.

16 MR. ANURAG GUPTA: I'm there.

17 MR. ANTOINE HACAULT: Now, just
18 confirming for the record, the sale scenario is
19 equivalent to the recommended scenario in the power
20 resource plan for 2009/2010?

21 MR. ANURAG GUPTA: Sorry. Yes, the --
22 the sale scenario corresponds to the preferred
23 development sequence in the '09/'10 PRP.

24 MR. ANTOINE HACAULT: And the no-sale is
25 equivalent to the alternative scenario in the same

1 resource plan?

2 MR. ANURAG GUPTA: The no-sale excludes
3 Keeyask and the term sheets and the associated
4 transmission interconnection, so, yes, it is the
5 alternative.

6 MR. ANTOINE HACAULT: Has KPMG reviewed
7 the recommended and alternative scenarios in the updated
8 plan, the 2010/'11 plan?

9 MR. ANURAG GUPTA: We have not, no.

10 MR. ANTOINE HACAULT: Well, I guess the
11 record will speak with respect to the similarities to
12 those plans. I won't ask any questions on that. Moving
13 on to the middle of page 145, I believe, the middle of
14 the page. As I understand it, the comparison that was
15 made in the middle of the page when we talk about the
16 benefit, is a comparison between the net present value of
17 the two (2) scenarios that we have just talked about, the
18 recommended scenario and the alternative scenario.

19 Is that correct?

20 MR. ANURAG GUPTA: Specifically on page
21 145?

22 MR. ANTOINE HACAULT: That's correct.

23 MR. ANURAG GUPTA: No, I think on page
24 145 we were discussing the benefits of entering into
25 long-term contracts of the type that Manitoba Hydro is

1 proposing in -- in there and the positive benefits.

2 MR. ANTOINE HACAULT: I may have put the
3 -- oh, ignore my page number it's obviously wrong. But
4 the comparison that was made when you were talking about
5 the two (2) scenarios and the benefit to Manitoba
6 ratepayers, it was the difference between the net present
7 value of the two (2) scenarios.

8 Is that correct?

9 MR. ANURAG GUPTA: That's right. So when
10 we compared the sale scenario to the no-sale scenario we
11 were looking at the incremental NPV of the sale scenario
12 over the no-sale scenario under a variety of scenarios
13 that we had directed.

14 MR. ANTOINE HACAULT: And that takes into
15 account the costs borne by Manitoba Hydro ratepayers and
16 also the export revenues.

17 MR. ANURAG GUPTA: The analysis -- the
18 sale and no-sale scenario analysis includes projected
19 rate increases, it includes capital costs, it includes
20 the -- it includes the projections of the export
21 revenues, yes.

22 MR. ANTOINE HACAULT: Ultimately, it
23 falls back to an analysis as to what is better for the
24 ratepayer, though? Am I right on that we're looking at
25 how Manitoba ratepayers would benefit from a sale

1 scenario versus a no-sale scenario?

2 MR. ANURAG GUPTA: The analysis looks at,
3 given a certain set of assumptions on costs and revenues,
4 what the incremental NPV is to Manitoba Hydro in -- in
5 the sale scenario versus the no-sale scenario. And --
6 and my colleague here has just pointed out I think it's
7 important also to note that the revenues from domestic
8 customers are not taken into account in that analysis
9 because they are served under both scenarios first, in
10 any case.

11 MR. ANTOINE HACAULT: Okay. So I think
12 we're speaking the same language although you exclude the
13 revenues from the domestic ratepayers, you ultimately
14 know the incremental -- I shouldn't say -- or the
15 difference between the two (2) scenarios and whether one
16 is more beneficial in the long-run for Manitoba Hydro,
17 and if we say Manitoba Hydro serves Manitoba ratepayers
18 we get down to the ratepayers ultimately. Is that
19 correct?

20 MR. ANURAG GUPTA: That's fair, sir, yes.

21 MR. ANTOINE HACAULT: Okay. Can -- do
22 you know what assumptions were in -- in that calculation?
23 Was everything included like fuel purchases, ex -- what
24 were the assumptions?

25 MR. ANURAG GUPTA: my understanding is

1 that -- is that the power resource plan, a lot of that is
2 not in the public domain, but I can confirm that they did
3 take into account things like cost of fuel purchases,
4 projected export revenues, national gas pricing, and --
5 and as it flowed through the IFF it would have taken into
6 account things like water rental charges.

7 This morning there was a question raised
8 with regard the revenue-sharing agreements with First
9 Nations to the extent those have been inked, and then the
10 IFF, all of that will be taken into account.

11 MR. ANTOINE HACAULT: Okay. So I guess
12 the thing that might change because we can only do a net
13 present value as of a certain date, it wouldn't take into
14 account any adjustments made in export prices and the new
15 IFF?

16 MR. ANURAG GUPTA: I -- I haven't
17 reviewed the new IFF but I can tell you that the -- the
18 analysis that Manitoba Hydro does internally, they stress
19 it on a variety of factors, including different pricing
20 forecasts, a low/high expected. And as I explained in
21 our direct evidence yesterday, we also ran additional
22 scenarios which took into account different pricing
23 combinations. And under all those scenarios we found the
24 sale scenario NPV was significantly larger than the no-
25 sale si -- scenario NPV.

1 MR. ANTOINE HACAULT: Thank you. And I
2 don't want you to divulge confidential information if it
3 is, but can you tell me whether the NPV is based on
4 Manitoba Hydro's cost of borrowing at the particular
5 time?

6 MR. ANURAG GUPTA: The analysis takes
7 into account -- it -- it's done at -- at a WACC, which
8 Manitoba Hydro specifies by its internal policies and it
9 takes into account the debt cost -- with average cost of
10 capital, sorry about that.

11 MR. ANTOINE HACAULT: I -- I think at
12 page 156, at footnote 11, at the very end of the footnote
13 it indicates that they're all discounted at Manitoba
14 Hydro's cost of borrowing.

15 MR. ANURAG GUPTA: This -- this footnote
16 is very specific to the spreadsheet we saw in -- in terms
17 of setting the pricing. The analysis done around the
18 pricing for the MPS -- sorry, for the WPS and MP term
19 sheets, the analysis I've talked about, the sale versus
20 no-sale scenario is -- is something different from this
21 footnote.

22 MR. ANTOINE HACAULT: Now -- so you say
23 with respect -- and -- and I don't want to get into those
24 areas which I shouldn't be, but when we're talking about
25 the no-sale and sale scenario, are you indicating that I

1 was incorrect in taking from that footnote that the
2 analysis in -- done by Manitoba Hydro was at Manitoba
3 Hydro's cost of borrowing this -- that was the discount?

4 I'm wrong in assuming that?

5 MR. ANURAG GUPTA: The sale versus no-
6 sale scenario was done using a WACC, Weighted Average
7 Cost of Capital, one (1) component of which is the --
8 MH's cost of borrowing.

9 MR. ANTOINE HACAULT: So the WACC should
10 be very close to that? Is that something we can put on
11 the record?

12 MR. WILL LIPSON: Yeah, maybe if I could
13 add -- we -- we had some discussion of this I think
14 earlier today, that there is an undertaking from Manitoba
15 Hydro to describe the discount rate, to -- to come back
16 and provide you with the discount rate.

17 What we confirmed again, as Mr. Gupta had
18 said this morning, is the consistency between that
19 discount rate and other uses of it. It's not the same
20 discount rate that's referred to on the page 156
21 necessarily, and, you know, with a little bit of
22 patience, which I'm sure you have, you'll be hearing this
23 back from Manitoba Hydro.

24 MR. ANTOINE HACAULT: Thank you. That
25 would be significantly lower than what -- I mean, I'm not

1 here to give evidence, but many analyses use a number
2 that is a lot higher than what I would call this WACC, or
3 whatever.

4 Is that -- is that -- do you agree with my
5 suggestion?

6 MR. ANURAG GUPTA: I think the use of the
7 weighted averaged cost of capital, or WACC is -- is fair
8 -- is a fairly standard use in -- in such kind of
9 financial analyses.

10 MR. ANTOINE HACAULT: Okay. And what
11 would happen if you would use a cap rate say of -- or a
12 discount rate of 8 percent instead of 5 or 6 percent?
13 Incrementally, what happens to your value?

14 MR. ANURAG GUPTA: Directionally
15 speaking, if -- if everything else remaining unchanged,
16 costs as well as revenues, the use of the higher discount
17 rate would result directionally in a lower NPV.

18 MR. WILL LIPSON: Sorry, although that's
19 not something you can guarantee in all circumstances.
20 It's a function of, you know, the year-by-year cash
21 flows. You know, if it's a normal-style investment type
22 cash flow, then Mr. Gupta is correct. But I can -- I
23 guarantee I can concoct -- sorry, concoct cash flows
24 where a higher discount rate results in a higher NPV,
25 just the function of what the cash flows are.

1 MR. ANURAG GUPTA: I think that's fair,
2 and I should have said, all things remaining equal and
3 the sale was a no-sale scenario.

4 MR. ANTOINE HACAULT: Now, based on your
5 knowledge of this sale scenario, because my question was
6 specifically directed to Manitoba Hydro, does your answer
7 remain true, Mr. Gupta, that all things being the same
8 with respect to Manitoba Hydro, if you changed that
9 discount rate in that model, it would result in a lower
10 net present value?

11 MR. ANURAG GUPTA: With the sale and no-
12 sale scenario as we analyzed it, everything else
13 remaining equal, in -- in those scenarios, yes.
14 Directionally, if you increased the discount rate at
15 which the NPV was calculated, it would result in a lower
16 NPV.

17 MR. ANTOINE HACAULT: Now, a lower rate
18 like this, would it pick up the long-term horizon? One
19 (1) of the issues in this proceeding is we in -- invest
20 in plants that are going to last sixty-seven (67) years,
21 or at least on an amortised basis, and may last as long
22 as a hundred years?

23 MR. WILL LIPSON: Well, while Mr. Gupta's
24 looking, I know the cashflow analysis is over a long-term
25 horizon; if I recall, thirty-five (35) years, although

1 I'll let Mr. Gupta confirm. The discount rate, again, I
2 suggest we be patient and wait until Manitoba Hydro
3 follow through on its undertaking.

4

5 (BRIEF PAUSE)

6

7 MR. ANTOINE HACAULT: Okay, I'll hold off
8 on questions on that then. Turning to page 157. The
9 middle of the page it's noted:

10 "KPMG notes that contract term sheets
11 were signed with counterparties at --
12 with the caveat of pending Manitoba
13 Hydro Board approval."

14 Does that continue to be your
15 understanding, sir?

16 MR. ANURAG GUPTA: That's right.

17 MR. ANTOINE HACAULT: So does KPMG have
18 any knowledge as to whether or not those term sheets have
19 now received Manitoba Hydro Board approval, or is that
20 something that's not a public...?

21 MR. ANURAG GUPTA: I -- I can't comment
22 on that. At the time, when we wrote this report, the --
23 the term sheets had been provided to the Board for appro
24 -- for information, and they were pending MH Board
25 approval.

1 MR. ANTOINE HACAULT: So is anybody from
2 the panel able to answer my question: Have they been
3 approved by the Board?

4 MR. ANURAG GUPTA: I -- I can't answer
5 that, sorry.

6 MR. ANTOINE HACAULT: I see all panel --
7 panel members indicating they have no knowledge.

8 Now, we've heard some evidence here with
9 NSP that the term sheets -- actually, the conditions
10 changed between the initial term sheets being signed and
11 the final contracts being negotiated.

12 Has KPMG seen or reviewed any of the draft
13 contracts with respect to the two (2) term sheets that
14 we're talking about here; the Minnesota Power and WPS?

15 MR. ANURAG GUPTA: Again, we reviewed the
16 -- the proposed term sheets -- sorry, the -- the term
17 sheets for the proposed long-term sales for WPS and MP.

18 MR. ANTOINE HACAULT: Okay, so you'd be
19 unable to con -- comment with respect to whether or not
20 you would have any suggestions on different approaches or
21 different terms in the proposed contracts?

22 MR. ANURAG GUPTA: I think, again, it's --
23 -- it's very difficult to secondguess Manitoba Hydro
24 management who -- who have tonnes of experience in
25 negotiating these term sheets. We analysed the term

1 sheets for what they did to Manito Hy -- Manitoba Hydro's
2 risk exposure, sale versus no-sale scenarios, and -- and
3 our findings are contained in our report.

4 It's very difficult to speculate on
5 whether a different outcome could have been achieved or
6 not.

7 MR. ANTOINE HACAULT: Once again, you're
8 comfortable with the recommendations you've made in the
9 report, that the Manitoba Hydro Board will have the
10 information it needs, and its staff has the information
11 it needs to properly assess those term sheets?

12 MR. ANURAG GUPTA: That is our
13 understanding. And -- and in our conversations with
14 Manitoba Hydro, they understand that these -- these -- it
15 -- it takes a long time to go from a signed term sheet to
16 a signed contract; conditions will change. And they
17 understand and recognize the need that they have to
18 update their analyses and -- and take it forward for
19 approval while the economics still -- still hold up.

20 MR. ANTOINE HACAULT: Thank you. I'd ask
21 you to -- or the panel to go to page 28 of the
22 presentation; it's the graph that shows the incremental
23 adding of power generation.

24 MR. ANURAG GUPTA: I'm there, sir.

25 MR. ANTOINE HACAULT: So hydroelectric

1 generation such in Manitoba you can't add little clumps
2 of power; you have to do big incremental additions.

3 Do you accept that premise?

4 MR. ANURAG GUPTA: In general, you can
5 have small hydro, you can have large hydro. Our
6 understanding is Manitoba Hydro has determined that this
7 is the most economic sequence for it to develop its hydro
8 in -- in these large chunks.

9 MR. ANTOINE HACAULT: And prudent
10 practice would have it that you'd make sure that your
11 incremental additions are done enough in advance to
12 ensure that you don't risk a situation where you don't
13 have enough hydro-electric power because of increased
14 domestic demand?

15 MR. ANURAG GUPTA: Manitoba Hydro has a
16 very clear capacity planning criterion and energy
17 planning criterion. And our understanding is, and -- and
18 we've seen this, they do respect those planning ci --
19 criterion in -- in developing the PRPs and other plans.

20 MR. ANTOINE HACAULT: The question I
21 have, sir, is: Did KPMG look at any of the policies or -
22 - with respect to advancing plant further in advance of
23 Manitoba load to serve, specifically, export contracts?

24 MR. ANURAG GUPTA: We absolutely reviewed
25 -- reviewed that in the -- the power resource plan. The

1 preferred development sequence actually calls for
2 advancement of -- of the -- of Keeyask, for example, in
3 advance of when it is required to meet Manitoba load.
4 Tha -- that's a preferred development sequence, so, yes,
5 we did look at.

6 And the entire economics of comparing sale
7 versus no-sale is -- is another extension of that
8 analysis to see what happens if you do advance the
9 construction of plants in order to -- and -- and ahead of
10 the time required to meet the Manitoba load.

11 MR. ANTOINE HACAULT: Against what
12 criteria should we be evaluating whether to advance plant
13 construction? I'm not talking about whether it's needed
14 or not eventually, but I'm talking about advancing the
15 construction schedule when it's not reasonably needed for
16 Manitoba load at that particular time but we advance it
17 specifically to be able to export.

18 What criteria should we establish in
19 looking at whether that's a good thing for Manitoba
20 ratepayers?

21 MR. ANURAG GUPTA: I think -- again, the
22 way Manitoba Hydro does it is appropriate. I think
23 looking at the NPV of -- of the scenario, which calls for
24 a certain development sequence in which plants may be
25 advanced ahead of the time needed to look at -- needed to

1 serve Manitoba load as opposed to the NPV of a plan which
2 puts those plants online at -- at a later date. I think
3 if -- if you have a positive NPV, that, to me, is -- is
4 one (1) criteria you should look at.

5 You should also then test that NPV under
6 various scenarios to see whether or not your preferred
7 development sequence holds up, if -- if any of your
8 assumptions change, and these are forward looking
9 analyses, things can and will change.

10 So, again, it's important to test the
11 robustness of that NPV against a variety of scenarios.
12 And, again, Manitoba Hydro does that. We extended that
13 analysis. So that would be the criteria.

14 MR. ANTOINE HACAULT: Now -- and here you
15 may not be able to answer the question, but I'm wondering
16 why would you do that on thirty-five (35) years instead
17 of sixty (60) years?

18 MR. ANURAG GUPTA: It's -- the -- let --
19 let me just take a second to phrase my answer. The
20 explicit cashflows are modelled for thirty-five (35)
21 years, but there is value to the plant and the assets
22 after the thirty-five (35) year period. There is a
23 terminal value associated with it, which is -- which is
24 factored into the analysis, sale versus no-sale.

25 MR. ANTOINE HACAULT: And what terminal

1 value is assumed for purposes of that calculation?
2 Because if you're looking at practically a seventy-year
3 (70) plant and you're only taking thirty-five (35) years,
4 you've got practically another thirty-two (32) guaranteed
5 years of production. I don't know how you'd deal with
6 that.

7 MR. JONATHAN ERLING: My recollection --
8 and the specific details of the terminal calculation are
9 not in my head at the moment, but it is a form of
10 levellized cost analysis that is used to come up with the
11 terminal value, so it's not a book-value concept.

12 MR. ANTOINE HACAULT: And that is a
13 methodology which KPMG thinks is a reasonable methodology
14 to --

15 MR. JONATHAN ERLING: It certainly --

16 MR. ANTOINE HACAULT: -- access this?

17 MR. JONATHAN ERLING: -- it's certainly a
18 methodology that is very commonly used in the utility
19 sector and particularly with regulated utilities in
20 comparing different options that have different time
21 frames. And -- and different options with different
22 generation plant lives.

23 MR. ANTOINE HACAULT: Now next I jump to
24 -- and my colleague of the Board Council had done some of
25 this, she had gone through some quick numbers and,

1 subject to check, he says that numbers Keeyask, 2008 we
2 were at 3.7 billion, 2009 it was -- which is what I
3 understood you used, we were at 4.592 billion, and
4 finally 2010 we've jumped up to 5.637 billion.

5 My question to you is -- or to the panel:
6 Does the panel have any recommendations with respect to
7 improving Manitoba Hydro's approach to estimating capital
8 costs?

9 MR. ANURAG GUPTA: I'm not a quantity
10 server, sir, I can't -- I can't -- I can't speak to that.

11 MR. WILL LIPSON: Yeah, maybe on behalf
12 of my other panellists, we -- we did not go in and in any
13 way look at their capital cost methodology. You know, I
14 think we're reasonably familiar with how those exercises
15 are done, and we're reasonably familiar that they are,
16 you know, subject to change, and you will see swings and
17 a whole variety of circumstances but, no, we did not have
18 any set of recommendations in either of our reports, or
19 subsequently, that relate to improving capital cost
20 estimation.

21 MR. ANTOINE HACAULT: Now recognizing
22 that wasn't a task given, but trying to assist the Board
23 here, because you see the -- the issue, if we start doing
24 NPVs and the costs are about 50 percent more in -- in the
25 nature of like about \$4 billion between the two (2)

1 plants, it could affect our calculations.

2 Is there any other step which you're aware
3 of, which might assist the Board, or Manitoba Hydro in
4 dealing with this issue?

5 MR. WILL LIPSON: Well, maybe I'll start
6 and then pass it on to any of my colleagues who want to
7 add. Generally, you're not today making a firm
8 commitment of any sort around a particular plant like
9 Keeyask or Conawapa.

10 As environmental processes proceed, as
11 more design is done, as costs change in the marketplace,
12 Manitoba Hydro will continually refine its estimates.
13 And when the time comes to making the firm commitment to
14 go ahead and spend the billions of dollars that's
15 involved, I would expect, and it's normal in other
16 processes, that you have a much more refined and a much
17 more accurate cost estimate than you do in the early days
18 when it's still years into the future before the, you
19 know, big dollars start to get spent.

20 So -- so the real point is to remember
21 that, you know, in the early days that these numbers are
22 subject to change and to ke -- keep an eye on the
23 analysis and be as firm as you can at the time that the
24 real commitment is being made.

25 MR. ANTOINE HACAULT: Concern might be

1 expressed by some that -- I think the numbers are close
2 to \$3 billion of invested money into these two (2) new
3 plants where the -- I'm not saying I'm giving evidence, I
4 think the record indicates that based on the -- the
5 financials.

6 Does KPMG have any view as to a certain
7 percentage being kind of a critical. If you're getting
8 to 25 percent or 30 percent of the capital costs, is --
9 is there kind of a critical time when decisions should be
10 reviewed?

11 MR. WILL LIPSON: No, we -- we don't have
12 a view per se. You know, again, it's specific to every
13 circumstance. There isn't an overall one (1) number that
14 applies in all situations. I think again, it's important
15 to bear in mind that these plants presumably are going to
16 be built one (1) day, so money that's spent now isn't
17 being thrown away. It may be spent a little bit sooner
18 than it might otherwise have been spent, but it's not --
19 hopefully, it's not wasted money.

20 And that, you know, for the most part it's
21 a management judgment call as to how certain and how
22 committed are they to the projects preceding, and, you
23 know, how possible do the things look, bearing in mind,
24 you know, the term sheets are not yet contacts, and
25 bearing in mind that we're still a few years into the

1 future as to how much money they spend at the present
2 time.

3

4

(BRIEF PAUSE)

5

6

7

8

MR. ANTOINE HACAULT: I'll move to the
last area. I just have a couple of questions and I'm --
I'll be finished.

9

10

11

12

13

It was the area where risk exposure cannot
be modified or addressed to other appropriate risk
management practices. What are the financial reserves
required to be targeted to address the residual risk
items?

14

15

16

I understand you haven't specifically
dealt with that, but my questions are as follows.

17

18

19

Does KPMG have any view on the
reasonableness of the two point (2.) -- I think it's two
point seven (2.7) number that you've chosen as a number
that represents the drought risk.

20

21

22

23

24

25

MR. ANURAG GUPTA: I -- sorry, on -- on
page 173, yes, you -- you're -- you're correct. Exhibit
4-18 is -- is something which Manitoba Hydro had put
forward to the PUB in response to one of the orders. And
-- and the cumulative impact on retained earnings for a
five (5) year drought, as mentioned there, is \$2.764

1 billion.

2 MR. ANTOINE HACAULT: But my question was
3 with respect to KPMG's opinion of the reasonableness of
4 that in the context of being a Crown corporation.

5 MR. ANURAG GUPTA: We -- we tested -- we
6 tested Manitoba Hydro's quantification of drought risks;
7 our results are in Section 4(11) of our -- of our report.
8 And -- and we -- I -- I think we were in agreement with
9 Manitoba Hydro on -- on the numbers that they had
10 presented earlier, with regards to impact of a five (5)
11 year drought on -- on net income and what it would do to
12 retained earnings at the end of the period.

13 MR. ANTOINE HACAULT: Because there's
14 different numbers that can be chosen under different
15 scenarios -- that's kind of second subset that I'm asking
16 now -- between the different scenarios, choosing the
17 scenario that leads to the two point seven six four
18 (2.764), is that, in the opinion of KPMG, a reasonable
19 approach for this Crown utility?

20 MR. ANURAG GUPTA: I -- I think the
21 number will change as -- as the analysis is updated.
22 That two point seven six four (2.764) number was -- I --
23 my understanding is -- is at 2009 -- sorry, it was for
24 five (5) year drought lasting from 2009 to 2013.

25 I think the important point to note here

1 is that we found that Manitoba Hydro has an appropriate
2 methodology for examining drought risk, the
3 quantification of that drought risk. The exact number
4 obviously will change depending on -- on the various
5 inputs which go into that analysis.

6 MR. ANTOINE HACAULT: And although I'd
7 asked very many questions as to what wasn't done by KPMG
8 in the report, I'd suggest to you that the highest risk
9 and highest cost facing this utility is, in fact, this
10 drought risk, at least as analyzed by it in its Corporate
11 Risk Management Report.

12 Do you agree with that?

13 MR. ANURAG GUPTA: It is certainly a
14 very, very significant risk.

15 MR. ANTOINE HACAULT: Thank you. Those
16 are my questions, members of the Board. Thank you very
17 much.

18 THE CHAIRPERSON: Thank you very much.
19 Very helpful.

20 Mr. Gange, you're still estimating about
21 forty-five (45) minutes?

22 MR. WILLIAM GANGE: Forty-five (45)
23 minutes at most, yes.

24 THE CHAIRPERSON: Okay, well, we would
25 appreciate it because the Board has a few questions and

1 then there may be re-direct, so we'll take a -- this time
2 we'll hold to, a very short break. We'll be back at 3:05
3

4 --- Upon recessing at 2:56 p.m.

5 --- Upon resuming at 3:05 p.m.

6

7 THE CHAIRPERSON: Mr. Gange, not meant to
8 overly rush you, but I guess that's the situation we're
9 dealing with.

10 MR. WILLIAM GANGE: It is, Mr. Chair.
11 Thank you very much.

12

13 CROSS-EXAMINATION BY MR. WILLIAM GANGE:

14 MR. WILLIAM GANGE: Panel, my name is
15 Bill Gange. I'm here -- I'm along with Dr. Peter Miller
16 on behalf of what is now called Green Action Centre and
17 Time to Respect Earth's Eco System. And we have a number
18 of questions to assist our expert, Jonathan Wallach, with
19 respect to drought risk.

20 So, if I could have the -- the -- panel, I
21 -- I suspect that it's Mr. Erling that's going to -- that
22 these questions are directed to. And -- and the
23 reference -- the starting point of this is on the KPMG
24 report, page 174.

25 Right at the bottom of -- of page 174,

1 forecast year, sir, how are the export prices expressed
2 in the 2008 price forecast? And by that, I'm asking:
3 Does the forecast provide a single average export price
4 for the year as a whole, or for each month of the year?

5 MR. ANURAG GUPTA: So the way Manitoba
6 Hydro develops its export for -- price forecasts is it's
7 based on the purchase price of the -- the purchased
8 forecast from the five (5) consultants; that is then
9 averaged out by Manitoba Hydro to develop the price
10 forecast.

11 And as -- with regards to the periodicity,
12 I'll have to check and -- and -- and look into that,
13 whether it's monthly or it's for the -- or whether it's
14 diurnal.

15 MR. WILLIAM GANGE: Okay, thank you, Mr.
16 Gupta. You'll undertake to provide that information in
17 due course?

18 MR. ANURAG GUPTA: Absolutely, yes.

19 MR. WILLIAM GANGE: And if I can follow
20 up on that, could you also check: Are prices expressed
21 as the average overall on-peak and off-peak hours in the
22 year or the month?

23 Is it -- is it that specific?

24 MR. ANURAG GUPTA: Let me get back to you
25 on that, please.

1 MR. WILLIAM GANGE: Okay. And -- and --
2 and there's one (1) other part of the undertaking, if you
3 could also check, does the forecast provide export prices
4 even -- even more detailed for -- but rather trying to go
5 back and -- and -- and predict for each hour of the year?

6 MR. ANURAG GUPTA: I shall certainly
7 undertake to get back to you on that information.

8 MR. WILLIAM GANGE: Thank you, sir.

9

10 --- UNDERTAKING NO. 77: KPMG to advise if the 2008
11 price forecast provides a
12 single average export price
13 for the year as a whole, or
14 for each month of the year;
15 and are the prices expressed
16 as the average overall
17 on-peak and off-peak hours in
18 the year or the month; and
19 does the forecast provide
20 export prices even more
21 detailed for each hour of the
22 year

23

24 CONTINUED BY MR. WILLIAM GANGE:

25 MR. WILLIAM GANGE: Does the 2008 price

1 forecast provide a separate forecast of import prices, or
2 does it provide a single forecast of market prices
3 applicable both to exports and imports?

4 MR. ANURAG GUPTA: The price forecast is
5 an electricity export price forecast, so it's -- it's the
6 -- my understanding is it's the pricing at MHEB.

7 MR. WILLIAM GANGE: So it's a single
8 forecast?

9 MR. ANURAG GUPTA: A single forecast,
10 yeah.

11 MR. WILLIAM GANGE: Thank you.

12 MR. JONATHAN ERLING: I don't -- maybe if
13 I could add certainly within the SPLASH modelling
14 framework, as well as in HERMES, in doing the
15 calculations, Manitoba Hydro would take a forecast and
16 take into account what it represented.

17 For example, if it was a five (5) by
18 sixteen (16) on-peak price forecast, there would be --
19 need to be some adjustment when it's used within the
20 model to convert it to appropriate monthly for -- monthly
21 prices and peak and off-peak prices. And then, further
22 to that, within the peak and off-peak period, there would
23 be some consideration of the potential distribution of
24 those prices within each -- each of the periods and when
25 export sales were likely to occur.

1 So just to reiterate some discussion I
2 think we had yesterday, there is a long process between a
3 price forecast as an input and how it is used within the
4 modelling framework to come up with actual export and
5 import revenues.

6 MR. WILLIAM GANGE: Than you, Mr. Erling.
7 And when -- when the document says that you -- that you
8 modelled a scenario of high export and natural gas
9 prices, does that mean that -- that KPMG modelled a
10 scenario of high MISO market prices that would also imply
11 high import prices?

12 MR. ANURAG GUPTA: Well, just to clarify,
13 KPMG didn't model, we asked Manitoba Hydro to run
14 scenarios through their models. The low, high, and
15 expected price forecast that we reference in the scenario
16 analysis is all developed as part of the electricity
17 price forecast.

18 MR. WILLIAM GANGE: And -- and, sir, were
19 the export prices from the 2008 price forecast
20 manipulated or modified in any way for use in the SPLASH
21 modelling of the various price scenarios?

22 MR. JONATHAN ERLING: Well, I -- I'm not
23 sure what you're getting at. Maybe if you're asking me --
24 -- I think I did address that a question or two (2) ago
25 with respect to the adjustments that are done, maybe not.

1 If I'm -- I -- I -- if I don't understand that correctly,
2 please let me know.

3 MR. WILLIAM GANGE: Okay. That's fine,
4 Mr. Erling, the -- the -- the -- the commentary that you
5 made two (2) -- two (2) questions ago was -- in essence
6 answers that question?

7 MR. JONATHAN ERLING: I believe so. If
8 it doesn't, please, let us know.

9 MR. WILLIAM GANGE: No, that's fine. Is
10 it possible to tell us on average what is the percentage
11 difference between export prices in the high price
12 scenario and those in the expected price scenario?

13 MR. JONATHAN ERLING: It's certainly not
14 a number we have at the top of our heads.

15 MR. ANURAG GUPTA: Well, let me -- that
16 might not be -- Manitoba Hydro might not want to divulge
17 that. If I can just confer? Thank you.

18

19 (BRIEF PAUSE)

20

21 MR. ANURAG GUPTA: I have been advised by
22 Manitoba Hydro personnel that -- that that's confidential
23 information.

24

25 (BRIEF PAUSE)

1 MR. WILLIAM GANGE: Okay. Thank you.
2 And, sir, can you advise me of this, for the high price
3 scenario, why do export prices coincide with high natural
4 gas prices?

5 MR. ANURAG GUPTA: Can you point me to a
6 reference in the report that you're looking at, and maybe
7 I can answer your question better then.

8

9 (BRIEF PAUSE)

10

11 MR. WILLIAM GANGE: Where we're taking
12 that from, sir, is at the bottom of page 174. In -- in
13 the comment when -- it says:

14 "The droust -- drought risk analysis is
15 conducted using the SPLASH computer
16 model for low, expected, and high
17 export and natural gas prices."

18 MR. ANURAG GUPTA: I -- I see. I -- if I
19 -- if I can explain that, and I'm sorry if it didn't come
20 across clearly in the report. We're running, as I had
21 mentioned in our direct evidence yesterday, thirty-six
22 (36) scenarios. And one (1) of the scenario is what
23 happens if there is high export prices and high natural
24 gas prices such that in a drought situation when you are
25 -- when Manitoba Hydro's having to buy natural gas to

1 fuel it's -- it's terminal plants, we're trying to look
2 at the effect that has as a scenario.

3 It's not that it -- it's coincident. It's
4 -- it's -- that's the scenario chosen to -- to study the
5 effect -- combined effect of both high prices as well as
6 high natural gas prices.

7 MR. WILLIAM GANGE: Okay. So -- so, in
8 fact, the -- the scenario chosen implies that the import
9 prices are -- are the same for this scenario as for the
10 expected price scenario. Do I have that right?

11 MR. ANURAG GUPTA: I -- I think so, yes.

12 MR. WILLIAM GANGE: Yeah. And in -- in
13 that case, sir, why would import prices not be higher
14 than expected in -- in a scenario where export prices are
15 higher than expected? So -- so what -- what factors
16 would increase export prices but not import prices?

17 MR. ANURAG GUPTA: Maybe I misunderstood
18 your previous question. When we run the scenarios, if
19 it's a high -- if you're looking at a high price -- not a
20 high gas price, but if you're looking at a high export
21 price scenario, that would apply to both imports and
22 exports.

23 MR. WILLIAM GANGE: I see, okay.

24 MR. JONATHAN ERLING: Because obviously
25 you're importing and exporting into and out of the same

1 market, so it's the same price assumptions.

2 MR. WILLIAM GANGE: And would that also
3 apply in terms of the five (5) by sixteen (16) peaks as
4 compared to the -- the off -- off-price night sales or
5 purchases? Would that also apply, what you just said,
6 Mr. Erling?

7 MR. JONATHAN ERLING: Yes.

8 MR. WILLIAM GANGE: I -- I'm then going
9 to refer to page 181, the -- the Exhibit 4-21.

10 MR. ANURAG GUPTA: I'm there, sir.

11

12 (BRIEF PAUSE)

13

14 MR. WILLIAM GANGE: In this chart, sir,
15 the way that we read it is that KPMG estimates that
16 retained earnings at the end of a drought starting in
17 2013 would be \$190 million under the expected price
18 scenario but negative \$1,079 million under the si --
19 scenario that assumes high export and natural gas prices.

20 Am I reading that correctly, sir?

21 MR. ANURAG GUPTA: So under the sale
22 scenario with high prices, yes, it's negative one-o-seven
23 nine (1,079).

24 MR. WILLIAM GANGE: And if I could ask a
25 hypothetical question, sir. If -- if you ran a scenario

1 that's -- assumed only high export prices but not high
2 natural gas prices, so high export prices not high
3 natural gas prices, would you expect that retained
4 earnings at the end of the 2013 drought would be greater
5 under the high price scenario than under the expected
6 price scenario?

7 MR. ANURAG GUPTA: I'm sorry, could you
8 repeat that question again?

9 MR. WILLIAM GANGE: Sure, I -- I can. If
10 -- if you ran a scenario that assumed only high export
11 prices but not high natural gas prices, would you expect
12 that retained earnings at the end of 2013 -- at the 2013
13 drought would be greater under the high price scenario
14 than under the expected price scenario?

15 And -- and the thought process is that
16 higher export prices would mean greater export revenues
17 for Manitoba Hydro and, thus, greater retained earnings.

18 MR. ANURAG GUPTA: I think that is the
19 general thought process, yes.

20 MR. WILLIAM GANGE: And -- and then,
21 conversely, if KPMG ran a scenario that assumed only high
22 gas prices but not high export prices, would you expect
23 that retained earnings at the end of the 2013 drought
24 would be less under the high price scenario than under
25 the expected price scenario?

1 MR. WILL LIPSON: Ma -- maybe if I could
2 just jump in. These are fairly speculative questions,
3 the last two (2). I'm a little bit leery that KPMG is,
4 you know, trying to assess what a model run is really
5 necessary to be able to do.

6 I think you are looking at, you know, a
7 difference of a billion two (2) be -- in the data that's
8 in the exhibit, but whether or not that billion two (2)
9 gets eaten away or partially eaten away and the like.
10 To be honest, this should be done with, you know, real
11 model runs and, you know, with -- with the proper care
12 that goes into that kind of work.

13 This isn't really a matter of judgment.
14 This is really just asking us to become models ourselves
15 and -- and do the analyses that models are built to do.

16 THE CHAIRPERSON: I think that's a fair
17 response, Mr. Gange.

18

19 CONTINUED BY MR. WILLIAM GANGE:

20 MR. WILLIAM GANGE: Can -- can I say
21 this, Mr. Gupta. Can -- can you go this far, that -- to
22 -- to confirm that high export prices increase retained
23 earnings relative to the exper -- expected price
24 scenario, while high gas prices reduce retained earnings
25 relative to the expected price scenario? Is that within

1 -- within the scope?

2 MR. JONATHAN ERLING: I guess -- I mean,
3 maybe to add to Will's comment. I -- one of the reasons
4 I'm reluctant to answer these types of questions on the
5 fly is, you know, the potential to make a mistake in my
6 head, which is large, and, you know, there are various
7 ins and outs that -- that affect the answer.

8 For example, natural gas prices really
9 only generally have an impact on the model runs in low-
10 flow years, and they don't have much of an impact in any
11 other year because Manitoba Hydro uses very limited
12 thermal generation. And then, you know, there's similar
13 puts and takes with respect to export prices because, you
14 know, to the extent export prices are -- are high, I
15 mean, that's a positive in -- in high flow years, but
16 when you get into a drought situation it's a negative
17 because you tend to be purchasing more power.

18 So kind of sorting all these things on the
19 fly, I'm -- I'm quite reluctant to do. I mean, Anurag
20 might be capable of it, but -- anyway, I won't answer.

21 THE CHAIRPERSON: Mr. Gange, because it's
22 on the public record, and certainly the Board doesn't
23 want to give evidence, but it is on the public record,
24 following the drought year in which the massive loss
25 occurred, the reverse happened. The water flows went way

1 up at the same time as natural gas prices spiked.

2 And when natural gas prices spiked there
3 was some attribution by Manitoba Hydro to the fact that
4 their large net earnings that followed was a result of
5 those natural gas spikes spiking and affecting the
6 Americans buying electricity from us at higher prices.

7 MR. WILLIAM GANGE: Thank you, Mr. Chair.

8

9 CONTINUED BY MR. WILLIAM GANGE:

10 MR. WILLIAM GANGE: If -- if I can -- I'm
11 not going to show it to you, panel, but -- but the -- the
12 Appendix 16, the Manitoba Hydro twenty (20) year
13 financial outlook, has a clause that says that:

14 "The high export price scenario is
15 characterized by high economic and
16 energy demand growth, higher capital
17 costs, a move to fully competitive
18 markets, higher natural gas and coal
19 prices, stringent US environmental
20 policies, and higher environmental
21 premiums relative to expected prices in
22 the twenty (20) year financial
23 outlook."

24 That's -- that's the context with which
25 these next few questions will be asked. Did the KPMG

1 high price scenario use the same forecast of export and
2 natural gas prices as were assumed for the high export
3 scenario in the twenty (20) year financial outlook?

4 Do you know that, Mr. Gupta?

5 MR. ANURAG GUPTA: I can confirm that the
6 2008 electricity price forecast was used consistently for
7 both the IFF-09/'10 and the PRP '09/'10.

8 MR. WILLIAM GANGE: And with regard to
9 some of the characteristics of the high export price
10 forecast, for instance, high demand growth, the reference
11 to high gas pri -- high coal prices, more stringent
12 environmental restrictions, would you expect these
13 factors to result in market prices in off-peak hours that
14 are higher in the high export price forecast than off-
15 peak prices in the expected price forecast?

16

17 (BRIEF PAUSE)

18

19 MR. ANURAG GUPTA: I think my response to
20 that would be these price forecasts were not developed by
21 KPMG. These are not our forecasts. I -- I don't think I
22 should be commenting on that.

23 MR. WILLIAM GANGE: Thank you.

24

25 (BRIEF PAUSE)

1 MR. WILLIAM GANGE: And, sir, if I -- the
2 last reference that -- that I've provided to your counsel
3 was the -- Appendix 77, the Manitoba Hydro Corporate Risk
4 Management Report. And at page 37 under the heading,
5 "Water Supply Drought," the comment is made that:

6 "Reduced water supply is a fundamental
7 risk to the financial position of the
8 Corporation. And key to this risk..."

9 I -- I skipped a sentence, but:

10 "Key to this risk is the large degree
11 of uncertainty surrounding the price of
12 imports and fuel purchases required to
13 serm -- serve firm demand commitments
14 during an extended drought."

15 It -- it would appear that a large part of
16 the testimony that you've provided does deal with the --
17 the fact that the drought risk arises out of the large
18 degree of uncertainty surrounding the price of imports.

19 Would you agree with that comment?

20 MR. ANURAG GUPTA: That's one (1) of the
21 key factors, yes.

22 MR. WILLIAM GANGE: Given the key role
23 played by import price uncertainty, wouldn't it have been
24 reasonable to evaluate the magnitude of the company's
25 drought related risk exposure to imprite -- import price

1 uncertainty?

2 MR. ANURAG GUPTA: I -- I think, Exhibit
3 421 in -- in our report on page 181, un -- under the rowa
4 saying -- which are labelled "High Prices" do in fact
5 analyze what happens under a drought situation if you are
6 facing a high export by import prices.

7 MR. WILLIAM GANGE: Is it your position,
8 sir, that that reference is an examination by KPMG to the
9 high import price scenario as part of its modelling of --
10 of drought related financial risk?

11 MR. ANURAG GUPTA: The scenario labelled
12 "High Prices" is -- is high export prices, which as Mr.
13 Erling had explained, the SPLASH model also uses to model
14 import purchases.

15

16 (BRIEF PAUSE)

17

18 MR. JONATHAN ERLING: I mean, just to add
19 to that, I mean, that's why the retained earnings impact
20 is so much greater, because it's really a function of the
21 import prices, not the export prices, because under a
22 drought there are much fewer exports.

23

24 (BRIEF PAUSE)

25

1 MR. WILLIAM GANGE: Under that scenario
2 though, sir, if -- if Hydro is exporting -- even in the
3 drought scenario, but is exporting during peak hours, but
4 importing during off-peak hours, is it reasonable to use
5 the same -- same value in terms of -- of importing and
6 exporting?

7 MR. JONATHAN ERLING: Maybe just to
8 clarify, when we say a -- a high import -- let me step
9 back again and start again.

10 As I explained, I think earlier, there's a
11 long process for translating a given forecast into the
12 actual import and export prices that would be observed
13 within the model, this issue of -- of looking at the --
14 some means of modelling, the time distribution, the
15 prices, and import, and -- and translating a -- a
16 forecast for a given period into an off-peak forecast and
17 an import forecast or sorry, an on-peak and an off-peak
18 forecast for the MISO market.

19 So in a drought -- in a high priced
20 sensitivity run where we have a high, essentially MISO
21 price forecast being used, it doesn't necessarily
22 translate into the same prices being predicted for import
23 and export transactions because of the fact that they may
24 take place in different time periods, not only, you know,
25 to some degree you might try to export in on-peak and

1 import in off-peak, but also you'll be importing and
2 exporting in different months. So -- but the basis is
3 that they would use a consistent starting assumption for
4 the MISO price level.

5 I -- I hope that clarifies things if...

6 MR. WILLIAM GANGE: As -- as best we can.
7 Yes, thank you.

8

9 (BRIEF PAUSE)

10

11 MR. WILLIAM GANGE: If -- panel, if you
12 could go to your direct evidence, Manitoba Hydro Exhibit
13 Number 61, and I'm looking at page 20 of the direct
14 evidence. Under the treatment of optionality, the last
15 bullet states that:

16 "Manitoba Hydro does not calculate the
17 option value of storage, which is the
18 value associated with the flexibility
19 to change these schedules. Estimate of
20 market value or of option value would
21 only be necessary if Manitoba Hydro was
22 trading access to storage in external
23 markets."

24 From -- from your review, panel, is there
25 a potential external market for access to Manitoba

1 Hydro's storage in terms of -- of firming, for instance,
2 wind power?

3 MR. JONATHAN ERLING: Well, that's an
4 interesting question. And the context for this
5 discussion -- and it is an interesting question. I'm not
6 just trying to take some time to avoid having an answer.
7 The -- the context for this finding was that the New York
8 consultant had criticized Manitoba Hydro for failing to
9 provide calculations with respect to the option value of
10 storage.

11 And I would note that I think such
12 calculations might be particularly relevant if you're
13 talking about gas storage capacity. For example, if you
14 look at the Dawn site in Ontario, Union Gas has sig --
15 significant gas storage capacity, and that that capacity
16 is traded. You can purchase and buy storage capacity in
17 markets and there are tariffs for injections and
18 withdrawals.

19 I have not seen evidence, I am not aware
20 of anybody trading hydroelectric capacity in this manner,
21 although perhaps it occurs somewhere, it's certainly an
22 interesting idea. My suspicion is that it would be
23 practically more difficult than for gas storage, because
24 gas transportation, as we know, is -- is easier to manage
25 since it's -- you're just pumping some gas around and,

1 you know, gas is a much less complex business than
2 electricity, but...

3 So in conclusion to your question, I
4 hadn't thought of that, and I -- I don't -- I don't know
5 that it would be relevant. I'd have to think of a
6 scenario in which you would want to try to, you know,
7 sell capacity in Manitoba Hydro's reservoirs somehow in
8 an external market.

9 I would have thought there's a lot of
10 practical issues associated with that. In particular, I
11 think the fact that Manitoba Hydro has a -- a relatively
12 constrained system for various reasons that have been
13 discussed already in this proceeding.

14 MR. WILLIAM GANGE: Thank you, Mr.
15 Erling. If we could go to page 35, and this is the chart
16 of long-term fixed price contracts for export power
17 sales.

18 MR. ANURAG GUPTA: Yes, these are the
19 proposed prices and the proposed long-term contract term
20 sheets.

21 MR. WILLIAM GANGE: Yes, and -- and --
22 and there have been a number of questions asked about
23 this -- not this page, but about that issue, Mr. Gupta,
24 and -- and so I'll be very brief. And I'm -- I'm -- I'm
25 only a couple of minutes from the end.

1 The bars on the right labelled "Contract
2 On-peak Prower -- Power Price" refer to the -- the term
3 sheets and actual contracts.

4 Is that correct, sir?

5 MR. ANURAG GUPTA: Those bars correspond
6 to the proposed prices in the -- in the term sheets.

7 MR. WILLIAM GANGE: Can you tell us which
8 of these -- you -- you've got them marked as "NSP", "MP",
9 "WPS" and -- and "Average."

10 Can -- can you advise which of them relate
11 to actual contracts and which are based on term sheets?

12 MR. ANURAG GUPTA: My recollection is
13 that at the time we did this graph, all three (3) were
14 term sheets.

15 MR. WILLIAM GANGE: And at the time you
16 did the graph, it was back -- well, is that in 2009 or is
17 that in -- in 2010, sir?

18 MR. ANURAG GUPTA: Well, I remember my
19 daughter just being born. So, yes, the early part of
20 2010.

21 MR. WILLIAM GANGE: There is, at the
22 bottom, a source saying the ICF independent review and
23 2009, so -- it looks like September 11th, 2009. But
24 that's where the information came from -- the ICF report?

25 MR. ANURAG GUPTA: Let me clarify. The -

1 - the reference to the ICF is some of the -- so if you
2 look at the blue-coloured bars on the left which refer to
3 the MIS -- the MAPP/MISO pricing. Some of that pricing
4 came from I -- the ICF report because we didn't have
5 access to the MAPP portion particularly.

6 MR. WILLIAM GANGE: We -- we've heard,
7 and -- and I understand that we're going to hear more
8 information from Mr. Cormie in due course -- but we've
9 heard about some renegotiations with respect to these
10 term sheets.

11 Are -- are you aware if -- can you advise
12 us if -- if the information that you've provided us is
13 the original term sheet or post the renegotiation?

14 MR. ANURAG GUPTA: The information on
15 this graph is as per the term sheets we had reviewed in
16 the early part of 2010.

17

18 (BRIEF PAUSE)

19

20 MR. WILLIAM GANGE: And then, sir,
21 finally, on page 36 there are statements in terms of --
22 of the second bullet and then the indented bullet saying
23 that many of the potential novel terms that could be
24 considered in a long-term fail -- long-term firm sales
25 contract between Manitoba Hydro and a counterparty

1 involve shifting a particular risk to the counterparty.
2 And then it goes on to say that Manitoba Hydro would
3 generally be better off, in the long run, if it retained
4 the risk.

5 Just a little bit confused about that,
6 sir. Are you saying that although the practice has
7 developed of shifting the burden from your perspective --
8 from the perspective of KPMG, Manitoba Hydro ought to be
9 able to retain the risk and thereby get a better price?

10 Was that -- was that the point of that?

11 MR. ANURAG GUPTA: Not exactly, sir. The
12 -- the context of this -- this slide and these bullet
13 points, in particular, were -- the New York consultant
14 had made certain allegations and assertions that Manitoba
15 Hydro was suboptimizing some of the contractual
16 provisions, and -- and the New York consultant had put
17 forward certainly some very novel propositions that
18 Manitoba Hydro should consider including in its
19 contracts.

20 And -- and the statement here, what --
21 what we men -- mean by this is that in -- in getting to
22 that optimal risk transfer you ma -- you can always shift
23 a risk to the counterparty. There will be a price that
24 the counterparty will charge you for taking on that risk,
25 it might be monetary, it might be the giving and taking

1 of some other term in the contract.

2 But in order to -- in order to decide
3 whether or not to shift that risk to the counterparty,
4 Manitoba Hydro -- whoever is trying to shift that risk
5 should do an assessment of whether it is cost effective
6 to shift that risk or retain it. Specifically, for
7 example, with re -- with respect to certain hydrological
8 risks. Curtailment is a good example of that.

9 If -- if I am Manitoba Hydro's
10 counterparty and -- and I -- and Manitoba Hydro proposes
11 to me that I take on certain curtailment risks, I am in a
12 less -- I think Manitoba Hydro knows its system much
13 better. And if I'm the counterparty under that
14 asymmetric information situation, I would probably place
15 more for risk premium to accept that kind of a risk
16 transfer than perhaps Manitoba Hydro would "pay" by
17 retaining that risk. So that was the context of this.

18

19 (BRIEF PAUSE)

20

21 MR. WILLIAM GANGE: Thank you very much,
22 panel. Those are my questions, Mr. Chair.

23 THE CHAIRPERSON: Thank you, Mr. Gange.

24

25 BOARD QUESTIONS:

1 THE CHAIRPERSON: Panel, if you don't
2 mind, we have got a few questions. I believe you've
3 touched on all of them, so they mainly fall under the
4 category of confirmation. I have one (1) question that,
5 depending on how we do, I'd ask if maybe Mr. Owen could
6 move up to the front row because I think he's the only CA
7 of the group. Is that correct?

8 MR. WILL LIPSON: It is correct. He's
9 the only CA in the room from KPMG.

10 THE CHAIRPERSON: And I don't think it's
11 a particularly difficult question, but it's really one
12 only an accountant can -- can handle. But I would -- I
13 would wait, Mr. Gupta, until we reach to it because I've
14 arranged the question so it's the very last one.

15 Okay, so I assume that KPMG, in taking on
16 the assignment, relied in part on its general knowledge
17 and expertise in utility -- utilities, and, in
18 particular, electric utility matters. Please confirm.

19 MR. WILL LIPSON: Yes, that's correct.

20 THE CHAIRPERSON: From your review of
21 Hydro's forecast, results, operations, and models, have
22 you formed an opinion on the advisability of Manitoba
23 Hydro's major capital plans as described and as supported
24 by export sales expectations, the latter represented by
25 export term sheets entered into several years ago?

1 MR. WILL LIPSON: Okay. My colleagues
2 have elected me to -- to at least do the first pass at
3 that. I think our view is -- is quite favourable. I
4 think again there is a tremendous opportunity here to
5 develop new capacity, have it largely sup -- well, and
6 significantly supported by external customers through the
7 long-term contracts, and to take advantage of -- of the
8 resource that, you know, residents of Manitoba have been
9 blessed with.

10 So, overall, as -- as a basic concept, I -
11 - I think you're in a very good position, and there's
12 lots of jurisdictions that would be very enviable of the
13 position you're in. The key, obviously, is to, you know,
14 proceed ahead, and as we discussed earlier, ma -- you
15 know, make sure the costs don't go way out of wack, make
16 sure that the benefits do eventually flow back through,
17 you know, a) good prices in the contracts, and b) you
18 know, for example, not sharing the benefits of that too
19 widely with other parties, of things -- things of that
20 sort that, you know, we've been discussing over the last
21 three (3) days.

22 But, overall, as a -- as a basic strategy,
23 I would say KPMG's very supportive of what we see
24 happening here at Manitoba Hydro. I welcome my
25 colleagues to add or -- or expand on any of these

1 comments.

2 THE CHAIRPERSON: Thank you, sir. There
3 have been references to Hydro's IFFs. Has KPMG a
4 perspective, a view, as to the adequacy of Manitoba
5 Hydro's current and future forecast domestic rates, given
6 the uncertainties that surround the capital asset costs
7 and plans, and the export sales plans and prices?

8 MR. ANURAG GUPTA: Let -- let me take a
9 crack at it and -- at trying to answer that question, and
10 then if I -- if anyone wants to add -- sir, in -- in the
11 IFF, in the analysis we did, the -- the rate increases
12 were an input to the analysis and we did not specifically
13 analyse whether or not those were appropriate or not. We
14 -- we took those rate increases as they were, as a given
15 input.

16 THE CHAIRPERSON: Okay. Did KPMG
17 consider the financial risk inherent in expending
18 material funds for future generation additions ahead of a
19 firm contract for export sales?

20 MR. ANURAG GUPTA: Again, sir, I think
21 the -- the -- the whole analysis of the sale versus the
22 no -- versus no-sale scenario was done to isolate that
23 very impact. And again, our understanding is based from
24 the proposed terms -- term sheets. And in -- in Chapter
25 4, we specifically do note that one (1) of the ongoing

1 risks is that these are term sheets, and Manitoba Hydro
2 is expen -- is -- is incurring certain expenditures.

3 MR. JONATHAN ERLING: But also, our
4 understanding is that it would not commence construction
5 until the contract was signed so that there would be no -
6 - you know, the two (2) would proceed hand-in-hand.
7 There is not the expectation that you would build a plant
8 without having firmed the contract and turning it from a
9 term -- term sheet into a signed -- formally-signed
10 document.

11 THE CHAIRPERSON: Thank you, sir. I'll
12 come back to a minute -- to that same subject. In your
13 report you recommend, if I read properly, that Hydro
14 review its capital structure. That's correct, is it not?

15 MR. WILL LIPSON: I don't think it's
16 precisely correct. I think what we say is continually
17 keep an eye on the capital structure and we invited the
18 PUB, other stakeholders, government, ratepayers. It's --
19 it's a -- it's a very large policy topic.

20 And -- but yes, in -- in principle it's a
21 key aspect to, you know, the management of the hydro
22 resource again in the province. And so what you say is
23 in spirit correct, precisely, we -- we were broader than
24 that.

25 THE CHAIRPERSON: In the case of a plan

1 to more than double the amount of assets and loans of the
2 Utility, and with uncertainty with respect to both costs
3 and revenues to be incurred and enjoyed, would, in your
4 expert view, expect that in such a circumstance, debt
5 markets would generally prefer a lower debt-equity ratio
6 rather than a higher one?

7 MR. WILL LIPSON: I think our experience
8 is debt markets will look at what it is they're prepared
9 to extend in support of a capital project. So it isn't
10 just the debt equity ratio. There's a whole variety of
11 factors. And it is possible, I mean, I actually have
12 some experience, where there are projects that are 100
13 percent debt funded, even though a company may have had
14 high debt-equity ratios because it's specific to those
15 circumstances and there may be a high degree of assurance
16 that there's almost no risk being passed along.

17 Again, signing up of these long term
18 contracts that Mr. Erling just talked about is obviously
19 a key aspect to reducing the riskiness that lenders face.
20 And to us -- in our direct evidence we even talked about
21 the challenge of trying to finance projects of these
22 magnitudes without having supporting long-term contracts
23 and depending on the high variability of the MISO
24 markets.

25 So in general, yes, lenders like there to

1 be more equity. They like somebody -- my -- my way of
2 saying it, they like somebody else to be in the swimming
3 pool with them. And since they're generally in the first
4 position, they generally like as many other people in
5 there as possible because they're the first ones who can
6 get out the ladder when there's a -- a shark found
7 swimming in this swimming pool because they are in first
8 position.

9 In Manitoba Hydro's context, there is also
10 a province, you know, provincial guarantee to the debt.
11 But even that, we are dealing with such large numbers
12 that, you know, this is -- this is an important aspect of
13 the provincial credit rating too.

14 So, you know, lenders, you know, from my
15 experience, they've all had experience somewhere or
16 another, where even a government guarantee wasn't good
17 enough and they worry about everything. That's their bus
18 -- that's their job to do.

19 THE CHAIRPERSON: Thank you, sir. Is it
20 fair to suggest that KPMG holds that the largest risk
21 faced by Hydro is a multi-year drought?

22 MR. WILL LIPSON: That's -- that's our
23 view, yes. I think it's shared by Hydro, but -- if it's
24 not the largest, it's definitely in the top three (3).

25 THE CHAIRPERSON: Is it also fair to say

1 that droughts appear to be, based on historical
2 experience, inevitable?

3 MR. WILL LIPSON: I would say "yes." You
4 know, nobody in this room and certainly nobody that I'm
5 aware of can control whether a drought occurs or not.

6 THE CHAIRPERSON: Certainly not us. Is
7 it also fair to say that KPMG holds that Hydro's approach
8 to this risk is reasonable?

9 MR. WILL LIPSON: I'm doing all the
10 talking here. No, I'm prepared to keep going. You know
11 me.

12 Yeah, no, I -- I think that's a large
13 element of what -- what we actually were addressing in
14 the assignment and, overall, I would say yes, I think
15 Manitoba Hydro are prudently addressing this, you know,
16 number 1 risk.

17 There are policy calls. They could be a
18 bit more conservative in some areas or less conservative
19 in some areas, but, overall, you know, they are experts
20 in a lot of the areas that -- that need to be looked at,
21 and they're doing a more-than-reasonable job in the
22 circumstances in our view.

23 MR. ANURAG GUPTA: And -- and, sir, if I
24 could just very briefly add -- I -- I won't take much
25 time.

1 I think one (1) of the things we found
2 counterintuitively is that the sale -- entering into
3 these sale contracts and advancing the plans actually
4 mitigates the financial impacts for drought.

5 And in a way it's actually very easy for
6 Hydro to, you know, to just sit back and not do anything
7 and then say, Well, why are we negotiating with
8 counterparties? Why -- why are we advancing plans?

9 So the fact that they are going through
10 these efforts, they're negotiating with counterparties --
11 and I've been in negotiations and negotiations with
12 counterparties -- they're never a fun thing to do. They
13 can be stressful.

14 I think that shows that they are -- they
15 are cognizant of this and they're taking positive steps
16 to address risk instead of just sitting back and saying,
17 Well, a drought is inevitable. If it happens, we'll take
18 a loss. We've got the Province behind us. Who cares.

19 That -- that's definitely not the view.

20 THE CHAIRPERSON: Thank you. Do you --
21 you were talking about drought, if it wasn't the top one
22 it was certainly in the top three (3).

23 Do you consider the selection of a
24 particular development plan one that, in hindsight, turns
25 out to be suboptimal is also a risk -- a risk that --

1 which is more approachable by Hydro than drought?

2 MR. WILL LIPSON: Sorry, by "development
3 plan", you mean in terms of Keeyask and Conawapa? I -- I
4 think Mr. Gupta was just talking on that point to some
5 degree.

6 They -- they are integrated. The -- you
7 know, the -- the key -- one (1) of the absolute key
8 findings of our assignment was what Mr. Gupta just talked
9 about, that the development program, again coupled with
10 getting the long-term contracts in place and the timing
11 and everything else it's associated with, that plan and
12 the analysis -- or the -- the inputs that went into the
13 analysis through the SPLASH model are such that, you
14 know, the -- the -- it -- it -- this is a very big step
15 forward to mitigating that risk of drought.

16 Is it the optimal way forward? I -- we're
17 aware Manitoba Hydro considered alternatives. I don't
18 know that it considered, you know, changes by a month
19 here or a month there. I mean, there's a limit to how
20 many analyses you do. But, overall, we're -- we're quite
21 comfortable they come up with something that if it's not
22 the optimal, it's quite close to an optimal development
23 plan, but subject to change if circumstances change.

24 You know, my experience on major projects
25 like this is there -- inevitably there's going to be some

1 delay, there's going to be some hiccup, there's going to
2 be something that comes out of environmental processes
3 that was unforeseen. So you continually keep an eye on
4 the -- on the analysis, you continually update, and
5 eventually, when the time comes to, you know, make the
6 firm commitment, you know, at that point you just confirm
7 that that is the optimal plan.

8 THE CHAIRPERSON: Do you have any opinion
9 as to whether Hydro has identified and considered
10 carefully all available depart -- developmental --
11 development scenarios?

12 MR. ANURAG GUPTA: Certainly, sir, in the
13 power -- in the PRP we -- we see evidence of them
14 analyzing, not just the sale versus no-sale scenario
15 that's been the primary focus of our discussion, but they
16 have looked at multiple other development sequences.

17 THE CHAIRPERSON: Preference has been --
18 reference has been made to Manitoba Hydro's discount rate
19 for new development.

20 Whatever the rate is, in your practice, is
21 that rate similar to that used by other major utilities
22 with respect to major developments?

23 MR. ANURAG GUPTA: Sir, the methodology
24 that I've read by which Manitoba Hydro develops its
25 weighted average cost of capital, in my view, is very

1 similar to what any other corporation or utility would
2 also -- the factors they would look at in -- in coming up
3 with -- with a WACC.

4 THE CHAIRPERSON: But is the threshold
5 rate they're using -- the discount -- comparable with
6 other utilities?

7 Do you have an opinion on that?

8 MR. ANURAG GUPTA: Le -- let me -- maybe
9 it's -- it's not the best answer but because the factors
10 they're looking at are what I would expect other
11 utilities to look at, I would have some -- I would some
12 comfort that the number that comes out is reflective of
13 their -- their capital situation and -- and their rated -
14 - their true rated average cost of capital for their
15 particular situation.

16 MR. WILL LIPSON: Yeah, and maybe just to
17 expand. Not everyone else has a provincial guarantee on
18 their debt. There are unique -- not everybody else is so
19 -- is 98 percent hydro and, you know, 2 percent fossil
20 fuels. There are so many factors that go into the output
21 that comes out of the process.

22 So, again, what we've stressed is that
23 they've looked at the right sorts of factors, applied it
24 in the circumstances here, and have developed a, you
25 know, internal policy outcome of that process, and that's

1 what we reviewed. The number that comes out I don't
2 think is out of whack with where you see other people.
3 But I'm sure some expert could be brought in to show a
4 table of, you know, twenty (20) other utilities and do
5 some standard deviation or statistical analysis on them
6 and try and prove or disprove any comments of that sort.

7 THE CHAIRPERSON: Thank you, sir. Just
8 for due diligence, earlier I asked if KPMG had been
9 directed by Hydro not to consult with PUB staff and
10 advisors. And the response was, No, which we accept.
11 Did KPMG and Hydro discuss KPMG possibly meeting with PUB
12 staff and advisors?

13 MR. WILL LIPSON: To my knowledge, when
14 we were -- whe -- when we were preparing our proposal
15 there was an issue as to whether -- sorry, there -- there
16 was a concept of whether we should go and meet with the
17 PUB in advance of preparing our proposal. I recall that
18 circumstance at the time. This is back November of 2009.

19 And the feedback we got from Manitoba
20 Hydro was that they were going to meet with you, confirm
21 the terms of reference. And then our -- our job was only
22 to respond to the terms of reference when we received it
23 from Mr. Brennan on the 10th of November.

24 After being engaged, I don't recall any
25 such circumstance, no.

1 THE CHAIRPERSON: Thank you, sir. Having
2 testified and been cross-examined by -- at this Hearing
3 by a variety of different parties, if you had the
4 opportunity, can you think of any major changes,
5 amendments to the approach that you would take to the
6 assignment to enhance the value of your participation for
7 all parties present? There's a general question for you.

8 MR. JONATHAN ERLING: No major changes.
9 And certainly the section I wrote, I might have rewritten
10 a few things, used a few different words in places, but,
11 no.

12 THE CHAIRPERSON: And in fairness, you've
13 added a few as we've gone through. With respect to risk
14 tolerance, which we've touched on from time to time, do
15 you accept that differences with respect to risk
16 tolerance may exist between Hydro, the government,
17 regulators, and the public?

18 MR. ANURAG GUPTA: Yes, sir, I think it's
19 possible those parties would have a different risk
20 tolerance each.

21 THE CHAIRPERSON: Are you aware of any
22 specific testing to determine if differences exist, and,
23 if so, what they may be?

24 MR. WILL LIPSON: Well, I don't have
25 personal knowledge. I'll invite my colleagues to jump

1 in. But I can imagine that there are, you know,
2 interview techniques and, you know, these, I'm trying to
3 remember the term, multi-choice question -- statistical
4 questionnaires you can put to parties to try and get a
5 handle on risk tolerances.

6 And so there can be an assignment where
7 you come to some overall view as to party A's risk
8 tolerance, party B's risk tolerance, party C's risk
9 tolerance. I've never been through that process in this
10 fashion, but I'm not saying something like that couldn't
11 be done, but, again, we don't have any -- we didn't do
12 it, we don't have any knowledge of it being done and --
13 at least to my knowledge.

14 THE CHAIRPERSON: Thank you, sir. Just
15 give me one (1) second. Mr. Owen, I'm not going to
16 bother -- we're not going to bother swearing you in.
17 You're a CA. You're subject to a code of conduct like so
18 many other professions. We have a general question. I
19 don't know whether you can answer it or not, but perhaps
20 you might want to at least get a mic.

21

22 (BRIEF PAUSE)

23

24 THE CHAIRPERSON: This, by the way, is a
25 subject that we -- we certainly have no firm view on or

1 knowledge of what the correct answer is. It has to do
2 with IFRS and the recording of expenses. Let us assume
3 that Hydro defers or capitalizes very material sums on an
4 ongoing basis with respect to its Preferred Capital Asset
5 Development Plan. Transcript page 1,573, he says
6 approximately \$25 million a month.

7 Let us assume that hundreds of millions of
8 dollars of such expenses have been accumulated as
9 deferred and/or capitalized assets, construction work in
10 progress, on the utilities balance sheet. Does IFRS
11 allow for such deferrals and capitalization when the
12 development plan underlying those expenses has neither
13 passed muster, had an expected needs and justification
14 review, nor had a -- an environmental review, nor has yet
15 been -- been supported by firm export contracts prices
16 and volumes?

17 MR. BOB OWEN: Under certain
18 circumstances IFRS certainly allows development of
19 expenditures associated with major capital projects. And
20 -- and in terms of something as significant as the
21 construction of a feature -- major feature capital
22 projects in -- which I -- which would be generation in
23 this case, there would be a significant number of factors
24 to look at, and it would be very difficult to give -- it
25 -- it would be impossible to give a yes or a no answer

1 that "yes you can" or "no you can't capitalize."

2 And it would really on the -- on the --
3 you would have to analyse the underlying facts and
4 circumstances pertaining to each group of assets or
5 expenditures that we were talking about.

6 THE CHAIRPERSON: We expected it was
7 actually quite a complex issue and you're confirming
8 that. The -- the last part of this is -- is -- as
9 addressed earlier in my questions; in KPMG's presentation
10 there's a reference to the potential for mark to market
11 evaluation of the value of long term sales contracts. So
12 in the same context, if the net present value turned out
13 to be negative, is there any potential that IFRS would
14 require that negative value to be reported in the
15 accounts in the fiscal year that it was apprehended?

16 Is that another complex question?

17 MR. BOB OWEN: Absolutely, a very complex
18 question. Under IFRS, in -- in -- pertaining to long
19 term contracts, the assessment would have to be made -- and
20 would have to be made up front, in terms of whether these
21 contracts are being entered into in the normal course of
22 operations, in terms of whether they -- if you like -- if
23 they like their normal purchase and their normal sale
24 contracts.

25 And under -- if they did meet that

1 criteria, and again, that would be a major undertaking
2 and a major evaluation itself, but if they did meet that
3 criteria, my understanding under IFRS is you would not
4 mark those contracts to market.

5 THE CHAIRPERSON: You would not do that?

6 MR. BOB OWEN: That's my understanding,
7 if they met that -- that -- those criteria, that they
8 were in a normal course of sale, or purchase.

9 THE CHAIRPERSON: Thank you, sir. That's
10 helpful. It adds to our -- further complexitory
11 (phonetic) nature of this whole thing.

12 That brings to close to -- ours. Do you
13 have any re-direct, Ms. Boyd?

14 MS. MARLA BOYD: I don't, Mr. Chairman.
15 I do, however, have one (1) undertaking that could be
16 filed if you're prepared to accept it.

17 THE CHAIRPERSON: Yes.

18 MS. MARLA BOYD: It's the response to
19 Undertaking number 74, which relates to the footnote that
20 was contained on page 12 of the middle and back office
21 assessment, which was inadvertently omitted in the report
22 production process, and we have the photocopied page that
23 can be provided.

24 THE CHAIRPERSON: Very good. Mr. Singh
25 will distribute it. And --

1 MS. MARLA BOYD: I believe it should
2 Manitoba Hydro Exhibit number 63.

3 THE CHAIRPERSON: So it would be Manitoba
4 Hydro Exhibit number 63.

5

6 --- EXHIBIT NO. MH-63: Response to Undertaking 74

7

8 THE CHAIRPERSON: So with that we thank
9 the -- the panel and all participants and we stand
10 adjourned until next Monday morning at 9:30, and we hope
11 you have a good trip back.

12

13 (PANEL STANDS DOWN)

14

15 --- Upon adjourning at 4:04 p.m.

16

17 Certified Correct

18

19

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21 _____
Cheryl Lavigne, Ms.

22

23

24

25