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MANITOBA PUBLIC UTILITIES BOARD

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

Before Board Panel:

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

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
March 7, 2011
Pages 3758 to 3969

APPEARANCES

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4		Volume III	3800
5	MH-64	Response to Undertaking 77	3803
6	MH-65	Response to Undertaking 49	3812
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4		the \$153 million referenced in the ICF	
5		report	3765
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1 --- Upon commencing at 9:34 a.m.

2

3 THE CHAIRPERSON: Good morning, everyone,
4 to another bright Manitoba morning. Mr. Peters...?

5 MR. BOB PETERS: Thank you, Mr. Chairman.
6 I'll see if I can equal the brightness of the day. Mr.
7 Warden, Mr. Surminski, Mr. Cormie, welcome back to the
8 front row.

9

10 MANITOBA HYDRO PANEL:

11 VINCE WARDEN, Resumed

12 DAVID CORMIE, Resumed

13 HAROLD SURMINSKI, Resumed

14

15 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

16 MR. BOB PETERS: Mr. Warden, am I
17 correct that you sat through the direct evidence and
18 cross-examinations of ICF's witness, Mr. Rose, and you
19 also sat through the evidence of KPMG's panel of
20 witnesses?

21 MR. VINCE WARDEN: I did.

22 MR. BOB PETERS: And likewise, Mr. Cormie
23 and Mr. Surminski?

24 MR. DAVID CORMIE: Yes, I did.

25 MR. BOB PETERS: Okay.

1 MR. HAROLD SURMINSKI: Yes, I did, also.

2 MR. BOB PETERS: Thank you. Mr. Warden,
3 when Manitoba Hydro runs a net present value calculation,
4 it uses the weighted average cost of capital as a proxy
5 for the discount rate in its calculations.

6 Would that be correct?

7 MR. VINCE WARDEN: Yes.

8 MR. BOB PETERS: Can you tell the Board
9 what is Manitoba Hydro's weighted average cost of capital
10 today?

11 MR. VINCE WARDEN: Yes, I believe we
12 filed an undertaking with respect to that late Friday --
13 or, sorry, Wednesday, and the weighted average rate that
14 was indicated in that under -- undertaking was 6.1
15 percent.

16 MS. PATTI RAMAGE: If I can help,
17 Manitoba Hydro will be filing that undertaking this
18 morning. It didn't -- when things were winding down on
19 Friday, it didn't get filed.

20 MR. VINCE WARDEN: Sorry, I -- I thought
21 it was filed. It was ready for filing, for sure.

22 MR. BOB PETERS: The lawyers just didn't
23 get around to it. Mr. Warden, thank you.

24 THE CHAIRPERSON: And it was actually
25 Wednesday, wasn't it? We were all remarking it's hard to

1 get going on Monday.

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: Mr. Warden, does that
5 weighted average cost of capital use only Manitoba
6 Hydro's debt costs, or is there an assumed cost on
7 Manitoba Hydro's equity?

8 MR. VINCE WARDEN: There is an assumed
9 cost on Manitoba Hydro's equity, yes. It's -- it's
10 weighted in accordance with our target debt-equity ratio
11 of 75:25, so we take our long term debt rate which is
12 seventy-five (75) per -- weighted 75 percent, and add on
13 the cost of equity which, for this purpose, is -- is
14 assumed at long-term debt rate plus 3 percent, and that
15 is weighted at 25 percent.

16 MR. BOB PETERS: Sorry, Mr. Warden, the
17 equity portion is three (3) percentage points?

18 MR. VINCE WARDEN: No, it -- the equity
19 portion is long-term debt rate plus 3 percentage points.

20 MR. BOB PETERS: And does the long-term
21 debt include the provincial government debt guarantee
22 fee?

23 MR. VINCE WARDEN: Yes.

24 MR. BOB PETERS: Am I correct, sir, that
25 the ICF team did not do any net present value analysis

1 for Hydro but rather they relied on the net present value
2 analysis that was done by Manitoba Hydro? Is that your
3 understanding, sir?

4

5

(BRIEF PAUSE)

6

7

MR. VINCE WARDEN: Yes, Mr. Peters, ICF
8 relied on information provided by Manitoba Hydro.

9

MR. BOB PETERS: And you'll recall that
10 there were references in the ICF evidence to a
11 calculation on a net -- sorry, on a present value basis
12 discounted to 2008/'09, which had a cumulative reduction
13 in bills possibly being \$153 million by 2041 when they
14 compared the sale case to the no-sale case. Do you
15 recall that discussion, sir?

16

MR. VINCE WARDEN: I do recall that and I
17 believe there was some confusion around that number. The
18 net present value calculation with respect to bills did
19 not take into account the total net present value benefit
20 of the sale versus the no-sale scenario. And I believe
21 that was clarified later or at least KPMG spoke to that
22 in their evidence.

23

MR. BOB PETERS: When they -- when ICF
24 talks of a present value basis possibly reducing bills by
25 \$153 million by 2041, what are they telling the Board?

1 (BRIEF PAUSE)

2

3 MR. VINCE WARDEN: Mr. Peters, I think I
4 would like to take that as an undertaking as to the exact
5 source of the 153 million that's referenced in the ICF
6 report. I want to make sure we're clear on exactly what
7 -- what's included in that.

8 My understanding is that -- well, as a
9 matter of fact, rather than convey my understanding at
10 this point in time it would be good if we did confirm
11 exactly what is included in that number.

12 MR. BOB PETERS: All right. Certainly,
13 sir.

14

15 --- UNDERTAKING NO. 78: Manitoba Hydro to provide the
16 source of the \$153 million
17 referenced in the ICF report

18

19 CONTINUED BY MR. BOB PETERS:

20 MR. BOB PETERS: When Manitoba Hydro
21 provides the net present value information to ICF does it
22 include the economic impact to the Province of Manitoba?

23 MR. VINCE WARDEN: No.

24 MR. BOB PETERS: So it doesn't take into
25 account things like job creation, directly or indirectly?

1 MR. VINCE WARDEN: No, it does not.

2

3

(BRIEF PAUSE)

4

5 MR. BOB PETERS: Mr. Warden, in terms of
6 coming up with that number, and I know you've undertaken
7 to -- to verify the -- the information that went into the
8 \$153 million number, that was a comparison, was it, as
9 between the preferred development versus the alternative
10 development scenario with the rate increases as shown in
11 the IFF that's filed at IFF-09?

12 MR. VINCE WARDEN: Yes, those were the
13 two (2) scenarios that were being reviewed to come up
14 with that number.

15 MR. BOB PETERS: And whatever that number
16 turns out to be, whether it's 153 million or some other
17 number, Mr. Warden, it represents a -- a net present
18 value out to 2042?

19 MR. VINCE WARDEN: Yes.

20 MR. BOB PETERS: And so for the purpose
21 of our discussion we're -- we're thirty-three
22 (33)/thirty-two (32) years looking forward, correct?

23 MR. VINCE WARDEN: Yes.

24 MR. BOB PETERS: Can you ballpark for the
25 Board, sir, that using your discount rate of

1 approximately 6.1 percent that you've indicated, what
2 would the annual amount be required for the next thirty-
3 two/thirty-three (32/33) years to come up with that --
4 well -- well, let's start with the \$153 million and we'll
5 see if that's the number that you come back with. Are
6 you able to -- to provide a quick and dirty answer to
7 that?

8

9

(BRIEF PAUSE)

10

11

MR. VINCE WARDEN: No.

12

MR. BOB PETERS: All right, I -- I --

13

14

THE CHAIRPERSON: Actually, we'd rather
have a slow and careful answer, Mr. Peters.

15

16

MR. BOB PETERS: That -- that's a fair
comment, Mr. Chairman.

17

18

CONTINUED BY MR. BOB PETERS:

19

20

21

22

MR. BOB PETERS: You're able then to come
back and include in your undertaking, Mr. Warden, what
the annual increase would be required to achieve the net
present value benefit that was mentioned?

23

24

25

MR. VINCE WARDEN: I wonder if you could
just be a little bit clearer in that, Mr. Peters, in --
in your request?

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: What I was trying to get
4 at, Mr. Warden, was for you to come back to the Board
5 with what would be the annual payment required at the 6.1
6 percent discount rate over the next thirty-two/thirty-
7 three (32/33) years to come up with the net present value
8 amount of 153 million or whatever subsequent number you
9 come up with. Am I making myself clear?

10 MR. VINCE WARDEN: You probably are. I'm
11 just trying to think of how I would approach this to make
12 sure that I -- we are clear.

13 The annual payment required to achieve the
14 \$153 million in net present value savings. So I think
15 what you're asking is what series of future cash flows
16 for -- up -- for that forty-two (42) year period will
17 result in a present value of \$153 million at a 6.1
18 percent discount rate?

19 MR. BOB PETERS: I agreed with everything
20 you put back to me, Mr. Warden, except I think your term
21 was -- was ten (10) years longer than I had asked for. I
22 -- I -- I wanted thirty-two (32) years, not forty-two
23 (42).

24 MR. VINCE WARDEN: Yes.

25 MR. BOB PETERS: Is it -- are -- are we

1 saying the same thing, Mr. Warden, if I come at it this
2 way and say that if Manitoba Hydro got a 1 percent rate
3 increase today, and that equates to 10 or \$12 million,
4 that 10 or \$12 million accumulated over the next thirty-
5 two (32) years would come up with your \$153 million?

6 MR. VINCE WARDEN: No. No, that's --
7 that's something different altogether. You know, I think
8 it's really important though that we're clear on what
9 that hundred and fifty-two (152) -- I -- we can certainly
10 do this calculation, but I think it's going to be -- turn
11 out to be a relatively meaningless calculation because
12 \$153 million is only the impact on customer bills between
13 two (2) scenarios, and does not represent the present
14 value of the benefit of the sales.

15 There are re -- impacts on retained
16 earnings over that -- that same period of time, which
17 shows the profitability of those sales which is something
18 quite different from the impact on customer bills. But
19 again, I think it is an important point that the Board
20 understands and we will make that clear in our response
21 to the undertaking.

22 MR. BOB PETERS: Thank you for that, sir.
23 Maybe Mr. Surminski can be helpful here. Mr. Surminski,
24 is the calculation that ICF was referring to, is that
25 contained in Manitoba Hydro's 2008/'09 power resource

1 plan, page 31?

2 MR. HAROLD SURMINSKI: Yes, checking with
3 the back row, I can confirm it -- it did come from a
4 power resource plan, which is -- which is not public.
5 It's the internal version.

6 MR. BOB PETERS: Right. And when the
7 Board looks at Appendix 46 in the public filing their
8 version only goes up to about page 18, so they don't have
9 page 31, correct?

10 MR. HAROLD SURMINSKI: That's correct.

11 MR. BOB PETERS: All right. So we'll
12 await the undertaking, and you'll provide as much
13 information then to the Board as you're able to put on
14 the public record?

15 MR. HAROLD SURMINSKI: Yes, but we -- we
16 treat that information as confidential, the -- the net
17 present value of the sales package versus the non-sale.
18 So, you know, we allow the -- that information. The
19 hundred and fifty-three (153) was not redacted because it
20 was not a complete picture. If -- if it were a complete
21 picture, we would have redacted that number.

22 MR. BOB PETERS: I understand that. And
23 Mr. Warden's going to come back to us with what he thinks
24 is going to clear up this issue for the Board, so I'll
25 hopefully have your assistance in that as well, Mr.

1 Surminski.

2 Mr. Surminski, you can tell the Board in
3 doing that calculation in the 2008/'09 power resource
4 plan, was the 2008 capital expenditure forecast used?

5 MR. HAROLD SURMINSKI: Yes, if -- if that
6 is the correct power resource plan, we -- we use the --
7 the same capital expenditure forecast. The '08/'09
8 belongs with the '08/'09 power resource plan.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: Mr. Surminski, the
13 capital resource -- or capital expenditure forecast that
14 you referenced for -- would have included the costs of
15 Keeyask and Conawapa as they then were back in the CEF-
16 08, correct?

17 MR. HAROLD SURMINSKI: Yes, that's
18 correct.

19 MR. BOB PETERS: They weren't updated to
20 include the CEF-09 number, or most recently, the CEF-10
21 number, correct?

22 MR. HAROLD SURMINSKI: That's correct.

23

24 (BRIEF PAUSE)

25

1 MR. HAROLD SURMINSKI: Mr. Peters, just
2 to clarify again this fiscal year ending year, it is the
3 power resource plan for '08 and '09 as -- just to -- and
4 IFF-09.

5 MR. BOB PETERS: All right. Let's see if
6 there's something we can agree on then, Mr. Surminski.
7 It did not include capital expenditure forecast '10,
8 which contains Manitoba Hydro's most current capital
9 forecasts of Keeyask at 5.6 billion and Conawapa at 7.8
10 billion?

11 MR. HAROLD SURMINSKI: Yes, that's
12 correct.

13 MR. BOB PETERS: It's correct that you
14 did not use the most -- the CEF-10. It wasn't available
15 at the time the calculation was done?

16 MR. HAROLD SURMINSKI: Correct.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Are the costs of Bipole
21 3 in either or both of the sale and no-sale scenarios
22 that were the subject of this exercise, Mr. Surminski?

23 MR. HAROLD SURMINSKI: Could you please
24 repeat the question about Bipole 3 costs?

25 MR. BOB PETERS: Well, I -- I just want

1 to understand whether the costs were in the numerator and
2 denominator, or whether they were just in one (1) version
3 of the analysis, the sale or the no-sale.

4 MR. HAROLD SURMINSKI: No, Bipole 3 is
5 common to the alternative development plan as well as the
6 recommended development plan.

7 MR. BOB PETERS: So when comparing the
8 costs and the benefits, the cost of Bipole 3 would have
9 been included in both the sale and the no-sale scenario -
10 - or the - I guess the preferred development and then the
11 alternative development scenario?

12 MR. HAROLD SURMINSKI: Yes, correct.

13 MR. BOB PETERS: Likewise, Wuskwatim
14 would have been included in both, sir?

15 MR. HAROLD SURMINSKI: Yes.

16 MR. BOB PETERS: Without giving numbers,
17 Mr. Surminski, Mr. Warden, if Manitoba Hydro was to
18 update its calculation to reflect the current capital
19 expenditure forecast estimates of Conawapa and Wuskwatim
20 using current capital costs to support the Minnesota
21 Power and Wisconsin Public Service sales, what does
22 Manitoba Hydro expect would happen to the result of this
23 net present value benefit study?

24

25

(BRIEF PAUSE)

1 MR. VINCE WARDEN: Well, Mr. Peters, the
2 capital costs are higher, which, of course, would result
3 in a lower net present value benefit to Manitoba Hydro,
4 with everything else remaining equal.

5 MR. BOB PETERS: So Keeyask going up \$1
6 billion from CEF-09 to CEF-10, Conawapa going up \$1.5
7 billion from CEF-09 to CEF-10, totals \$2.5 billion of
8 additional capital costs that would not have been
9 included in the calculation that ICF was referring to.

10 Is that correct, Mr. Warden?

11 MR. VINCE WARDEN: Yes, but recall we are
12 looking at this only over the sale period. Those
13 additional costs that you reference would be amortized
14 over the life of the facility, so the impact would -- on
15 the sale versus no-sale comparisons would be not nearly
16 so great.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Mr. Warden, when you say
21 that, if the -- if the additional capital costs are \$2
22 1/2 billion the interest costs alone on that mortgage, or
23 on that payment, would be in the neighbourhood of \$152
24 million a year, would they not, at 6.1 percent?

25 MR. VINCE WARDEN: Yes, the interest

1 costs on that higher debt would -- would be in that order
2 of magnitude, yes.

3 MR. BOB PETERS: And so adding \$150
4 million a year of costs to the preferred scenario,
5 doesn't that wipe out the net present value benefit that
6 was calculated \$153 million over forty (40) -- over
7 thirty-two (32) years?

8 MR. VINCE WARDEN: No, because remember
9 that the alternative development plan also includes
10 Conawapa. So Conawapa is going to go up in both the
11 preferred development plan and also the alternative
12 development plan, as would other costs, so we would have
13 to examine both scenarios to reconfirm the net present
14 value benefit.

15 You have to also realize that part of the
16 reason for the -- the cost increase is that the plants
17 were deferred by one (1) year, so there would be higher
18 escalation on -- on those plants, as was there a shift in
19 the sale -- the start date of -- of the sales to
20 Minnesota and Wisconsin.

21 MR. BOB PETERS: So you're -- you're
22 telling the Board that because Conawapa would be included
23 in the no-sale scenario, whatever additional capital
24 costs would cancel themselves out because it would be
25 included in both the numerator and denominator of that

1 formula.

2 MR. VINCE WARDEN: Well, not exactly
3 cancel themselves out, but -- because there's different
4 in-service dates for Conawapa in -- in the sale versus no
5 -- no-sale, but in a -- there -- there would be
6 offsetting increases under both scenarios. Partly
7 offsetting, I should say.

8 MR. BOB PETERS: Yeah, partly offsetting
9 because for the years in which Conawapa is not required
10 for sale purposes, the interest costs could be deferred
11 and wouldn't be needed to be incurred for domestic use.

12 MR. VINCE WARDEN: Yes. And with
13 Conawapa being built without a firm contract under the
14 no-sale scenario, the return on export sales, first of
15 all, would be very uncertain but would likely be lower --
16 in fact, it would be lower than in the sale scenario.

17 MR. BOB PETERS: While we're talking
18 about export sales then, Mr. Warden, does the present
19 value calculation referenced by ICF as resulting in \$153
20 million of lower bills over a thirty-two (32) year
21 period, does it use the assumed export prices as provided
22 by Manitoba Hydro?

23 MR. VINCE WARDEN: Yes, the numbers would
24 have been provided by Manitoba Hydro to make that
25 calculation.

1 MR. BOB PETERS: And those numbers would
2 have been circa 2008/'09?

3 MR. VINCE WARDEN: Yes, I believe that
4 would be the case.

5 MR. BOB PETERS: And what happens to that
6 \$153 million, or whatever number you're undertaking comes
7 up with in terms of a cumulative total, if ICF's latest
8 forecast incorporating a 38 percent lower gas cost is
9 used in Manitoba Hydro's calculation of export prices?

10 MR. VINCE WARDEN: Well, the alternative
11 scenario does include combustion turbine. We are, as --
12 as a matter of fact, part of the commitment to this Board
13 is to file the updated twenty (20) year outlook, so those
14 numbers are -- are being run pretty much as we speak.
15 There's a -- but -- but the -- the -- and to answer your
16 question, the -- the impact of a reduction in gas prices
17 would have a favourable impact with respect to the
18 alternative development sequence because of the lower
19 operating costs.

20 MR. BOB PETERS: Mr. Warden, you were
21 clear to the Board that both Conawapa and Keeyask capital
22 costs have gone up but it was really only Keeyask that
23 wasn't going to be included in the alternative
24 development scenario. Have I got that right?

25 MR. VINCE WARDEN: That's right.

1 MR. BOB PETERS: And Keeyask, if it's
2 gone up a million dollars -- sorry, that's a billion
3 dollars, that would work out to about \$61 million a year
4 of additional interest costs, correct?

5 MR. VINCE WARDEN: That's approximately
6 right, yes.

7 MR. BOB PETERS: And so when we look at
8 this net present value test, if the carrying costs of
9 Keeyask go up \$61 million what does that do to the -- at
10 least directionally to the \$153 million of lower bills
11 over a thirty (30) year period?

12 MR. VINCE WARDEN: Well, I think you
13 meant to say go down? The Keeyask, if it's not included
14 in the alternative development's scenario.

15 MR. BOB PETERS: I'm sorry, I may have -
16 - my mouth may have been well ahead of my brain. Yes,
17 Keeyask is going to be included as you note in the
18 preferred development scenario but not in the alternative
19 development scenario, correct?

20 MR. VINCE WARDEN: That's right.

21 MR. BOB PETERS: And so there would be an
22 extra \$61 million a year of interest costs in the
23 preferred development scenario?

24 MR. VINCE WARDEN: Yes, although there
25 are some complications with not proceeding with Keeyask

1 inasmuch as there are quite significant sunk costs
2 incurred with Keeyask already, and those costs would have
3 to be disposed of if Keeyask wasn't proceeded with.

4 MR. BOB PETERS: But those sunk costs
5 don't form part of the net present value test, do they?

6 MR. VINCE WARDEN: Well, when we're con -
7 - comparing customer bill impacts they certainly would.
8 They have to be recovered from somewhere so they would
9 definitely be factored into that.

10 MR. BOB PETERS: Way back in the book of
11 documents, I won't even guess at the tab, Mr. Warden, but
12 you had provided the Board with an indication as to the
13 costs incurred, or the CWIP to date on Keeyask and
14 Conawapa, and my recollection is that at least up until
15 the end of '09 it was in the range of \$350 million for
16 Keeyask.

17 Is that your recollection?

18 MR. VINCE WARDEN: Well, I think the
19 number I put on the record was 400 million. That's the
20 current costs incurred to date for -- for Keeyask.

21 MR. BOB PETERS: All right. So in the --
22 in the no-sale scenario, or the alternative development
23 scenario, as we're calling it, those sunk costs will have
24 to be recovered then from consumer's rates?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: And over what period of
2 time would they have to be recovered?

3 MR. VINCE WARDEN: Well, it depends. It
4 depends on whether we determine that Keeyask was to be
5 built imminently, and by imminently I mean within an
6 approximate ten (10) year time frame. But if it was
7 determined that Keeyask was not required for the
8 foreseeable future, then those costs would have to be
9 written off almost immediately. So there would be a -- a
10 charge against retained earnings.

11 MR. BOB PETERS: And a \$400 million
12 writeoff equates to about a 40 percent rate increase if
13 it was all going to come from consumer's rates?

14 MR. VINCE WARDEN: Well, I wouldn't
15 express it that way. Of course, we wouldn't be imposing
16 a 40 percent rate increase on -- on consumers, so I
17 wouldn't even attempt to make that comparison.

18 THE CHAIRPERSON: Isn't 1 percent 10
19 million?

20 MR. BOB PETERS: Yes, that was my rough
21 rule of thumb, so I thought 400 million made it 40
22 percent, if my math is doing --

23 THE CHAIRPERSON: No, your math seems
24 sound. It just seems startling.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Well, as -- and, Mr.
3 Warden -- but just help me out here, if these 400 million
4 of sunk costs are going to be used, I think your word was
5 "imminently," then they would have no business being in
6 the net present value study, would they?

7 MR. VINCE WARDEN: No, but the
8 alternative development sequence does not have Keeyask in
9 the development horizon. If Conawapa is put in service,
10 that meets the Manitoba load requirements for many years
11 into the future and Keeyask would not be on the horizon.

12 MR. BOB PETERS: All right. And -- and
13 let's go back to my -- I think the chairman called it
14 "startling," but the point is if there was \$400 million
15 to be charged through to consumers, while that may equate
16 numerically to approximately a 40 percent rate increase,
17 Hydro would have no intention of trying to recover that
18 all in a short period of time is what you've said to the
19 Board, correct?

20 MR. VINCE WARDEN: That's correct. That
21 -- that is the reason -- one (1) of the reasons we're
22 having adequate level of retained earnings. We do have
23 some 2.2 billion in retained earnings now at 400 million
24 charg -- charge against retained earnings would reduce
25 that significantly and would have to be built up over a

1 period of time, but the build up would be something that
2 would be sensitive to ratepayers, and there certainly
3 would not be anything like a 40 percent increase.

4 MR. BOB PETERS: Well, we see from IFF-
5 09-1, found at Tab 4 of the first volume of book of
6 documents, we see that it's approximately ten (10) years
7 at 3.5 percent is going to -- is going to accumulate to
8 about a 40 percent rate increase over the -- over those
9 time frames, correct?

10 MR. VINCE WARDEN: Yes.

11 MR. BOB PETERS: But that would be -- if
12 -- if there was another \$400 million to be recovered, any
13 ex -- any additional rate increases would be over and
14 above the 3 1/2 percent already on the planning horizon,
15 depending on how things work out in the future.

16 Wouldn't that also be correct?

17 MR. VINCE WARDEN: Well, that would have
18 to be a decision made by both the Manitoba Hydro-Electric
19 Board and this Board as to how those costs or what time
20 frame they would be recovered, but if we wanted to
21 recover it over that ten (10) year period, yes, it would
22 result in considerably higher rate increases than what is
23 indicated in the financial forecast.

24 MR. BOB PETERS: Well, it'd be exactly
25 double, wouldn't it, Mr. Warden?

1 MR. VINCE WARDEN: Well, there's the
2 compounding effect of rate increases that would not be
3 exactly double, no.

4 MR. BOB PETERS: All right, but close to
5 it. You'll -- you'll grant -- grant the lawyer's close
6 enough without the accountant's precision?

7 MR. VINCE WARDEN: Well, I think your --
8 your math was that the 400 million equated to a one-time
9 40 percent rate increase. If we were to spread that over
10 a number of years it wouldn't - it would not be double
11 because we -- we're not looking at a one-time 40 percent
12 rate increase over that period of time. That's
13 accumulative rate.

14 MR. BOB PETERS: And a cumulative 3.5
15 percent rate increase over ten (10) years, according to
16 IFF-09, comes out to about 39.43 percent?

17 MR. VINCE WARDEN: Yes, it does
18 accumulatively.

19 MR. BOB PETERS: All right. Thank you.
20 Mr. Warden, one (1) of the -- one (1) of the thoughts
21 when you were answering my question about the sale versus
22 the no-sale, or the preferred development versus the
23 alternative development scenarios -- by the way, those
24 are interchangeable for our discussions, are they not?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: The operating and
2 maintenance costs, those would increase to the extent
3 that Keeyask was part of the equation in the sale
4 scenario but they wouldn't be included in the -- in the
5 no-sale scenario because Keeyask wouldn't be part of the
6 alternative development plan, correct?

7 MR. VINCE WARDEN: So you're saying those
8 costs would increase in the sale scenario because Keeyask
9 is included?

10 MR. BOB PETERS: That was suggesting
11 that.

12 MR. VINCE WARDEN: Yes, of course there
13 are operating costs that are in the alternative
14 development plan that would not be in the sale scenario
15 as well, but, again, everything else being equal, yes,
16 you're right.

17 MR. BOB PETERS: In terms of payments to
18 government, when we looked back at the payments to
19 government earlier on in the proceedings, I noted that
20 the payments to government were around 13, 14, maybe as
21 high as 15 percent of gross revenues, at least up until
22 2020. Do you have a recollection of that, sir?

23 MR. VINCE WARDEN: Yes.

24 MR. BOB PETERS: And -- and whether it's
25 14 percent or 15 percent of gross revenues or 13 percent

1 of gross revenues, it was ho -- it was held relatively
2 constant, correct?

3 MR. VINCE WARDEN: Well, it wasn't held
4 relatively constant. That was the result of the -- the
5 payments that were being -- being made. But there wasn't
6 an intention, to my knowledge, by government to hold
7 those -- that percentage -- that ratio constant.

8 MR. BOB PETERS: Oh, I wasn't meaning to
9 imply that there was an intention on the part of
10 government to maintain those, but it ju -- it just
11 mathematically worked out that way. Is that what you're
12 saying?

13 MR. VINCE WARDEN: Yes.

14 MR. BOB PETERS: Help me out on this side
15 then. If Keeyask and Conawa -- first of all, that 13,
16 14, 15 percent average of gross revenues going as
17 payments to the provincial government, that in -- that
18 held even with Wuskwatim coming on-stream, correct?

19 MR. VINCE WARDEN: Well, the schedule
20 you're referring to, Mr. Peters, I believe -- my
21 recollection is that based on actual costs to date, I
22 don't believe a projection was included for Wuskwatim
23 coming on-stream.

24 MR. BOB PETERS: May -- maybe your
25 counsel has handy the first volume of the book of

1 documents, unless you've left that on your night table,
2 and document found at Tab 14 -- I'm sorry, at Tab 24, Mr.
3 Warden. And -- and I maybe should have drawn your
4 attention to it earlier, and I apologize, sir.

5 I'm looking at the -- page 158 in the
6 Board counsel PUB Exhibit 15, and it is found at Tab 24,
7 the -- the forecast of payments to government, both
8 before and after Wuskwatim come online, remains
9 relatively the same of 13, 14, 15 percent of gross
10 revenues, Mr. Warden?

11 MR. VINCE WARDEN: Yes, I see that now,
12 Mr. Peters.

13 MR. BOB PETERS: And -- and that would be
14 -- is that just -- just what the math showed? Is that
15 something that you would have expected?

16

17 (BRIEF PAUSE)

18

19 MR. VINCE WARDEN: I'm not sure what I
20 would have expected with that calculation. So it's --
21 it's more so just what the math turns out. The -- of
22 course, with Wuskwatim coming online, water rental
23 payments will increase, the debt guarantee fee will
24 increase, so yeah, it -- it apparently remains relatively
25 constant around that 13/14 percent range.

1 MR. BOB PETERS: And that's because gross
2 revenue also increases, correct?

3 MR. VINCE WARDEN: Yes.

4 MR. BOB PETERS: Now, here's the part
5 that if you answer it one (1) way you don't have to do an
6 undertaking, and if you answer another way you might have
7 to, so let's assume that Keeyask and Conawapa are built
8 as part of the preferred development plan.

9 Will the payments to government remain
10 around the 13, 14, 15 percent of gross revenue, or is
11 there going to be a -- a change in that percentage?

12 MR. VINCE WARDEN: I think I'm looking
13 at an undertaking. I -- I wouldn't want to speculate on
14 that. I'd have to do the calculation.

15 MR. BOB PETERS: All right. You'll have
16 to pull that out of the IFF that you've -- that you've
17 prepared then. You've got that information relatively at
18 hand?

19 MR. VINCE WARDEN: Yes.

20 MR. BOB PETERS: All right. So then we'll
21 ask for that undertaking through Ms. Ramage to provide
22 the Board with an indication of the payments to
23 government in the years following the in-service of
24 Keeyask and also following the in-service of Conawapa.

25 Would that be fair, Mr. Warden? You'll be

1 able to do that?

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

3 MR. BOB PETERS: Thank you, sir.

4

5 --- UNDERTAKING NO. 79: Manitoba Hydro to provide an
6 indication of the payments to
7 government in the years
8 following the in-service of
9 Keeyask and also following
10 the in-service of Conawapa

11

12 CONTINUED BY MR. BOB PETERS:

13 MR. BOB PETERS: Mr. Warden, you wanted
14 to do, and you've undertaken to provide the Board with
15 confirmation about the cumulative rate savings of \$153
16 million over thirty-three (33) years.

17 Is that a calculation that Manitoba Hydro
18 will file in confidence, and on blue paper, with the
19 Public Utilities Board?

20

21 (BRIEF PAUSE)

22

23 MR. VINCE WARDEN: I think I'd like to
24 look at the form of the response first, Mr. Peters. We -
25 - we won't be divulging confidential pricing information

1 for sure, but whether this calculation does that or not,
2 we might be able to answer at a high enough level that
3 that won't be necessary.

4 MR. BOB PETERS: Well, Manitoba Hydro has
5 already put on the public record the \$153 million number,
6 correct?

7 MR. VINCE WARDEN: That's already on the
8 public record, yes.

9 MR. BOB PETERS: And to the extent that
10 number changes through your review, you'd be able to put
11 whatever changed number on -- results also on the public
12 record, would I be correct?

13 MR. VINCE WARDEN: That would seem
14 reasonable, yes.

15 MR. BOB PETERS: And then, Mr. Warden,
16 would Manitoba Hydro then undertake to file in confidence
17 with the Board the present value analysis by ICF, but
18 expressly updated to include ICF's revised gas costs as
19 found in Manitoba Hydro Exhibit 60, as well as updating
20 that calculation to use the capital expenditure forecast
21 information from 2010's CEF for Keeyask and Wuskwatim
22 capital costs?

23

24

(BRIEF PAUSE)

25

1 MR. VINCE WARDEN: Yes, Mr. Peters, we'll
2 -- we'll undertake to do that as we did previously, and
3 to the extent there is confidential information that will
4 be filed in confidence.

5
6 --- UNDERTAKING NO. 80: Manitoba Hydro to file the
7 present value analysis by
8 ICF, but expressly updated to
9 include ICF's revised gas
10 costs as found in Manitoba
11 Hydro Exhibit 60, as well as
12 updating that calculation to
13 use the capital expenditure
14 forecast information from
15 2010's CEF for Keeyask and
16 Wuskwatim capital costs

17
18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: And to the extent that
20 the comparative numbers can be placed on the public
21 record, that would be something you're prepared to
22 consider -- consider putting on the public record as
23 well?

24 MR. VINCE WARDEN: Yes.

25 MR. BOB PETERS: All right. Turning, Mr.

1 Warden, to another issue with ICF's matters that I
2 discussed with them. In looking at the costs to produce
3 power for the Minnesota Power and the Wisconsin Public
4 Service proposed and planned sales, 100 percent of that
5 energy is planned to come from Keeyask and Conawapa.

6 Would that be fair?

7 MR. VINCE WARDEN: Well, 100 percent of
8 that energy is planned to come from dependable sources.

9 MR. BOB PETERS: To supply -- and then --
10 I've got your answer, Mr. Warden, but to supply the
11 Wisconsin and Minnesota sales, Manitoba Hydro has told
12 this Board it needs to build both Keeyask and Conawapa,
13 correct?

14 MR. VINCE WARDEN: That's correct.

15 MR. BOB PETERS: Those will -- those will
16 be new generating stations that will have a certain
17 amount of dependable energy?

18 MR. VINCE WARDEN: Yes.

19 MR. BOB PETERS: And that dependable
20 energy is expected to be used from Keeyask and Conawapa
21 to fulfill the sales on these transactions, at least on
22 paper.

23 MR. VINCE WARDEN: On -- on -- on paper,
24 yes. Theor -- excuse me, theoretically that's correct,
25 yes.

1 MR. BOB PETERS: And maybe what we're
2 dancing around, Mr. Warden, is that electrons are in
3 essence, I suppose, fungible. You can't tell where one
4 (1) came from as compared to another, but in terms of
5 planning purposes it's the dependable energy from Keeyask
6 and Conawapa that will be used to service Minnesota Power
7 and Wisconsin Public Service?

8 MR. VINCE WARDEN: Yes.

9 MR. BOB PETERS: Now, Mr. Warden,
10 previously, you and I calculated on the record the unit
11 energy costs for the first year beyond in-service for the
12 Keeyask and Conawapa, do you remember that exercise?

13 MR. VINCE WARDEN: No. Yes, Mr. Peters.

14 MR. BOB PETERS: You -- you don't want to
15 remember, is that what you're telling me? But -- but,
16 Mr. Warden, I really just used information Manitoba Hydro
17 had provided and -- but -- but let's not dwell on that.
18 ICF never did a revised calculation for Manitoba Hydro in
19 that regard, did they?

20 MR. VINCE WARDEN: No, they did not.

21 MR. BOB PETERS: Now, would it be correct
22 for the Board to understand that ICF again relied on
23 Manitoba Hydro's documents to suggest that Hydro's
24 proposed contract prices for Minnesota Power and
25 Wisconsin Public Service are above the costs of producing

1 the power from Keeyask and Conawapa?

2 MR. VINCE WARDEN: Yes, they would have
3 relied on information provided by Manitoba Hydro.

4 MR. BOB PETERS: And when they relied on
5 information provided by Manitoba Hydro, can you tell the
6 Board what information that would have been?

7

8 (BRIEF PAUSE)

9

10 MS. PATTI RAMAGE: Mr. Peters, it might
11 be helpful if you could refer to us the spot in the ICF
12 Report where these statements were made because then I --
13 I think we'll have an easier time locating the
14 information that was relied on.

15 MR. BOB PETERS: Certainly, Ms. Ramage.
16 Mr. Chairman, I'm -- I'm looking at Appendix 12.2, and
17 I'm looking at page 75, and I'll read the sentence into
18 the record.

19 "Manitoba Hydro's proposed contract
20 prices are also above the costs of
21 producing the power."

22 That's found on the bottom of page 75 of
23 the ICF Report.

24

25 CONTINUED BY MR. BOB PETERS:

1 MR. BOB PETERS: Have you located that,
2 Mr. Warden?

3 MR. VINCE WARDEN: Yes, I see that, Mr.
4 Peters.

5 MR. BOB PETERS: And are you able to tell
6 the Board what documents ICF would have been provided by
7 Manitoba Hydro that support that statement?

8

9 (BRIEF PAUSE)

10

11 MR. VINCE WARDEN: Mr. Peters, when you
12 asked what information ICF would have had access to, they
13 certainly would have had access to whatever documents
14 they needed in order to make that statement. So they --
15 they would have had access to the term sheets, so they
16 would have known the prices that we were negotiating at
17 that time, as well as Manitoba Hydro's capital
18 expenditure forecasts.

19 They would have known what costs would
20 have been calculated by Manitoba Hydro based on the --
21 based on our financial forecast at that time.

22 MR. BOB PETERS: With the exception, Mr.
23 Warden, of the capital expenditure forecast '09, the
24 other information you're referencing would not be on the
25 public record of this hearing. Would that be correct?

1 (BRIEF PAUSE)

2

3 MR. VINCE WARDEN: Well, the term sheets
4 are not on the public record if that's what you're
5 referring to, Mr. Peters. Certainly the -- the twenty
6 (20) year financial outlook is on the public record,
7 which is -- provides information necessary to calculate
8 unit costs.

9 MR. BOB PETERS: So the costs by Manitoba
10 Hydro then are on the public record? That's your
11 understanding is where ICF got its information, sir?

12 MR. VINCE WARDEN: Well, the costs of the
13 -- as I indicated, the twenty (20) year financial
14 outlook, this is the twenty (20) financial outlook that
15 was prepared in 2009, is on the public record. All the
16 costs of providing service, interest, depreciation on
17 fixed assets that were in -- that were projected to be in
18 service that are compatible with that twenty (20) year
19 outlook were on the public record. So, yes.

20 Now, we would have worked with ICF in
21 order to ensure that their understanding of the costs was
22 -- was appropriate, but I don't believe there are any
23 other documents that ICF would have -- have had access to
24 that weren't -- that aren't on the public record.

25 MR. BOB PETERS: Thank you.

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Mr. Warden, I'll just
4 give you a minute, I'm sorry, if you're...

5

6 (BRIEF PAUSE)

7

8 MR. VINCE WARDEN: So, Mr. Peters, it was
9 just pointed out to me that the -- one (1) of the
10 references, in fact, the reference that also references
11 the 153 million does refer to the 2008/'09 power resource
12 plan, which, as you know, is not on the public record in
13 its entirety.

14 MR. BOB PETERS: Is it Manitoba Hydro's
15 understanding that that 2008/'09 power resource plan was
16 needed for ICF to make the statement they did on page 75
17 that I've drawn your attention to?

18

19 (BRIEF PAUSE)

20

21 MR. VINCE WARDEN: Mr. Peters, I don't --
22 it probably isn't appropriate for me to speculate at this
23 time as to what ICF may or may not have access to. They
24 would -- we certainly didn't restrict their access to any
25 documents. They would look -- would have looked at a

1 number of documents in formulating their opinion. But
2 I'm -- I'm confident that ICF did the analysis necessary
3 to support the statement that you're referencing.

4 MR. BOB PETERS: You will acknowledge
5 though, Mr. Warden, that ICF did not use the capital
6 expenditure forecast 2010 which updated the capital costs
7 of Keeyask and Conawapa, did they?

8 MR. VINCE WARDEN: No. Well, they
9 wouldn't have had that in -- that information wouldn't
10 have been available at the time they did -- they
11 conducted their review.

12 MR. BOB PETERS: Yeah. It's not
13 available because it wasn't done yet by Manitoba Hydro,
14 right?

15 MR. VINCE WARDEN: That's right.

16 MR. BOB PETERS: Yeah. And likewise, in
17 the morass of paper you have there's a new PUB counsel
18 book of documents, Volume III. Mr. Chairman, I failed
19 miserably at circulating this electronically last week,
20 or late Friday, I guess, and over the weekend, and so
21 paper copies have been distributed today with an
22 indication that an electronic copy would be provided to
23 the Board on a disc with a request posted on the Board's
24 website.

25 That aside, there's documents in there

1 that most likely aren't going to be referred to by Board
2 council, but the state of readiness in which it was in, I
3 had somebody assist me in putting it together. So I'd
4 like to draw -- to, first of all, mark that as PUB
5 Exhibit number 18.

6 THE CHAIRPERSON: Very good.

7

8 --- EXHIBIT NO PUB-18: PUB counsel book of
9 documents, Volume III

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: And, Mr. Warden, the
13 very last tab, 71 of PUB Exhibit 18 -- Tab 71 contains
14 Manitoba Hydro's response to Information Request PUB
15 Manitoba Hydro First Round 197, correct?

16 MR. VINCE WARDEN: Yes.

17 MR. BOB PETERS: And just as CEF-10 was
18 not available for use by CEF, CEF -- I'm sorry, by ICF,
19 the capital expenditure forecast 2010 would not have been
20 used by Manitoba Hydro when it responded to PUB Manitoba
21 Hydro First Round question 197, would it?

22

23 (BRIEF PAUSE)

24

25 MR. VINCE WARDEN: Sorry, Mr. Peters,

1 could -- could you ask that question again, please?

2 MR. BOB PETERS: Right. Let's -- let's
3 look at Tab 71 of Board counsel's third book of
4 documents. I'm suggesting to you, Mr. Warden, that the
5 calculations for Keeyask and Conawapa -- you could maybe
6 turn your mic off. The -- the co -- the calculations for
7 Keeyask and Conawapa on PUB Manitoba Hydro First Round
8 197 would have been based on the capital expenditure
9 forecast 2009.

10 Would you accept that as being correct?

11 MR. VINCE WARDEN: Yes.

12 MR. BOB PETERS: And there we see if
13 Keeyask in capital expenditure forecast '09 was -- was
14 priced at \$4.6 billion, correct?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And with about 8.3
17 percent annual costs for the first year beyond in-service
18 the total expenses were \$383 million a year on account of
19 Keeyask.

20 MR. VINCE WARDEN: Correct.

21 MR. BOB PETERS: And likewise for
22 Conawapa, using the capital expenditure forecast '09 at
23 \$6.3 billion, and using 9 percent approximate first year
24 in-service costs, there's an annual cost and expenses
25 attributed to Conawapa at \$570 million, correct?

1 MR. VINCE WARDEN: Yes.

2 MR. BOB PETERS: Now those numbers, Mr.
3 Warden, aren't the numbers you and I talked about oh so
4 long ago on the record, because we used in our discussion
5 the capital expenditure forecast for 2010. Do you
6 remember that? Are you starting to remember that?

7 MR. VINCE WARDEN: Yes.

8 MR. BOB PETERS: All right. And -- and
9 there, if we want to superimpose some numbers, using the
10 capital expenditure forecast of 2010 for Keeyask at \$5.6
11 billion, and using my 9 percent number, the total annual
12 expenses were \$500 million.

13 You'll accept that number for purposes of
14 our discussion?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And then we did the same
17 for Conawapa. We updated it to \$7.8 billion based on
18 capital expenditure forecast 2010, and using the same 9
19 percent that Manitoba Hydro used in this IR response it
20 came out to approximately \$700 million a year of costs
21 for the first year beyond in-service.

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: Yeah. Now, those
24 numbers were not available to ICF, correct?

25 MR. VINCE WARDEN: Correct.

1 MR. BOB PETERS: And would the Board also
2 be correct that when we look at ICF -- I'm sorry, when we
3 look at Information Request PUB Manitoba Hydro First
4 Round 197 found at Tab 71 of the now marked PUB Exhibit
5 18, the revenues that are in this calculation are based
6 on the average export prices that Manitoba Hydro included
7 in answer to a previous information response, which has
8 now been marked, and it's found at Tab 6 of Board
9 counsel's first book of documents marked as PUB Exhibit
10 15.

11 And Mr. -- Mr. Warden, that's the
12 reference to PUB Manitoba Hydro Second Round Question
13 45A.

14 Are you with me, sir?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And are you in agreement
17 that the export prices used in answering PUB Manitoba
18 Hydro First Round 197 came from what is found at Tab 6 of
19 Board counsel's first book of documents?

20 MR. HAROLD SURMINSKI: Mr. Peters, I'd
21 like to clarify something that -- that's been on the
22 record here regarding this particular exhibit, or this
23 particular IR response we have.

24 I -- I see references that this is -- is
25 called the assumptions that go into the IFF, and the

1 calculations. These are not the assumptions. These are
2 the net result after the fact, and these are the average
3 prices that result after you consider all ninety-four
4 (94) or ninety-six (96) flow conditions.

5 And so, you know, theoretically you're
6 correct that they are consistent, but they're not the
7 assumptions that go into the -- the forecast.

8 MR. BOB PETERS: You won't share your
9 assumptions with us, will you, Mr. Surminski?

10 MR. HAROLD SURMINSKI: That's correct.
11 That's why this is all you have.

12 MR. BOB PETERS: Well, that -- that was
13 my next question. You've -- you've put -- you've put to
14 the Board in Tab 6 of Board counsel's first book of
15 documents what amounts to averages which blend your
16 assumptions into one (1) compiled number for various
17 input numbers.

18 MR. HAROLD SURMINSKI: Yes. And blend
19 all the months of the year into a single annual number,
20 so it's -- it's very much blended over the eight (8)
21 months and over all flow conditions.

22 MR. BOB PETERS: But all of the numbers
23 are treated the same in the sense that they are averaged
24 where you're not prepared to divulge specific assumption
25 information.

1 MR. HAROLD SURMINSKI: Yes, that's
2 correct.

3 MR. BOB PETERS: All right. And so back
4 to my question, Mr. Surminski and Mr. Warden, the
5 calculation of revenue found in Tab 71 of Board counsel's
6 third book of documents comes from Tab 6 of Manitoba
7 Hydro's response found in Tab 6 of the Board counsel's
8 first book of documents. Is that correct, Mr. Surminski?

9 MR. HAROLD SURMINSKI: Yes.

10 MR. BOB PETERS: All right. And the
11 revenue forecast was based to some extent and you won't
12 tell me how much, Mr. Surminski, on a forecast of natural
13 gas prices and what that would do to the electricity
14 market in which Manitoba Hydro would be exporting its en
15 -- its energy, correct?

16 MR. HAROLD SURMINSKI: Correct. Natural
17 gas prices are inherent in -- in the export prices, the
18 two (2) go together.

19 MR. BOB PETERS: And inherent in the
20 natural gas prices that were used by ICF, is that their
21 natural gas forecast was approximately 38 percent higher
22 than their last fore -- than their most current forecast,
23 correct?

24 MR. HAROLD SURMINSKI: Or in reverse
25 forecast is lower now.

1 MR. BOB PETERS: Yes, the -- the forecast
2 now, and we can go back if we need to to look at Manitoba
3 Hydro Exhibit 60 and we can see that ICF downgraded their
4 natural gas forecast by 38 or 40 percent, at least in the
5 near term.

6 MR. HAROLD SURMINSKI: I don't remember
7 the number but it was significant, yes.

8 MR. BOB PETERS: Mr. Warden, Mr.
9 Surminski, will Manitoba Hydro undertake to update its
10 response to PUB Manitoba Hydro First Round 197 in two (2)
11 respects. One (1) is to use the CEF capital costs for
12 Keeyask and Conawapa that are in the 2010 capital expense
13 forecast, and the second is to adjust the average export
14 prices using ICF's information found at Manitoba Hydro
15 Exhibit 60.

16

17 (BRIEF PAUSE)

18

19 MR. VINCE WARDEN: Mr. Peters, the
20 forecast that Manitoba Hydro uses for export prices is
21 not based on the forecasts of a single forecaster, so we
22 -- we engaged -- as you know we arrive at a consensus
23 forecast based on -- on the estimates of a -- a number of
24 forecasters. I bel -- I believe the number is seven (7).
25 Five (5)? Okay, five (5) forecasters to come up with our

1 -- our export price forecast.

2 We do do sensitivity around that, so if
3 the forecasts are plus or minus then we -- we know what
4 the impacts are. But we don't -- we just don't have a
5 scenario that inputs some prices that was put forward
6 most recently by ICF. That just isn't available to us
7 and would take some amount of work to do that, and I'm
8 not sure how legitimate that would be based on the
9 assumption -- assumptions of one (1) -- one (1)
10 forecaster.

11 Again, I think we look to the sensitivity
12 to see what -- what the impacts would be on our -- our
13 financial projections. That's -- that's why we do
14 financial projections. That's why we update them every
15 year, is to -- to input current conditions and current
16 assumptions.

17 MR. BOB PETERS: The most current
18 assumption we have, Mr. Warden, is from ICF, found at
19 Manitoba Hydro Exhibit 60, isn't that correct?

20 MR. VINCE WARDEN: But not necessarily
21 one that Manitoba Hy -- and in fact it isn't one that
22 Manitoba Hydro has adopted.

23 MR. BOB PETERS: And whether or not
24 Manitoba Hydro has adopted it, and you can call it for
25 sensitivity purposes, I think it would be meaningful if

1 Manitoba Hydro was to rerun it using ICF's assumption as
2 to what the forecast would look like and provide any
3 qualifications in -- in addition to the ones you already
4 have presently.

5 MR. HAROLD SURMINSKI: Mr. Peters, the --
6 the use of the natural gas price forecast in the export
7 prices, it's not something that Manitoba Hydro separately
8 utilizes. It's incorporated into the entire scenario
9 that's being analyzed by the export price forecasters,
10 and it's -- it's -- it's not possible for us to -- to
11 just input a natural gas price and get a new export price
12 forecast.

13 We're -- we -- we don't have the -- all
14 the complex relationships in -- in our modelling.

15 MR. BOB PETERS: Do you have in your
16 modelling, Mr. Surminski, the relationship between the
17 natural gas forecast and the forecast export prices
18 available to Manitoba Hydro?

19 MR. HAROLD SURMINSKI: No, we do not.

20 MR. BOB PETERS: So you have no
21 sensitivity analysis that if the natural gas forecast
22 falls by 40 percent, you -- Manitoba Hydro does not know
23 what that will -- what will happen to its forecast export
24 prices?

25 MR. VINCE WARDEN: Mr. Peters, that is

1 just one (1) of many factors that are entered in to
2 deriving a price -- our forecast price for electricity
3 rates in the future. So, you know, we have to look at
4 our mark -- at our -- the market that we sell into, into
5 the MISO market, and look at the amount of gas-fired
6 generation that's -- that is existing and planned.

7 So it's a complex undertaking to come up
8 with. Simply saying that there's a correlation between a
9 40 percent drop in the forecast for natural gas prices is
10 going to result in X, it just isn't possible. We -- we --
11 - we don't do that.

12 MR. ROBERT MAYER: Mr. Warden, last week
13 the well used phrase was, "All other factors remaining
14 the same." If we use that in coupling with Mr. Peter's
15 question, can you at least give us an idea of what might
16 be happening? It seems that KPMG much like the praise --
17 the phrase "all other factors remaining the same."

18 THE CHAIRPERSON: Why don't you think on
19 it and we'll take our -- our mid-morning break now.
20 Thank you.

21 MR. BYRON WILLIAMS: Mr. Chairman, if I
22 might make some comments on behalf of my clients. My
23 friend, Mr. Peters had a discussion with Manitoba Hydro
24 in -- in terms of certain undertakings relating to net
25 present value that might be filed in confidence. And --

1 and I appreciate Mr. Peter's interest in making sure that
2 the revised number was available to Intervenors.
3 Obviously we're not raising an objection at this point in
4 time, but our clients always have some discomfort with
5 those -- that information being provided in confidence.

6 And certainly we would request -- from our
7 client's perspective it's not just the number, it's the
8 methodology that is of -- of great interest. And we
9 would certainly suggest that if there is going to be
10 something going back and forth on -- on blue paper, there
11 should be something shared with Intervenors so they --
12 they can get a sense of not just the number but the
13 methodology, and also what's blacked out.

14 So that'll be my -- my request to Hydro
15 and the PUB council, and we'll add -- be -- before that's
16 filed, that some sort of document be shared with the
17 Intervenors.

18 THE CHAIRPERSON: Thank you for your
19 comments, Mr. Williams. With that we'll take our break.

20
21 --- Upon recessing at 10:46 a.m.

22 --- Upon resuming at 11:08 a.m.

23

24 THE CHAIRPERSON: Okay. Welcome back.
25 Ms. Ramage, you've got a couple of exhibits?

1 MS. PATTI RAMAGE: Yes, we do. The first
2 of these is the response to Manitoba Hydro Undertaking
3 number 77, and that's a KPMG response with respect to if
4 the 2008 price forecast provides a single average export
5 price for the year as a whole, or for each month, or for
6 the year, and are prices expressed as the average overall
7 on-peak and off-peak hours in the year or the month, and
8 does the forecast provide export prices even more
9 detailed for each hour of the year. And that we have
10 assigned Manitoba Hydro Exhibit 64.

11

12 --- EXHIBIT NO. MH-64: Response to Undertaking 77

13

14 MS. PATTI RAMAGE: The other exhibit
15 that's been distributed is Manitoba Hydro Undertaking
16 number 49, and this was the one that was discussed this -
17 - this morning, and it deals with Manitoba Hydro's
18 discount rate used in the assessment of major capital
19 projects, and that has been assigned Exhibit Manitoba
20 Hydro 65.

21

22 --- EXHIBIT NO. MH-65: Response to Undertaking 49

23

24 THE COURT: Very good. Thank you very
25 much.

1 Mr. Peters...?

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: It might be more correct
5 to call on Mr. Warden. Mr. Warden, you were going to use
6 the -- the break to respond to the Vice Chair's request
7 to assist the Board in understanding what the change in
8 natural gas cost forecast would do to Manitoba Hydro's
9 forecast of export prices.

10 MR. VINCE WARDEN: Okay. The simple
11 answer is we don't know, and that is why we engage
12 outside expertise to provide those forecasts to us. So
13 we -- as I indicated earlier, we have five (5) different
14 forecasters that provide forecasts to us. They have
15 models that are designed to do just that, to input
16 things. One (1) of the variables being natural gas
17 prices but certainly not the only one. There's a complex
18 series of variables that go into the forecast of
19 electricity prices in the MISO market.

20 And we are in the process of receiving
21 those updated forecasts currently and -- but that isn't -
22 - information that isn't available to us yet.

23 THE CHAIRPERSON: Mr. Warden, you're in
24 the gas business too, correct?

25 MR. VINCE WARDEN: We are.

1 THE CHAIRPERSON: Yeah. And Centra
2 offers fixed-price fixed-term gas contracts out five (5)
3 years, correct?

4 MR. VINCE WARDEN: Yes.

5 THE CHAIRPERSON: Mr. Peters...?

6 MR. VINCE WARDEN: But just to be clear
7 though, Mr. Chair, that has no relationship to what the
8 electricity prices might be out in that term.

9 THE CHAIRPERSON: Well, I was just
10 suggesting that you have an idea of what the future price
11 of natural gas in acquirable quantities out at least five
12 (5) years.

13 MR. VINCE WARDEN: We -- we do, but the -
14 - I think the question is: What impact is that going to
15 have on electricity prices? And this is just one (1) of
16 the many variables that goes into the formulation of that
17 price forecast for electricity.

18 MR. ROBERT MAYER: But -- but, Mr.
19 Warden, I think we've heard that it's a relatively
20 substantial piece because it depends which fuel is at the
21 margin when you're bidding into the MISO market, as I
22 understand it. That if you've got coal on the margin,
23 then it's one (1) price you're competing against. Some
24 of, I guess, what we heard last week is that now you've
25 got coal that could be -- in some cases be more expensive

1 than -- than gas depending upon the forecast.

2 But it's my understanding from a good
3 piece of what we heard last week was that natural gas can
4 have a significant effect on the export price of
5 electricity. And I'm surprised that we can't even give a
6 directional basis on where you think those prices might
7 go other than to say they're probably going to be lower.

8 MR. HAROLD SURMINSKI: Yes, Mr. Mayer,
9 generally low -- lower, but one (1) of the complex
10 relationships is the off-peak price. So on-peak prices
11 are relatively closely tied to natural gas prices, but
12 the off-peak is not. So, you know, when you get a 40
13 percent decrease in natural gas it's not a 40 percent
14 change in electricity prices.

15 And what happens also, if -- if this is
16 the long-term trend, the -- the resource that's being
17 built in the future can be modified, depending on the --
18 the relationship between coal and natural gas or other
19 resources.

20 So that's -- that's part of what the
21 forecasters do. They have to build new resources as the
22 load is growing in that export market. They have to
23 expand their generation with new resources, and their new
24 resources are influenced by the fuel costs -- relative
25 fuel costs of these resources.

1 So it's -- it's -- there's lots of
2 feedback involved. It's not just one (1) parameter, and
3 you get your export price out. It's part of the whole
4 complex modelling of the future of the system and the
5 marginal clearing prices that result.

6 THE CHAIRPERSON: Thank you, sir.

7 Mr. Peters...?

8

9 CONTINUED BY MR. BOB PETERS:

10 MR. BOB PETERS: Thank you. Mr. Warden,
11 you said natural gas was one (1) factor. Did you agree
12 with the Vice-Chair, that it is a significant factor in
13 the price of the electricity forecast in the MISO market?

14

15 (BRIEF PAUSE)

16

17 MR. VINCE WARDEN: I -- I hesitate to
18 answer, Mr. Peters, because significant -- the word
19 significant is a relative term, and there's so many
20 moving parts that -- that are associated with the whole
21 volatil -- volatile natural gas market that I -- I
22 wouldn't like to come to a conclusion on that regard at
23 this time.

24 MR. BOB PETERS: Well, that was just my
25 first question. I was going to try to pin you down,

1 depending on what your answer was, but, Mr. Warden, when
2 you say -- you are not prepared to say it's significant,
3 you're not prepared to say it's 50 percent of the
4 forecast, is what you're telling the Board?

5 MR. VINCE WARDEN: No. No, we just --

6 MR. BOB PETERS: What -- what other
7 factors -- when you said to the -- to the Vice-Chair and
8 the Chairman that there were other factors that
9 influenced this electricity forecast, what would some of
10 these other factors be that you can divulge to the Board?

11 MR. DAVID CORMIE: Mr. -- Mr. Peters, I
12 think if we think back to what Mr. Rose testified to
13 several weeks ago, there -- the changing environmental
14 regulations, where he suggested there's a moratorium on
15 new coal, the -- the cost of meeting your capacity
16 reserve obligation, and the technologies that are
17 available, so it's the combination of the fuel cost plus
18 the capital cost needed to meet the expected
19 environmental standards of the time.

20 And so clearly gas is a component of that.
21 Which of the factors is the driving factor, it's -- I
22 believe, it's -- it's in the -- it's the view of each of
23 the forecasters that we're -- that we're trying to
24 balance, and everyone has a different forecast, and --
25 and that comes out in the -- in the weighted average

1 number that Manitoba Hydro uses for its electricity price
2 forecast.

3 But -- but it's a combination of fuel cost
4 plus capital cost to meet their -- their view of what is
5 required to meet their capacity reserve obligation in the
6 future under future regulatory regimes.

7 MR. BOB PETERS: Mr. Cormie, help me with
8 my memory. Manitoba Hydro does not blindly follow the
9 average of the five (5) forecasts for export prices, does
10 it?

11 MR. HAROLD SURMINSKI: I will take that,
12 Mr. Peters. Generally we do not. We -- we assess the --
13 the value or the -- the complexity and considerations of
14 each of the forecasters and -- and make a judgment of
15 whether we think that they have addressed all the issues.

16 And we do -- we have meetings with them,
17 we have conference calls, and -- and we get a feel for --
18 for how much value we place on each of the forecasters.
19 We have chosen forecasters now because we have added some
20 and dropped others over the years, we have a set of
21 forecasters that we think are quite reliable. And as a
22 result, in recent years we've treated them equally and --
23 and weighted them equally, but it's only after we assess
24 the -- the relative accuracy, if you will, or the
25 methodology, the complexity of the methodology that they

1 have.

2 If we think that they have addressed all
3 the factors appropriately and it looks like they have
4 good relationships in their final numbers we give them
5 equal weight.

6 MR. BOB PETERS: When the Board hear that
7 response Mr. Surminski, wouldn't the logical conclusion
8 be that Manitoba Hydro uses its judgment at the end of
9 the day to decide what the reasonable export price
10 forecast is?

11 MR. HAROLD SURMINSKI: Yes, but we don't
12 stray completely from the consensus of the forecasters.

13 MR. BOB PETERS: And so when I'm trying
14 to pin you down on a -- the degree to which ICF's 38 or
15 40 percent reduction in gas cost forecast will impact on
16 export sales, the Panel and Manitoba Hydro has no
17 sensitivity perception of what kind of impact that would
18 have on the export forecast?

19

20 (BRIEF PAUSE)

21

22 MR. DAVID CORMIE: Well, I think, Mr.
23 Peters, the -- if -- if that was the only factor that
24 went into the electricity price forecast, clearly it
25 would be a -- it would put downward pressure on

1 electricity prices. But there are other factors that
2 affect -- that can -- that can offset. And -- and we've
3 been made aware of those other factors by Mr. Rose in his
4 testimony several weeks ago.

5 And so to the extent that those other
6 factors are offsetting it we don't yet have a view of
7 what the electricity price forecast will be that will be
8 prepared by Manitoba Hydro later this spring.

9 If -- if it was -- if it was solely driven
10 by the electric -- or the natural gas price forecast that
11 Mr. Rose presented then clearly electricity prices would
12 be lower. But we -- we haven't got the electricity price
13 forecast from him yet or from the other consultants and
14 we haven't done the review and the averaging. And -- and
15 we'll do that in -- in due course.

16 MR. BOB PETERS: Are you able to tell the
17 Board what was the natural gas price when the 2008
18 electricity forecast was developed?

19

20 (BRIEF PAUSE)

21

22 MR. HAROLD SURMINSKI: That's a fairly
23 complex question, Mr. Peters. First of all, is it a
24 short-term, long-term? And secondly, because we have a
25 pattern, it starts at -- at current day prices and -- and

1 all else being equal, was probably lower than what we
2 were looking at prior to this, but we're not talking
3 about four dollars (\$4) gas in 2035, we're talking about
4 thirteen (\$13) gas in 2035.

5 But that's based on the assumption that
6 you can use an implied heat rate of eight (8). Mr.
7 Rose's company will provide a forecast that will reflect
8 the change in composition of the market in response to
9 the capital equipment that will be required to meet the
10 reserve capacity obligations and -- and he'll integrate
11 that with his natural gas price and we'll get electricity
12 price forecast. Until we get that we don't really -- we
13 don't have an idea what that electricity price will be.

14 MR. BOB PETERS: Thank you, Mr. Cormie.
15 Would the Board be correct in understanding that a heat
16 rate of eight (8) would be equated to perhaps the single-
17 cycle combustion turbine, much akin the kind Manitoba
18 Hydro has?

19 MR. DAVID CORMIE: No, the -- the heat
20 rate of eight (8) is approximately the average heat rate
21 of the -- of the market today. So if the heat rate of --
22 was eight (8) today and gas was at four dollars (\$4), the
23 average cost of electricity in the on-peak would be about
24 thirty-two dollars (\$32) a megawatt hour for the five (5)
25 by sixteen (16) hours.

1 But if you -- and if you assume that the
2 composition of the -- of the -- of all the units in the -
3 - in the MISO footprint stayed at that, we had an average
4 heat rate of eight (8) until the period of 2035, you
5 could use that same ratio of gas to electricity prices.
6 However, in addition to the cost of the natural gas
7 there's going to be the cost of carbon which will add to
8 that.

9 So not only is -- so -- and depending
10 whether the forecaster is viewing it as a ten dollar
11 (\$10) a tonne adder or twenty dollar (\$20) or a thirty
12 dollar (\$30) or a sixty dollar (\$60) tonne adder, that
13 has to be added to the cost of the gas. And then in
14 addition to that is the premium that Mr. Rose talked
15 about in order to reflect the marginal cost of
16 incremental generation to re -- meet the capacity reserve
17 margins.

18 So it's -- it's -- it's a complicated fact
19 -- it's a complicated calculation that needs a detailed
20 study, and it's not directly determinable just from a
21 change in the natural gas prices.

22 MR. BOB PETERS: And as Mr. Rose was
23 telling the Board, Mr. Cormie, the forecast in terms of
24 the CO2 emission price allowances, that forecast has also
25 been revised downward, at least by ICF, correct?

1 MR. DAVID CORMIE: I think Mr. Rose
2 indicated that he believed that there would be a delay of
3 approximately five (5) or six (6) years before the -- it
4 was realistic to assume that there would be a carbon
5 adder.

6 MR. BOB PETERS: And maybe just for the
7 benefit of the record, at Exhibit 55, which was his
8 PowerPoint presentation, on slide number 17, page 17, ICF
9 shows the carbon adder not starting until 2018. That's
10 what you're referring to?

11 MR. DAVID CORMIE: Yes, that's what I was
12 referring to.

13 MR. BOB PETERS: And in terms of the
14 previous dollars per -- per tonne, instead of starting
15 off at twenty (20)/twenty-two dollars (\$22) a tonne, by
16 2018 the forecast is it may be half of that, ten (10) to
17 fifteen dollars (\$15) a tonne?

18 MR. DAVID CORMIE: Yes, that's what he
19 was indicating. So those -- you know, that -- those --
20 the delay in the implementation of those regulations
21 combined with the lower natural gas prices are two (2) of
22 the factors that would reduce the electricity costs, but
23 then there's the other factor that he talked about is
24 that if -- if we met the legal requirements that the EPA
25 was putting on US generators to meet the air emission

1 limits, by 2014, 60,000 megawatts of coal-fired
2 generation would have to be shut down. So that's the
3 other factor that needs to be built into the forecast.
4 And -- and we don't know what the effect of that is yet.

5 THE CHAIRPERSON: Mr. Peters, as you're
6 asking your questions, and despite the helpfulness of all
7 of these various comments, we'd be interested in knowing
8 at the time that the price forecasts were made in '08,
9 just what was the then-current price of natural gas.

10

11 (BRIEF PAUSE)

12

13 THE CHAIRPERSON: It changes daily, and
14 it's got futures going out years.

15 MR. BOB PETERS: I'm -- I'm looking, Mr.
16 Chairman, at Manitoba Hydro Exhibit 55, which was the
17 PowerPoint presentation by the ICF witness, and just
18 maybe, Mr. Surminski, you have it at hand, do you, sir?

19 MR. HAROLD SURMINSKI: Yes, I do.

20 MR. BOB PETERS: And on page 14 of that
21 document there is the US Henry Hub natural gas spot
22 prices reflected on the page all the way back from 1991
23 through to 2010?

24 MR. HAROLD SURMINSKI: Yes, correct.

25 MR. BOB PETERS: And based on the -- the

1 spot price at Henry Hub in '07 was seven point two (7.2)
2 cents for MMBTU?

3 MR. HAROLD SURMINSKI: Yes.

4 MR. BOB PETERS: And then following it
5 through, in 2008 it went up to nine (9) cents?

6 MR. HAROLD SURMINSKI: Yes.

7 MR. BOB PETERS: And then it fell in 2009
8 down to four (4) cents?

9 MR. HAROLD SURMINSKI: Four dollars (\$4)
10 per MMBTU, yes.

11 MR. BOB PETERS: I'm sorry. Yes, four
12 dollars (\$4) per MMBTU, which is roughly four dollars
13 (\$4) per gigajoule, I suppose?

14 MR. HAROLD SURMINSKI: Yes.

15 MR. BOB PETERS: All right.

16 (BRIEF PAUSE)

17

18 MR. BOB PETERS: And, Mr. Warden, I
19 suppose on the gas side of your business, if the Board
20 went back to its 2008 orders related to the cost of
21 primary gas they'd also have an indication as to what at
22 least Centra was able to use as a forward price on its
23 gas costs back in '07, '08, and '09?

24 MR. VINCE WARDEN: Yes, that information
25 is on the record, or at least on the record of the gas

1 proceedings.

2 MR. BOB PETERS: It's also on the public
3 record in the Board's orders.

4 MR. VINCE WARDEN: Correct.

5 MR. BOB PETERS: Mr. Warden, let's turn
6 to the KPMG engagement. And you'll recall, sir, that in
7 the Board's Order 32 of '09 this Board had directed
8 Centra -- or I'm sorry, had directed Manitoba Hydro to
9 provide a conceptual outline for an in-depth and
10 independent study of Hydro's operational and business
11 risks?

12 MR. VINCE WARDEN: Yes, I do.

13 MR. BOB PETERS: And while the Board was
14 looking for some of that information to come in by
15 September 30th of 2009, for various reasons, Manitoba
16 Hydro wasn't able to meet that time deadline. Do you
17 recall that?

18 MR. VINCE WARDEN: For -- for various
19 reasons, yes.

20 MR. BOB PETERS: And in October of 2009,
21 Manitoba Hydro was preparing terms of reference for the
22 pending independent study and had asked the Board whether
23 there was any input that would be of assi -- of use to
24 the Board in that terms of reference?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: And, in essence, the --
2 PUB's input included, as found at Tab 1 of PUB Exhibit
3 17, an indication that the Board had directed Hydro to
4 provide a conceptual outline for an in-depth and
5 independent study, and that information from Board Order
6 32/09 made its way into the terms of reference, correct?

7

8 (BRIEF PAUSE)

9

10 MR. VINCE WARDEN: Well, Mr. Peters, I
11 don't believe that made its way into the ultimate terms
12 of reference that --

13 MR. BOB PETERS: Okay. Well, tha --
14 that's a fair comment. I'm looking at Tab 1 from PUB
15 Exhibit 17, and it's a letter of November 10th, 2009 from
16 Manitoba Hydro to KPMG.

17 MR. VINCE WARDEN: Yes, it is. And --

18 MR. BOB PETERS: And you've -- in the
19 terms of reference on page 1 of 2 in the third paragraph
20 there is reference to the Board's -- the Board's order,
21 and its --

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: -- directive that we
24 talked about, right?

25 MR. VINCE WARDEN: Tha -- that's correct.

1 MR. BOB PETERS: So at this point in
2 time, at least in terms of the chronology as I see it,
3 the -- the PUB's requested information from Order 32/'09
4 did form part and parcel of the terms of reference that
5 Hydro was embarking on with KPMG?

6 MR. VINCE WARDEN: Yes. At that point,
7 yes.

8 MR. BOB PETERS: And also included in
9 that terms of reference in the following -- at the bottom
10 of the page in point number two (2) on page 1 of 2 of the
11 terms of reference, there would be an opportunity, and a
12 request, for KPMG to meet with PUB staff and/or advisors
13 as necessary to review the orders and concerns with
14 respect to the risks?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And as I understand the
17 -- the material, the second tab at PUB Exhibit 17 was
18 KPMG, in essence, accepting the terms of reference in
19 their letter of November 20th, 2009, addressed from KPMG
20 to -- to Manitoba Hydro. Have you that?

21 MR. VINCE WARDEN: To -- to the chair of
22 the audit committee, yes.

23 MR. BOB PETERS: Right. And maybe I
24 should just pause there, Mr. Warden. Is -- is the fact
25 that this letter of KPMG's -- it went to the audit chair

1 of Manitoba Hydro's Board, does that in any way mean it's
2 not Manitoba Hydro?

3 MR. VINCE WARDEN: No, not at all.

4 MR. BOB PETERS: Does that mean that
5 Manitoba Hydro's management and executive were no longer
6 involved with that process?

7 MR. VINCE WARDEN: Well, the engagement
8 was with the -- the Board of Manitoba Hydro, and the
9 chair of the audit committee was representing the Board
10 in discussions with -- with KPMG.

11 MR. BOB PETERS: All right. And I'm just
12 trying to find out if that's significant or not, and I'm
13 not sure the right way to ask that, but the fact that it
14 came from the Board and not from Manitoba Hydro's
15 executive, is there any more or less weight that should
16 be considered relevant to that?

17 MR. VINCE WARDEN: No. I think the Board
18 of Manitoba Hydro was concerned at the time that they
19 needed to do their due diligence with respect to the
20 issues that were being raised, and that there should be
21 direct contact between the -- the Board and KPMG for this
22 -- for that purpose.

23 MR. BOB PETERS: And in any event, KPMG
24 is telling Manitoba Hydro through Manitoba Hydro's Board
25 of Directors that KPMG is prepared to accept the

1 engagement based on the terms of reference that we looked
2 at at Tab 1 of the book of documents.

3 MR. VINCE WARDEN: Yes, that's the -- the
4 essence of the communication.

5 MR. BOB PETERS: And do you know if -- if
6 the -- if the audit chair established a budget for the --
7 for the work to be done by KPMG?

8 MR. VINCE WARDEN: I don't know.

9 MR. BOB PETERS: Was it -- do you have
10 any understanding whether it was a fixed amount budget
11 much like ICF indicated when they testified, or was it
12 based on hours expended at various hourly rates?

13 MR. VINCE WARDEN: It -- it wasn't a
14 fixed budget. However -- and -- and I really don't know
15 what discussions the Board, or the -- the chair of the
16 audit committee had with KPMG in that regard, but I know,
17 as the CFO, I was very interested in limiting the -- to
18 the extent possible, the amount of -- of payments we --
19 would be made under this contract.

20 We -- I just don't like open-ended
21 contracts, of course. So I -- I received an estimate for
22 my purposes, which I -- I did, as -- as the engagement
23 progressed, monitor against that original budget.

24 MR. BOB PETERS: How did it come in?

25 MR. VINCE WARDEN: Well, it -- it did

1 come close to the original estimate.

2 MR. BOB PETERS: And the original
3 estimate was up until, at least, the preparation and
4 attendance at the hearings before this Board? Would that
5 be true?

6 MR. VINCE WARDEN: Yes, that was a
7 separate engagement over and above the engagement that
8 we're referring to here.

9 MR. BOB PETERS: And do you have an
10 estimate as to what those costs will be?

11 MR. VINCE WARDEN: Yes, I did receive an
12 estimate on that as well.

13 MR. BOB PETERS: Can you just provide the
14 order of magnitude to the Board, please?

15

16 (BRIEF PAUSE)

17

18 MR. VINCE WARDEN: I would prefer not to
19 because I don't want it to appear that that amount is in
20 any way approved so as -- again, as the engagement
21 proceeds we do ask KPMG, as we do for all consultants, to
22 provide a summary of hours spent and we monitor, we check
23 that, we ensure that we're satisfied with the hours
24 expended. So that's still in progress and I don't want
25 to suggest in any way that the original estimate is what

1 the amount will be.

2 MR. BOB PETERS: The earliest opportunity
3 the Board will know the actual amount will be when it
4 next sees Manitoba Hydro's actual expenditures then on
5 this -- what I suppose is an O&M expense?

6 MR. VINCE WARDEN: Yes, although if the
7 Board was interested we could undertake to provide that
8 information when it is available.

9 MS. PATTI RAMAGE: In fact, I believe
10 that undertaking has already been given.

11 MR. BOB PETERS: Well, if it hasn't I'll
12 -- I'll ask you to provide it again. But thank you, Ms.
13 Ramage, for that clarification.

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: Mr. Warden, after the
17 November 20th letter from KPMG through to Manitoba Hydro
18 on November the 20th of 2009, am I correct that Hydro did
19 not consult further with the Public Utilities Board
20 regarding any changes to the KPMG engagement after that
21 date?

22 MR. VINCE WARDEN: I don't know that, Mr.
23 Peters. That consultation may have taken place without
24 my knowledge.

25 MR. BOB PETERS: Well, if it does come to

1 your attention you're certainly welcome to bring that
2 back to the Board's attention through your counsel.

3 But after the November 20th -- no, but
4 it's an open-ended offer.

5 Mr. Warden, after the November 20th, 2009
6 letter from KPMG, you already alluded to that there was a
7 final or at least a subsequent official letter of
8 engagement from KPMG to Manitoba Hydro dated December the
9 15th, 2009, correct?

10 MR. VINCE WARDEN: Correct.

11 MR. BOB PETERS: And as you maybe noted
12 when we first started discussing this this morning, this
13 engagement letter of November 15th, 2009, found as Tab 3
14 of PUB Exhibit 17, it removes all references to the PUB
15 requirements and directives?

16 MR. VINCE WARDEN: Yes.

17 MR. BOB PETERS: And that includes
18 removal of the meeting with PUB staff and/or advisors as
19 required?

20 MR. VINCE WARDEN: Yes.

21 MR. BOB PETERS: Mr. Warden, you've told
22 me already you were here when KPMG was testifying last
23 week, so that gives you a leg up on me, but can Hydro
24 confirm to the Board that in its discussions with KPMG
25 during this engagement process, that Manitoba Hydro told

1 KPMG not to meet with Board staff and advisors? Are you
2 able to -- to answer that?

3 MR. VINCE WARDEN: Mr. Peters, I am
4 certain that that directive was never given to KPMG.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: You're telling the Board
9 that at no time did Hydro request or insist that KPMG not
10 meet with the Board or Board staff and advisors?

11 MR. VINCE WARDEN: That's correct. It
12 was totally up to KPMG as to whether they were to --
13 whether they needed to meet with K -- with the PUB Board
14 or advisors. Manitoba Hydro did not provide direction in
15 that regard.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Can you indicate to the
20 Board who was providing instructions to KPMG relative to
21 this assignment? Was there an individual who was
22 quarterbacking it from Manitoba Hydro's perspective?

23 MR. VINCE WARDEN: There was -- there
24 wasn't really a designated quarterback, so to speak. I
25 maintain -- I personally maintained regular contact with

1 the principals of KPMG just -- just so I knew what stage
2 they were at and they were still on track towards meeting
3 their obligation to the audit committee, or to the Board,
4 but they had full and open access to anyone within
5 Manitoba Hydro.

6 And I did not know on any given day as to
7 who they might be meeting with or speaking to. So they
8 had their terms of reference, they had their assignment,
9 and they proceeded to fulfill that assignment in the most
10 expeditious way.

11 MR. BOB PETERS: And the change in the
12 terms of reference, can the Board assume that was a
13 mutual agreement to change the terms of reference from
14 what was initially requested in the Hydro letter to the
15 first letter from KPMG to what ultimately ended up in the
16 second letter dated December 15th, 2009 from KPMG?

17 MR. VINCE WARDEN: Yes, well, the --
18 there was definitely sign-off by both parties, so it
19 would be mutual, yes.

20 MR. BOB PETERS: Now, Mr. Warden, while
21 you were the CF -- are the CFO when we're looking at
22 having regular contact with the principals of KPMG, I
23 take it that you would not have day to day contact with
24 all of the KPMG personnel who would be on this file?

25 MR. VINCE WARDEN: No, definitely not.

1 No, I -- I didn't have day to day --

2 MR. BOB PETERS: And as I understood your
3 previous answer, they had free reign to pretty much speak
4 to whomever they wanted within the Corporation at any
5 time about any issue?

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: And in dealing with
8 them, were you required to read all the drafts that they
9 prepared in terms of the reports?

10 MR. VINCE WARDEN: Well, there was, I
11 think as was clarified on the record, Mr. Peters, when
12 KPMG was testifying, there -- there was only one (1)
13 draft, and I believe we have an undertaking to file that
14 -- that draft. I might take this opportunity to mention
15 that I believe it was an IR that Manitoba Hydro responded
16 to that there -- there wasn't a draft.

17 I -- that was a -- an oversight on
18 Manitoba Hydro's part, but there -- there definitely was
19 one (1) draft which was reviewed by Manitoba Hydro. And
20 as I mentioned, that is going to be -- will be filed
21 likely today.

22 MR. BOB PETERS: Thank you for that
23 clarification, Mr. Warden.

24

25

(BRIEF PAUSE)

1 MR. BOB PETERS: Mr. Warden, were you a
2 primary point of contact for the KPMG personnel to ask
3 questions about Manitoba Hydro's operations or financial
4 situation?

5 MR. VINCE WARDEN: Well, Mr. Peters,
6 there were a number of personnel within Manitoba Hydro
7 that were indicated as key contacts. Was I one (1) of
8 them, absolutely, yes, I was one (1) of them, but not
9 exclusively. Certainly on -- on financial matters there
10 were a number of different people that were also
11 contacted and -- and interviewed by -- by KPMG.

12 MR. BOB PETERS: Can you explain to the
13 Board why Manitoba Hydro felt that the Board's concerns
14 from Order 32/'09 should not be the subject of KPMG's
15 review as per the terms of reference in at least their
16 first engagement letter?

17 MR. VINCE WARDEN: No. I actually can't
18 answer that. I -- there -- there certainly wasn't any
19 intention on management's part to exclude the PUB from --
20 from any part of the review, so the -- the terms of
21 reference were negotiated or were determined between the
22 audit committee to the Board and KPMG.

23 But to my recollection, there was never
24 any -- I was aware that the KPMG was consulted in the
25 development of the terms of reference, but I was never --

1 during the course of -- of their review -- of KPMG's
2 review, never aware that the PUB was in any way excluded
3 from any information that needed to be derived in order
4 for KPMG to fulfill its commitment.

5 MR. BOB PETERS: So you don't recall
6 Manitoba Hydro having any questions about the changes to
7 the engagement letter from KPMG's November 20th, 2009
8 letter to their December 15th, 2009 letter?

9 MR. VINCE WARDEN: No, I wasn't directly
10 involved in those changes.

11 MR. BOB PETERS: Again, you're indicating
12 that those changes occurred at the Manitoba Hydro Board
13 of Directors level?

14 MR. VINCE WARDEN: That's right.

15 MR. BOB PETERS: Are you confident, Mr.
16 Warden, or are you able to answer the question as to
17 whether then the Manitoba Hydro Board of Directors may
18 have given a directive or instruction to KPMG not to
19 pursue the issues the Board had raised in Order 32/'09?

20 MR. VINCE WARDEN: Well, I -- I was
21 present at all audit committee meetings, and that issue
22 was never raised while I was there, so I would say with
23 some confidence, yes, that the -- there was no direction
24 not to involve the -- the Public Utility Board or its
25 advisors.

1 MR. BOB PETERS: Do you recall if
2 Manitoba Hydro's Board of Directors had any questions
3 about the final changes to the December 15th, 2009 terms
4 of engagement by KPMG that excluded the PUB request?

5 MR. VINCE WARDEN: No, but whereas I was
6 present at all audit committee me -- meetings, I wasn't
7 present at the Board meetings, so what discussion took
8 place at the Board I wasn't privy to.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: Can I take from that
13 last answer, Mr. Warden, then that you weren't privy to
14 the final decision as to why Manitoba Hydro's Board of
15 Directors approved only KPMG's narrowed Phase 2 work,
16 which was to focus on issues driven by a former
17 consultant of Manitoba Hydro?

18 MR. VINCE WARDEN: Well, I think the
19 narrow -- narrower scope was as a result of the time
20 constraints in terms of completing this assignment, so
21 there was some urgency to get the work completed. But in
22 direct answer to your question, no, I was not present
23 when those exchange -- at the exchange of information
24 leading to the revised terms of reference.

25 MR. BOB PETERS: Mr. Warden, can you

1 indicate to the Board that, with Manitoba Hydro having
2 received a report from ICF in September of 2009 on some
3 aspects of Manitoba Hydro's long-term contracts and
4 risks, why a different consultant was sought out for the
5 subsequent report that was done by KPMG?

6 MR. VINCE WARDEN: I think the Board was
7 of the view that the review had to be somewhat forensic
8 in nature and that a firm such as KPMG was necessary. It
9 was necessary to -- to engage a firm such as KPMG for
10 that in-depth review.

11 The Board was not totally familiar with
12 ICF at the time, whereas management had a lot of
13 confidence in ICF. The Board was of the view, according
14 to my understanding at least, that the -- their
15 preference was to hire a firm such as KPMG to conduct
16 this in-depth review.

17 MR. BOB PETERS: And the review from KPMG
18 was not to look at the adequacy of Manitoba Hydro's rates
19 and rate projections going forward in terms of its
20 preferred development plan?

21 MR. VINCE WARDEN: No, that wasn't part
22 of the terms of reference.

23 MR. BOB PETERS: That was excluded?

24 MR. VINCE WARDEN: Yes.

25 MR. BOB PETERS: Do you know why it was

1 excluded?

2 MR. VINCE WARDEN: I don't.

3 MR. BOB PETERS: Again that would be a
4 matter that was determined finally at the Manitoba Hydro
5 Board of Director's level?

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: Mr. Warden, I want to
8 turn to a new subject, and may as well use the time
9 before lunch, unless the Board wants to break early.

10 MR. ROBERT MAYER: I -- I think we should
11 break early, before you leave that subject.

12 MR. BOB PETERS: All right. Thank you,
13 sir. Mr. Chairman, perhaps we can --

14 THE CHAIRPERSON: One o'clock?

15 MR. BOB PETERS: -- adjourn at this time,
16 and come back as the Board directs.

17 THE CHAIRPERSON: One o'clock then.

18

19 (PANEL RETIRES)

20

21 --- Upon recessing at 11:54 a.m.

22 --- Upon resuming at 1:02 p.m.

23

24 THE CHAIRPERSON: Okay. Welcome back,
25 everyone. We have the pleasure of receiving a

1 presentation now. As we all know, during the general
2 rate application hearings we may provide an opportunity
3 for members of the ratepayers of Manitoba to make
4 presentations on subjects that are related to the topic
5 matter at hand, and in a general nature, Manitoba Hydro.

6 I believe we have either -- is it Mr.
7 Simpson or Dr. Simpson? And a Mr. Skinner. Is he here
8 to? All right.

9 Okay, gentlemen, I believe -- has -- have
10 -- has there document, Mr. Singh, been distributed? It's
11 been distributed amongst the group.

12 And if you wouldn't mind, sir, if you
13 could try to see if you could do it not much more than
14 fifteen (15) minutes. We'd appreciate it.

15

16 PRESENTATION BY DR. LEONARD SIMPSON & MR. BLAIR SKINNER:

17 DR. LEONARD SIMPSON: Good afternoon. I
18 want to talk about another option for Manitoba Hydro
19 besides the rather continuous and rapid development of
20 our northern rivers. And I'm going to talk about the
21 nuclear option, which -- our community has been involved
22 in supporting the nuclear industry through AECL's
23 research establishment since 1963, so that we have a very
24 nuclear educated community.

25 In terms of expenditures of Manitoba Hydro

1 and so forth, there's some very ambitious and expensive
2 plans for future development which are focussed on our
3 northern rivers. And I guess what prompted me to put
4 this together was the most public of these plans, I
5 think, at the moment of building a high -- an additional
6 high voltage tra -- DC transmission line, Bipole 3,
7 which, according to the press reports, is going to cost
8 somewhat in excess of \$4 billion.

9 This cost is inflated by the decision to
10 build Bipole 3 for -- to my mind for no sensible reason,
11 down the west side of the province, rather on the east
12 side of Lake Winnipeg. For several years now, the LGD of
13 Pinawa has been pressing Manitoba Hydro and the province
14 to consider the comparative cost of a nuclear power plant
15 on the site of AECL's nuclear research centre in Pinawa.

16 So what we're -- what we're asking for at
17 the moment is not go and build us a reactor, but
18 basically do the study to see if it's economic and
19 helpful to the community that we should have a major
20 source of power close to the markets.

21 Manitoba hosts what was basically the
22 first major nuclear community in Western Canada, and
23 since 1980 -- 1963 the AECL's Whiteshell labs have
24 carried out research on reactor safety, waste management
25 and a number of reactor types, including small reactors

1 for powering -- powering northern communities.

2 As might be expected with their very
3 strong commitment to hydro power, Manitoba Hydro has not
4 shown a lot of interest in building an infrastructure of
5 nuclear expertise. They have, however, indicated a
6 willingness to buy and market the power if it is produced
7 by a private vendor who would build and operate the
8 station.

9 There are vendors in Canada who will
10 negotiate such an agreement, and this is the type of
11 agreement currently under discussion with the governments
12 of Alberta and Saskatchewan, or the utilities anyway.
13 And the time seems right for this feasibility study in
14 Manitoba we'll -- that we'll examine them -- total
15 economics as such an arrangement. And -- and included in
16 that is more sharing with other western provinces. This
17 is a concept we're considering, giving -- given the need
18 to -- the expressed need for a -- a western grid.

19 Now I'm going to switch over to the -- to
20 the handouts that you have now with the slides, because I
21 think I'm a better speaker to slides than I am to reading
22 text.

23 So if we go to the first one, it just --
24 it just reviews Manitoba's nuclear history. As I said,
25 we were established in 1963. Pinawa community was

1 selected right out of the bush for its natural beauty and
2 its recreation potential, and that would allow us, and
3 did allow us to attract the best people from all over the
4 world. The town grew to a population of twenty-two
5 hundred (2,200) with AECL employing over one thousand
6 (1,000) at its peak. Major programs as I alw -- already
7 mentioned were Nuclear Waste Management and Reactor
8 Safety Research.

9 What we call the dark ages occurred in the
10 '90s when AECL decided to close the Whiteshell labs and
11 consolidate the company at Chalk River. But
12 decommissioning had to be done and after a considerable
13 fight between our community and the nuclear regulator,
14 the decommissioning is now underway and three (3) to four
15 hundred (400) staff are avail -- are still working onsite
16 and will be for decades, carrying on the decommissioning.

17 But the site will remain under a
18 regulator's licence, that's the Canadian Nuclear Safety
19 Committee, for the rest of the century, because certain
20 facilities are not planned to be removed in any time in
21 the near future. So Pinawa's goal is to repopulate the
22 site with new nuclear industry, taking advantage of
23 what's now starting to gather steam, the nuclear
24 renaissance.

25 The next slide is a map that shows anybody

1 who may not know where Pinawa's located. It's on the
2 Winnipeg River and it's located about 100 kilometres east
3 of the east side of Winnipeg, as the crow flies. And
4 there's already a transmission line corridor going down
5 from, I think it's McArthur Falls, right through the --
6 the Whiteshell site and on into Winnipeg, so that finding
7 a right-of-way for an improved transmission line should
8 not be a problem.

9 There's a picture then of the site as it
10 existed a couple of years ago. There's one (1) or two
11 (2) buildings that have now been taken down. Right at
12 the centre of the picture with the large stack is the WR-
13 1 research reactor which operated for several decades
14 using an organic coolant, but when the -- when the
15 Pickering reactors were working so well they decided not
16 to support this any farther in this concept. But the --
17 the research buildings are still there, the hot cells are
18 still there, and -- and there's a lot of land there that
19 can be used. And there's the cooling water right at the
20 back there.

21 So what -- what about a licensed site?
22 Well, as I said, Whiteshell has been under the nuclear
23 licence for forty-five (45) years. Now if you wanted to
24 build a plant just anywhere, you have to obtain -- get a
25 construction licence. And there is -- surveys have to be

1 done, environmental surveys and the like. And for a
2 virgin site it would take much longer than for upgrading
3 Whiteshell's licence, which has already been the -- the
4 soil and the ground and everything else that's important
5 in environmental surveys have been done several times
6 there already. And that may not preclude another one
7 having to be done for a power reactor, but it should make
8 the process somewhat simpler.

9 The community around Pinawa, Lac du
10 Bonnet, Beausejour, is very familiar with the industry.
11 It was -- and is mainly pro-nuclear. On the site itself,
12 the infrastructure is still there. There's -- water and
13 sewage is in place, and the site is ideal, not just for a
14 power reactor really but any nuclear facility involving a
15 fuel cycle. And we -- we've been looking at all
16 possibilities.

17 The important thing about the licensed
18 site, if you look around the OECD countries, and see
19 where they're planning to build their next reactors, they
20 are almost comp -- a hundred percent looking at their
21 already licensed sites just because of the simplicity of
22 going to a community that understands nuclear, and also
23 that has -- has worked in that area.

24 A little bit about base-load. Base-load
25 is basically that power which -- for which you -- you

1 have to rely on twenty-four (24) hours a day, three
2 hundred and sixty-five (365) days a week, and it can't be
3 interruptible.

4 The coal-fired concept I don't think is
5 being considered here because of the greenhouse gas
6 problem.

7 Wind is intermittent. They use wind in
8 Ontario to reduce the use of coal, and thereby cut down
9 the greenhouse gases when the wind is blowing. I don't
10 know why we have it here, because we don't have any
11 greenhouse gas coming out of -- of any significant amount
12 coming out of our production.

13 Our Manitoba grid is 5,000 megawatts with
14 about 96 percent of that hydro, and most of that is
15 generated on the northern rivers. And the next station
16 planned is the Conawapa station on the Nelson River,
17 generating 1,485 megawatts.

18 I -- I have a little table here which is
19 sort of reviewing the cost of these hydro stations over
20 the years.

21 The Kettle Station was completed in 1974
22 at a cost of about two hundred tho -- two hundred
23 thousand dollars (\$200,000) per megawatt. The Limestone
24 came about sixteen (16) years later, and the costs had
25 gone up by a factor of five (5) to basically \$1 million

1 per megawatt. And the Conawapa proposal on these figures
2 are about two (2) years old, but in any case it shows
3 another factor of five (5) increase up to about \$5
4 million a megawatt.

5 I added Wuskwatim because it's kind of
6 interesting that for a -- they're prepared to pay \$8
7 billion a megawatt for -- for this station, which is
8 under construction, and the output is only 200 megawatts.
9 So that's sort of an interesting comment.

10 So what about nuclear? The capital costs
11 of northern hyro -- hydro, as you've just seen, is rising
12 rapidly. I guess the question is, nuclear is rising too,
13 but which is going up faster?

14 A nuclear plant just a hundred kilometres
15 from here would be much closer to the markets.
16 Winnipeg's the main market; Brandon, along the
17 TransCanada Highway along the border; and then of course
18 there's the export market to the south.

19 The -- the long-term high quality
20 employment that you would get with a nuclear plant, that
21 -- this would got -- on as long as the station was
22 operating, and it would have great economic benefits
23 towards the province.

24 With a da -- with a dam and a hydro
25 station up north, you have lots of employment while it's

1 being built, but once it's built it's -- it's game over
2 for most of them. And I understand even that the dam
3 itself could be controlled from Winnipeg next door here.

4 So we feel we need a full assessment, or a
5 study, that considers the economics of different power so
6 -- sources near and far from the markets.

7 And the other thing is, with the need to
8 get off gasoline for transportation, and -- and oil,
9 there's going to be additional electricity requirements
10 coming -- coming in the future for the transportation,
11 either to power electric vehicles, or to produce hydrogen
12 for a hydrogen powered vehicle. And if you're going to
13 produce this electricity it needs to be produced by a
14 non-polluting method, which again is hydro or nuclear.

15 A few facts on capital costs. And,
16 basically, a -- a comparison between hydro and nuclear
17 shows that the hydro plant itself is of a higher cost
18 than a -- an equivalent nuclear plant. The operating
19 costs are reversed, of course, because you have more
20 people operating the nuclear plant. The transmission
21 costs are much higher for hydro and they are, of course,
22 lower for nuclear which is near the market.

23 And the footprint of the plant itself is
24 measured in kilometres for a hydro plant, and metres for
25 a nuclear plant.

1 Sensitivity to drought conditions, that
2 could be an issues. It's -- it's a high sensitivity with
3 the Hydro plants; it's not -- it doesn't affect nuclear
4 plants.

5 Land settlement issues can be higher in
6 the northern communities, which are mostly native
7 communities, whereas not so high down here.

8 And I mentioned permanent job creation
9 already which is higher for a nuclear plant.

10 Construction time -- and the Hydro
11 information, incidentally, I get from their website, so
12 don't blame me if it's wrong -- eight (8) to nine (9)
13 years, they say, after the construction licence.

14 The CANDU 6E which is the unit that we
15 will recommend is four (4) years, and that's been
16 demonstrated both in Korea, China, and Argentina. Not
17 only can it be built in four (4) years but it can be --
18 be built on time -- or on budget, I mean.

19 Location, location, and location. That's
20 Pinawa. As I mentioned a hundred kilometres from the new
21 converter station.

22 Transmission corridor, I've already
23 mentioned.

24 Winnipeg River passes through the site
25 which could be used to cool the plant and the average

1 flow is about twenty (20) times what's required for a
2 CANDU 6E, which is about 700 megawatts.

3 I've mentioned the nuclear friendly
4 population and quality of life in Pinawa. To demonstrate
5 the quality of life you're -- you're -- you're looking at
6 two (2) people who, rather than move east to Chalk River
7 when the move was taken, I, being a rather old codger,
8 decided it was time to retire and my colleague Blair has
9 found himself a new career in the mining industry. But
10 we -- as we -- this quality of life is -- is very
11 attractive and we are able to attract high quality
12 personnel to a high-tech community.

13 I was once Mayor for eight (8) years and
14 then Blair followed on, and we had -- formed the Nuclear
15 Option Committee of the council. And we wanted to get
16 the -- the surrounding area too, including communities
17 like -- like Lac du Bonnet, Beausejour, Pine Falls, and
18 so forth. And we take -- took various resolutions to --
19 to the meetings, including the large annual meeting of
20 the AMM, which includes about two hundred (200)
21 communities across the province, and passed the shown
22 resolution, which is basically: We should -- the -- the
23 AMM should lobby the Province of Manitoba and Manitoba
24 Hydro to include nuclear in its long-range plan and
25 recognize the Whiteshell lab site as an asset due to the

1 various features which I've just been over. And this
2 resolution passed with minimal opposition.

3 So I'll just review the economic factors.
4 A delay of Bipole 3 would save \$4 billion until such time
5 as new dam is built. That would probably suffice more
6 than half the capital cost of a CANDU 6E nuclear plant,
7 so you -- you got a head start there already.

8 They'll maybe be the five hundred (500)
9 well-paid jobs to operate the plant and this will give
10 you increased tax revenue and restore prosperity to
11 Eastman. For when ACL had -- was going strong there
12 there was \$85 million annual budget, most of which was
13 spent on salaries and materials in Manitoba.

14 There -- I would guess there were high
15 construction costs that one has to consider associated
16 with the remote northern communities compared with
17 constructing something close to a centre where there's a
18 -- a lot of engineering companies and suppliers of
19 various components.

20 And we're not saying you shouldn't build
21 more north -- northern plants -- sorry about that, I'm
22 trying to talk too fast -- we should certainly build more
23 northern plants when and if they are needed, but we feel
24 that we -- that now is the time to look at nuclear.

25 Of course the issues that come up, there's

1 -- there are anti-nuclear groups about and they -- they
2 have two (2) -- two (2) criticisms which always appear,
3 the first is, Oh, those guys don't know what they're
4 going to do with the waste. And, well, first of all it's
5 not waste it's spent nuclear fuel. It has a lot of
6 value. It still contains about 90 percent of the energy
7 in the uranium that hasn't been exploited yet.

8 Some years ago the nuc -- Nuclear Waste
9 Management Organization was created by the federal
10 government and they completed their study as to how we
11 should deal with the waste. And they made a
12 recommendation that it should be stored at a central
13 repository. It should be stored in a re -- retrievable
14 form and at lea -- for at least sixty (60) years until a
15 decision is made on whether or not that spent fuel is
16 going to be recycled and used again.

17 And this plan was accepted by the
18 Government of Canada some time ago, and negotiations are
19 now going on between Nuclear Waste Management
20 Organization and various communities who -- who may wish
21 to be hosts, and these communities are in Ontario and
22 Saskatchewan.

23 They're not negotiating in Manitoba
24 because some -- some years ago, I think, when the -- the
25 waste management program began, a group of cottage owners

1 convinced the provincial government that they should ban
2 the import of nuclear waste into Manitoba. And the NP --
3 the NWMO, seeing this, decided, Well, they won't bother
4 trying to interest communities in this province.

5 The spent fuel will be recovered and
6 stored in central -- central area, as I mentioned. The
7 advantage of recycling has several advantages besides
8 extending the use of -- of the uranium, and, in fact,
9 making nuclear electricity a sustainable resource. It
10 will reduce the long-lived waste that a lot of people
11 worried about. These are actinide elements, isotopes
12 that have long half lives of the order of hundreds of
13 thousands of years.

14 Basically, reburning the fuel with these
15 actinides will cause them to convert to much less
16 radioactive atoms. The raining -- also, the remaining
17 waste will be in smaller volumes, and so, as I mentioned
18 already, faster decay. I should mention that whichever
19 path you choose, the amount of waste is really quite
20 minuscule in terms of volume compared to -- compared to
21 say a coal-fired plant and so forth.

22 So there's no technical reasons for not
23 going ahead with a nuclear plant because we don't know
24 what to do with the waste. We do know that. The other
25 frequently stated -- I was going to call it a fact, but

1 it's not a fact, is that there's no safe level of
2 radiation exposure. It's impossible to prove or disprove
3 that statement because at radiation levels below about 1
4 to 200 millisieverts per year, which is well above
5 anything, as you will see in a minute, that you'll get
6 from a nuclear plant, there is no -- there's no
7 relationship between those doses and -- at all and an
8 increase in radiation exposure.

9 We have over four hundred (400) operating
10 reactors in the world, and there's no reliable evidence
11 of cancer rates being higher near -- near the power
12 reactors. There is one (1), actually, near a German --
13 east German reactor which sees a small increase, but that
14 happens to be an environment which has all sorts of
15 polluting industries in the neighbourhood, and the
16 authors of the report them -- themselves say this is not
17 proof that the -- that the plant is the problem.

18 So the operators -- a little bit farther
19 down there you'll see this sort of set of inequalities.
20 If you look at 1.0 millisieverts, that's what the -- the
21 regulator regulates the -- the plant owner to, that you
22 can not re -- release more than 1 millisievert per year
23 from this plant from background radiation and sources in
24 the land, buildings, and in your own body. In fact, the
25 background radiation is two point seven (2.7), so it's

1 almost three (3) times that.

2 The operators of the plants themselves aim
3 for .01 millisieverts per year. So you can see -- and
4 they -- and they usually attain it. So you can see that
5 extreme care is taken not to release anything dangerous
6 to the environment, and that -- that is supported, as I
7 said, by the four hundred (400) operating plants.

8 I just mentioned Chernobyl. The World
9 Health Organization is stating now that there were about
10 fifty (50) -- there were fifty (50) immediate deaths
11 after that situation, but there's no evidence at all of
12 any increase in cancer rate since then in any of the
13 communities supposedly been contaminated, and that was a
14 situation that could never happen here, for reasons which
15 I won't go into because there's -- I only have fifteen
16 (15) minutes.

17 But I think many of the educated
18 environmentalists are now changing over and they're
19 coming to support nuclear. A couple of examples in
20 Canada are Laurence So -- Laurence Solomon, who is the
21 head of Energy Probe, and is also a writer for the
22 National Post. Patrick Moore was the founder -- one (1)
23 of the Canadian founders, original founders of the
24 Greenpeace and he -- he came around a few years ago and
25 is now an active campaigner for nuclear power.

1 Another one (1) would be James Lovelock,
2 who is a very highly respected environmentalist in -- in
3 the UK who also says that we -- we cannot -- if we're
4 going to reduce greenhouse gasses and -- and -- and meet
5 various targets associated with that, we must have
6 nuclear power and a lot more of it.

7 So it says I'm closing in on fifteen (15)
8 minutes, that I'm finished almost. Should Manitoba
9 continue -- consider nuclear then, well, we have the
10 first two (2) ingredients for a nuclear new build. We've
11 got the suitable site and we've got the willing host
12 community.

13 And as I'll -- as I've already mentioned
14 the diverse -- diversification of supply would enhance
15 Manitoba's flexibility. Forty-six (46) -- or sorry, 96
16 percent hydro and probably about 90 percent coming down
17 from the north, there's a risk there. We saw what
18 happened in Montreal a few years ago when they lost their
19 northern power for a -- a period of time.

20 If it wasn't for the availability of the
21 nuclear power from Gentilly 2, which is Quebec's reactor,
22 it would have been a lot more uncomfortable in Montreal
23 than it was. And with the expected growth and export
24 opportunities, I think having a plant close by to the --
25 the market is, again, another advantage.

1 So in summary, we feel that Hydro should
2 not move forward with its plan without first conducting a
3 comprehensive review of the nuclear option and they can
4 be assisted in this from the industry. And we -- we want
5 the feasibility study, as we've said.

6 We also encourage more movement on a
7 western grid, because Saskatchewan has a lot of coal-
8 fired plants that they want to replace and they're
9 looking at nuclear right now, and they've only got a
10 3,000 megawatt grid, so dumping in 1,000 megawatts of
11 nuclear power is pretty -- a pretty large thing to accept
12 right away.

13 We recommend the CANDU 6E as it's a proven
14 product. We understand how to build it. We understand
15 what it costs. And a more diverse generating system
16 means more reliability.

17 And finally, I think Manitoba Hydro should
18 put the interests of the customer ahead of those of the
19 politicians. And this is the problem every time we go to
20 talk to the politician, well, they -- they don't want to
21 do anything that might be controversial even amongst the
22 minority. And so that I -- we feel that this is one (1)
23 reason we're being held off.

24 Remember, nuclear power is clean, reb --
25 reliable, and sustainable. And if you want to go

1 fishing, come to Pinawa. Read -- read all about us at
2 pinawa.com, and that's my presentation. Thank you.

3 THE CHAIRPERSON: Thank you, sir. I'm
4 just wondering whether you're aware of the developments
5 of nuclear -- or what I think they call small nuclear for
6 the tar sands?

7 DR. LEONARD SIMPSON: Am I still switch -
8 - we -- we can both be switched on at the same time?
9 Yeah. Okay. Well, for a long time we've been talking
10 with the people in the -- I think they're the Oil Sands
11 now, about -- about steam. Of course, one (1) of the
12 problems with getting the -- getting the steam is you
13 have to burn natural gas and that -- that puts more
14 greenhouse gas up there.

15 And I think more importantly, natural gas
16 one (1) day is going to be limited, and there's other
17 more useful things you could do with it. They -- there
18 was a -- there was a conference at Calgary with the
19 Canadian Nuclear Association, I'm secretary of that group
20 right now. We had a special western focus seminar from
21 which some of this material that I put together here
22 comes.

23 And there was a lot of interest in people
24 -- there's a lot of people now building small reactors
25 for remote applications. The -- the difficult thing is

1 going to be able to get a regulator to approve the
2 design, that hasn't happened yet. We had a SLOWPOKE --
3 what we called a SLOWPOKE 2 under development in -- in
4 Whiteshell about fifteen (15) years ago for district
5 heating, which would have been ideal up north.

6 As AECL is prone to do, they -- they drop
7 projects on very short notice, and they dropped this one
8 (1) because the -- the licensing requirements were --
9 were getting too difficult. There was too much you would
10 have to do. The AECL idea was, Oh, just put it up there
11 and let it work and there won't be any need to have
12 somebody watching it.

13 But this has come back, certainly a number
14 of oil companies are interested in the small modular
15 reactors. There's a number of companies in the US that
16 are -- are putting together, and another one (1) in
17 France, and I guess the -- the licensing is going to be
18 the problem with the -- the US regulatory commission that
19 hasn't come up yet in Canada. I would assume if the --
20 the Americans would license one (1), the problem of
21 licencing in Canada would be less onerous, but there --
22 there certainly would be an advantage to that.

23 And even Bob Brennan has said that, I
24 think, in a -- a meeting he had with -- with the mayor
25 here. Yeah.

1 MR. BLAIR SKINNER: I just may add a
2 couple comments. Small modular reactors is -- is
3 something that Manitoba Hydro have in -- have said they
4 would be interested in -- in pursuing, particularly for
5 northern community applications.

6 And last -- the last week in February I
7 was at the Canadian Nuclear Association conference in
8 Ottawa and made contact with a former classmate of mine
9 who is the president of Babcock & Wilcox, and they are
10 interested in promoting a small modular reactor, and I've
11 offered up the Pinawa site as a -- as a good location to
12 develop that technology.

13 MR. ROBERT MAYER: Gentlemen, from the --
14 listening to your presentation, I'm assuming the -- that
15 the reactor you're recommending has got an \$8 billion
16 cost. Am I correct on that?

17 DR. LEONARD SIMPSON: Trying to get a --
18 an accurate cost, basically these costs are negotiated,
19 and I guess a -- a billion dollars -- is it a million or
20 a billion? These numbers...

21 MR. ROBERT MAYER: I gather that number
22 from the fact that you said --

23 DR. LEONARD SIMPSON: No, there -- there
24 was three (3) --

25 MR. ROBERT MAYER: -- you got half --

1 DR. LEONARD SIMPSON: -- there was \$3 to
2 \$10 billion for -- for the reactors. I think the -- the
3 10 billion one was for a twin, which could possibly be
4 either -- anything from 1,500 to 2,000 megawatts.

5 I would guess that the CANDU 6E would
6 probably be somewhere in the region around six (6) to
7 eight (8).

8 MR. ROBERT MAYER: And what capacity
9 would you get?

10 DR. LEONARD SIMPSON: That would be --
11 that would be about seven -- seven hundred (700). If
12 you'd like, I can send you documents that describe the
13 CANDU 6E, if it's --

14 MR. ROBERT MAYER: Seven hundred (700)
15 megawatts?

16 DR. LEONARD SIMPSON: Yes.

17 MR. ROBERT MAYER: Okay. Thank you.

18 THE CHAIRPERSON: Okay. Well, thank you
19 very much, Dr. Simpson and Mr. Skinner. We appreciate
20 your -- your coming, and your very interesting
21 presentation. Thank you again.

22 DR. LEONARD SIMPSON: Thank you for
23 listening.

24

25

(BRIEF PAUSE)

1 THE CHAIRPERSON: Mr. Peters...?

2 MR. BOB PETERS: Yes, thank you, Mr.
3 Chairman.

4

5 MANITOBA HYDRO PANEL:

6 VINCE WARDEN, Resumed

7 DAVID CORMIE, Resumed

8 HAROLD SURMINSKI, Resumed

9

10 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

11 MR. BOB PETERS: Mr. Warden, to just
12 conclude on the matters we were discussing before the
13 lunch hour, when you were present last week during the
14 evidence from KPMG, and I'm going to refer to the
15 transcript, page 3,751, you may have heard the question
16 posed from the Chairman, and I'll select the quote:

17 "Did KPMG and Hydro discuss KPMG
18 possibly meeting with PUB staff and
19 advisors?"

20 And then the response, again selecting
21 part of the response from Mr. Will Lipson, was:

22 "And the feedback we got from Manitoba
23 Hydro was that they were going to meet
24 with you..."

25 Referencing the Board, I suggest:

1 "Confirm the terms of reference, and
2 then our job was only to respond to the
3 terms of reference when we received it
4 from Mr. Brennan on the 9th -- the 10th
5 of November."

6 Do you remember that, sir? Have you
7 followed that in the transcript?

8 MR. VINCE WARDEN: Yes, I do, Mr. Peters,
9 and I think that is consistent with what we were
10 discussing earlier. That is, in terms of the development
11 of the terms of reference, there's no doubt that Manitoba
12 Hydro intended to meet with the Board, the Public
13 Utilities Board, and obtain their input, which they --
14 which I know for a fact they did do.

15 So at the time KPMG was formulating their
16 terms of reference, the question as to whether or not
17 they should meet with the Board in -- in order to
18 finalize those terms of reference wa -- was answered by
19 what Mr. Lipson indicated here at the transcript you just
20 referenced.

21 MR. BOB PETERS: This refers to a time
22 frame as at the time Mr. -- or at the time Manitoba Hydro
23 was sending out its terms of reference of November the
24 9th, November 10th, 2009, sir?

25 MR. VINCE WARDEN: Well, those are the

1 dates that are indicated there, Mr. Peters. I think the
2 point being that Manitoba Hydro did obtain the input of
3 the Public Utilities Board in developing the terms of
4 reference subsequent to those terms of reference being
5 developed.

6 And I think as I responded to your early -
7 - earlier in cross-examination that at no time did
8 Manitoba Hydro suggest that KPMG should not contact the
9 PUB or it's advisors in the performance of their
10 assignment.

11 MR. BOB PETERS: That answer then, Mr.
12 Warden, suggests that it was KPMG's decision and KPMG's
13 decision alone as to whether they did or did not contact
14 the Public Utilities Board staff or advisors?

15 MR. VINCE WARDEN: Yes, absolutely.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Help me refresh the
20 memory of the Board, Mr. Warden, that in terms of the
21 final decision to exclude from the KPMG engagement letter
22 of December 15th, 2009, found at Tab 3 of PUB Exhibit 17,
23 the decision to exclude reference to the PUB's Order 32
24 of '09 and the decision to exclude any reference to
25 meeting with PUB staff and/or advisors, you're not aware

1 as to who made that final decision?

2 MR. VINCE WARDEN: No, I -- I'm not aware
3 specifically, although my understanding is that as a
4 result of the receipt of the cease and desist letter,
5 which Mr. Lipson I believe referenced in his testimony,
6 the objective in -- with -- with respect to the letter
7 dated December the 15th was to make the scope of work in
8 the terms of reference as specific as possible in order
9 to fulfill their engagement. But it was -- it would have
10 -- in my judgment, it would have been their decision to
11 res -- remove the res -- reference to Board Order 32/'09.
12 It certainly was not at the direction of Manitoba Hydro.

13 MR. BOB PETERS: But Manitoba Hydro
14 concurred with that decision, did they not?

15 MR. VINCE WARDEN: Well, I don't think
16 there was specific concurrence with respect to the
17 decision to remove reference to 32/09. Manitoba Hydro
18 did ultimately confirm with the scope of work and terms
19 of reference as -- as referenced in the December the
20 15th, 2009 letter.

21 MR. BOB PETERS: And Manitoba Hydro
22 confirmed the scope and the terms of reference by signing
23 off on the December 15th, 2009 letter from KPMG?

24 MR. VINCE WARDEN: Yes. I -- I might
25 just add, Mr. Peters. I did have the opportunity to

1 discuss this with Mr. Brennan over lunch and he certainly
2 emphasized to me it was never the intent to prevent in
3 any way KPMG from meeting with the Board and its advisors
4 during the course of their engagement.

5 MR. BOB PETERS: Thank you for that, Mr,
6 Warden, and thank you for following that up over the
7 lunch hour.

8 I want to turn to you with a topic that I
9 think you and I also thought we might have been finished
10 with last time, and that's Bipole 3, as tangentially
11 referenced by Dr. Simpson and Mr. Skinner.

12 I think at last word, Mr. Warden, the
13 capital expenditure forecast is sitting at \$2.2 billion
14 for this transmission project?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And Manitoba Hydro is
17 undertaking an independent review of that proposal?

18 MR. VINCE WARDEN: That's correct.

19 MR. BOB PETERS: And that independent
20 review, it's expected to be completed in -- is it March
21 or April of this year?

22 MR. VINCE WARDEN: The target was to
23 complete that review in March.

24 MR. BOB PETERS: And after it's complete,
25 Manitoba Hydro has undertaken to file a independent

1 review as soon as possible with this Board?

2 MR. VINCE WARDEN: The plan, as I
3 understand it, is to take the results of the review, or
4 recommendations that are associated with the review, to
5 the audit committee of the Board of Manitoba Hydro, and,
6 subsequently, to the Board of Manitoba Hydro, at which
7 time, yes, it would be available for filing subject to
8 their -- the Board's approval.

9 MR. BOB PETERS: Does that mean sometime
10 in April it would be expected to be filed with this
11 Board?

12 MR. VINCE WARDEN: Yes, although I think
13 -- we certainly appreciate the Board's interest in this
14 matter. I think there is some discussion as -- as to
15 whether or not it could be released to this Board
16 following the audit committee meeting on March the 14th.

17 MR. BOB PETERS: And that decision has
18 not yet been made?

19 MR. VINCE WARDEN: No. There's still
20 information yet to be compiled to present to the audit
21 committee, and discussion will take place at the meeting
22 on the 14th. Our plan is to take our twenty (20) year
23 financial outlook to the audit committee on the 14th.
24 And we do have a commitment to file that outlook with the
25 Board following that meeting.

1 MR. BOB PETERS: So this Board will know,
2 I suppose, in a matter of ten (10) days whether or not
3 it's going to have receipt of that not only twenty (20)
4 year forecast but also the update on Bipole 3?

5 MR. VINCE WARDEN: We should have a good
6 indication by that time, yes.

7 MR. BOB PETERS: All right. And since we
8 last talked then, Mr. Warden, a new document has made its
9 way into the public record providing some capital costs
10 of Bipole 3 being about \$4.1 billion. You're aware of
11 that? And I just draw your attention to Tab 70, 7-0, in
12 PUB Exhibit 18, which is the third book of documents.
13 And it's found as the last page in Tab 70 at page 182 of
14 the total book of documents, Volume III.

15

16 (BRIEF PAUSE)

17

18 MS. PATTI RAMAGE: Mr. Peters, could you
19 perhaps help and give us the source of the document.
20 It's -- it's not immediately familiar.

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: Well, I was going to ask
24 Mr. Warden if it was a Manitoba Hydro document. But I'm
25 looking at -- at Tab 70 of the PUB Exhibit 18 and the top

1 right-hand corner, page 182. Have you located the
2 document?

3 MR. VINCE WARDEN: Was this perhaps, Mr.
4 Peters, an extract from the presentation made by Mr.
5 Derry? This is not --

6 MR. BOB PETERS: No. No.

7 MR. VINCE WARDEN: -- a document that was
8 filed by Manitoba Hydro, that I'm aware of. If -- if we
9 filed it, I -- I'm surprised.

10 MR. BOB PETERS: Well, I'm sorry. I'm
11 now understanding Ms. Ramage's question to me. No, this
12 ma -- this document was found on the public record as a
13 result of media reports and a link in the media reports
14 to this very document. I can check the media reference,
15 but I believe it was one (1) of the two (2) daily
16 newspapers.

17 MR. VINCE WARDEN: Well, all I can say,
18 Mr. Peters, is this is not an official approved document,
19 certainly not an approved document of Manitoba Hydro.

20 MR. BOB PETERS: All right. And I was
21 coming to that, sir. At first blush though, you're not
22 suggesting it's not a document that was -- wasn't
23 prepared at Manitoba Hydro?

24 MR. VINCE WARDEN: Well, you know, I have
25 no reason to doubt the reference to prepared by

1 Transmission Business Unit. However, it's not a document
2 that I'm personally familiar with, and not one (1) that -
3 - that I've reviewed.

4 MR. ROBERT MAYER: Mr. Warden, the
5 document -- and -- and this has been confusing me since
6 the number 4 billion came out, each time -- well, not
7 each time, but when I think I heard Mr. Brennan on the
8 radio saying, Well, the 4 billion would be -- would
9 include converter stations. What I'd really like to know
10 is when we talk about Bipole 3, I recognize we need
11 converter stations, so I -- I -- that's not my issue.

12 But when we're talking about east-side or
13 west-side Bipole 3, we need converter stations in either
14 event, so that doesn't concern me. But when we talk
15 about the cost of Bipole 3, do you include the cost of
16 one (1) or both of the new proposed converter stations?

17 MR. VINCE WARDEN: Yes, the \$2.2 billion
18 number that's on the record and that is the official
19 approved estimate of Manitoba Hydro does include the
20 converter stations.

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: Mr. Warden, do I take
24 from your answers that -- that you personally have not
25 seen, and I use that in the personal way, you've never

1 seen this document before?

2 MR. VINCE WARDEN: That's correct. I've
3 -- I've never reviewed this document before. I -- I'm --
4 yeah, I haven't. I -- of course I'm familiar with the
5 \$4.1 billion number that's been referenced in -- in the
6 media and elsewhere. This is what is currently under
7 review though, to determine what that number is,
8 something that Manitoba Hydro can rely on.

9 MR. BOB PETERS: And so while you're not
10 disputing that this was prepared by Manitoba Hydro's
11 Transmission Business Unit, it is not an official
12 document as far as Manitoba Hydro is concerned in terms
13 of the costs of Bipole 3?

14 MR. VINCE WARDEN: Well, I -- I have no
15 reason to disbelieve the source that's referenced here.
16 But again, it's not an official approved estimate of
17 Manitoba Hydro.

18 MR. BOB PETERS: When you say you're
19 aware of the \$4.1 billion number, that's as a result of
20 the previous media attention devoted to Bipole 3 and the
21 escalation of costs. Would that be fair, Mr. Warden?

22 MR. VINCE WARDEN: Yes, and there's been
23 considerable internal discussion about the higher number
24 and -- and the implications of that.

25 MR. BOB PETERS: Do you know whether or

1 not this document and this estimate has been provided
2 through to the executive other than yourself?

3 MR. VINCE WARDEN: It definitely has not
4 gone to executive committee. Whether any of the other
5 executive are familiar with this document, I -- I -- I
6 don't know.

7 MR. BOB PETERS: Mr. Cormie, Mr.
8 Surminski, because you have microphones, have either of
9 you seen this document prior to today?

10 MR. DAVID CORMIE: This is the first
11 time, Mr. Peters.

12 MR. HAROLD SURMINSKI: Same here, I have
13 no knowledge of it.

14 MR. BOB PETERS: Rare is the day I get
15 something before anybody else knows about it, but is this
16 the kind of information, Mr. Warden, that Manitoba Hydro
17 -- you would have expected would have made its way
18 through the ranks and to Manitoba Hydro's executive?

19 MR. VINCE WARDEN: Well, the format is
20 certainly one (1) that would ultimately make its way
21 through there, but the vice-president responsible for
22 transmission has not advanced that through to executive
23 committee for approval. And -- and I can't even speak to
24 whether the vice-president for transmission is -- is
25 familiar with this document. I don't know that.

1 MR. BOB PETERS: No, and I -- I accept
2 that, and I thank you, Mr. Warden. I want -- I want to
3 make sure that that's clear. When one looks at the
4 purported date on the document, is that purported date
5 October 5 of 2010? Is that how I read the Manitoba Hydro
6 date stamp?

7 MR. VINCE WARDEN: Yes.

8 MR. BOB PETERS: Would this have been a
9 document that should have been considered at the time the
10 capital expenditure forecast of 2010 was being prepared?

11 MR. VINCE WARDEN: No, the financial
12 forecast would have gone to the -- the Board of Manitoba
13 Hydro the month before, so in November of 2010 -- or, I -
14 - I'm sorry, that's October 2010.

15 Yeah, in the normal course of things, that
16 -- this -- this would have typically been considered,
17 although our cutoff date for getting capital into the
18 financial forecast is -- is probably a month or two (2)
19 ahead of this -- this date, just because of the logistics
20 of putting the forecast together.

21 MR. BOB PETERS: Sure, but if there was a
22 major revision, that might be something that would be
23 coming up as a one-off arrangement where there needed to
24 be adjustment?

25 MR. VINCE WARDEN: That's right.

1 MR. BOB PETERS: And this Bipole --
2 Bipole 3 never received -- there was no one-off
3 adjustment made for Bipole 3 in the preparation of CEF-
4 10?

5 MR. VINCE WARDEN: There was not, no.

6 MR. BOB PETERS: And what you're telling
7 this Board is that any figures supporting the \$4.1
8 billion didn't make it through to executive at the time
9 capital expenditure forecast 2010 was being approved?

10 MR. VINCE WARDEN: That's right.

11 MS. PATTI RAMAGE: Mr. Peters, if I could
12 just interject, and -- and Mr. Warden's been very
13 cooperative here, and I'm not wanting to -- to change
14 that in any way, but I just wanted to put on the record
15 that we don't know the source of this document for sure,
16 so I -- I did hear you reference, and I -- I'm not
17 suggesting anything untoward as -- of Manitoba Hydro date
18 stamp or anything.

19 We -- we just don't know exactly -- nobody
20 on the panel can really confirm any of those dates.

21 MR. BOB PETERS: I -- I accept Ms.
22 Ramage's qualifications, but I suppose there is a
23 tracking number on the bottom left-hand corner that would
24 allow Manitoba Hydro to investigate to see if this very
25 document is in the Manitoba Hydro database, would it not?

1 (BRIEF PAUSE)

2

3 MS. PATTI RAMAGE: It -- it might be
4 equally as helpful if -- if Board counsel could tell us
5 where it came from, and then we could track it back that
6 way.

7 MR. BOB PETERS: As simple as it was, I
8 was reading a newspaper article online, and I clicked on
9 a link, and this is what came up, and I just don't know
10 if it was the Press or the Sun.

11 THE CHAIRPERSON: And was there not
12 comments from someone in Manitoba Hydro that referred
13 directly to this by pointing out that they thought the
14 contingency allowance for one (1) seemed too high, which
15 suggests that you'd have to see this paper to know that
16 there was a contingency column.

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: There was reference in -
20 - in the newspaper article, though it's a bit of a blur
21 to me, Mr. Chairman, that did quote this \$4.1 billion
22 number, and it also did talk about a contingency number,
23 and the validity of it, but I'll leave that to Manitoba
24 Hydro to research, and then --

25 MR. VINCE WARDEN: Well, Mr. Peters, to

1 be clear, we're not suggesting that this document was
2 fabricated in any way. It appears to be a legitimate
3 document produced within Manitoba Hydro.

4 I think the point that's being made though
5 is that it just hasn't reached the point where it -- it
6 is -- has been approved as an official document of
7 Manitoba Hydro.

8 MR. BOB PETERS: What does it take to
9 become an official document then, Mr. Warden --

10 MR. VINCE WARDEN: Well --

11 MR. BOB PETERS: -- assuming it is in
12 Manitoba Hydro's domain, and assuming it is a legitimate
13 document that is prepared by individuals in the
14 transmission business unit.

15 MR. VINCE WARDEN: Well, I -- I expect
16 that that will be the result of the review that is
17 currently underway.

18 MR. BOB PETERS: And the review that's
19 underway, when the Board understands it's independent,
20 does that mean independent of Manitoba Hydro?

21 MR. VINCE WARDEN: Yes.

22 MR. BOB PETERS: It means it'll be done
23 by an outside engineering firm?

24 MR. VINCE WARDEN: That's correct.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Then Mr. Warden, to
4 conclude on this, if, hypothetically, the cost of Bipole
5 3 escalates, what impact will that have on Hydro's
6 preferred development plans?

7 MR. VINCE WARDEN: Well, as we've stated
8 many times, Bipole 3 isn't required for reliability
9 purposes. So on that basis it should have no -- no
10 impact on the preferred development plan.

11 THE CHAIRPERSON: Mr. Warden, are you
12 suggesting that if the number was 6 billion or 8 billion
13 it would have no effect? Like that, in other words the -
14 - the -- the requirement for more dependability, if you
15 like, exceeds whatever the number might be?

16 MR. VINCE WARDEN: Well, I think I
17 interpreted Mr. Peters' question to be the preferred
18 development plan compared to the alternative development
19 plan. The alder -- alternative development plan still
20 has Conawapa, so Bipole 3 would be required to -- under
21 both scenarios.

22 There re -- there is a point, though, at
23 which, you know, if it goes to 6 billion, 8 billion, 10
24 billion, you say well, of course we can't proceed, let's
25 look at something different, maybe it's nuclear, may --

1 maybe it's combustion turbines. But at -- at -- at this
2 time the bipole is needed and needed quite urgently for
3 reliability.

4 THE CHAIRPERSON: But the number 4.1
5 billion which is stated on this sheet, wherever it came
6 from, it's not a number high enough to bring the
7 Corporation to examine the overall approach.

8 MR. VINCE WARDEN: We are -- we are
9 definitely examining the overall approach. You know,
10 it's just the responsible thing to do, to know what the
11 options are. So one (1) of the options would be an all-
12 gas alternative.

13 THE CHAIRPERSON: Thank you, sir.

14 Mr. Peters...?
15

16 CONTINUED BY MR. BOB PETERS:

17 MR. BOB PETERS: Mr. Warden, the Chairman
18 was probably ahead of me on some of those questions. At
19 \$2.1 billion the cost to hit the income statement in the
20 year after in-service is approximately 200 million a year
21 in 2019, correct?

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: And if we -- if we turn
24 to Tab 71 in that Volume III of the book of documents and
25 we look at Manitoba Hydro's response to PUB Manitoba

1 Hydro First Round 97 -- again I'm looking in the new
2 Exhibit PUB-18, we see that Manitoba Hydro has done some
3 costs and the year after in-service costs for Bipole 3
4 according to Manitoba Hydro is -- could be as much as
5 \$225 million a year, correct?

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: And should the costs of
8 the bipole double, in essence the annual carrying costs
9 or the cost to hit the impa -- the income statement in
10 the first year after in-service, that essentially doubles
11 as well?

12 MR. VINCE WARDEN: Yes.

13 MR. BOB PETERS: And --

14 MR. VINCE WARDEN: Sorry, Mr. Peters, I
15 should qualify that --

16 MR. BOB PETERS: Sure.

17 MR. VINCE WARDEN: -- somewhat. The --
18 it doesn't necessarily mean you take the 225 million and
19 multiply it times two (2). The -- the OM&A -- you'd have
20 to look at the components of the expenses and -- and come
21 to a conclusion on that, but for purposes of our
22 discussion it's going to be roughly double.

23 MR. BOB PETERS: Be close to \$400 million
24 a year?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: All right. And Manitoba
2 Hydro actually did the calculation for the Board. If we
3 turn back to Tab 70 -- 70 in Board counsel's third book
4 of documents, PUB Exhibit 18, the Board will find
5 Manitoba Hydro's response to PUB Manitoba Hydro Second
6 Round 90B, where the anticipated annual interest
7 appreciation OM&A costs associated with Bipole 3 after
8 in-service were provided in a schedule.

9 You have that document as well?

10 MR. VINCE WARDEN: Yes, I see that.

11 MR. BOB PETERS: And, Mr. Warden, this
12 schedule was prepared on the assumption that the capital
13 costs were the \$2.2 billion for Bipole 3.

14 Is that correct?

15 MR. VINCE WARDEN: Yes.

16 MR. BOB PETERS: And so the Board will
17 note that in 2019 the annual cost is approximately \$217
18 million, based on the \$2.2 billion capital cost?

19 MR. VINCE WARDEN: Yes.

20 MR. BOB PETERS: Mr. Warden, there's a
21 point here that this might help the Board understand. If
22 we -- if we look at 2019, and we add those up and it's
23 217 million a year, and we do the same exercise out in
24 2029, we get \$180 million a year.

25 You'd accept my math on that, sir?

1 MR. VINCE WARDEN: Yes.

2 MR. BOB PETERS: And so while the costs
3 of Bipole will be on the income statement at about --
4 between 9 and 10 percent for that first year, when you go
5 out a further ten (10) years there's still going to be
6 over 8 percent of annual costs on the income statement.

7 Would you accept that, subject to -- to
8 verification of my math?

9 MR. VINCE WARDEN: Yes, I would.

10 MR. BOB PETERS: All right. Now, what we
11 had talked about previously is that when you have
12 Keeyask, when you have Conawapa, when you have Bipole 3,
13 over time, in essence, the -- the payment on the
14 principal causes the payment on the interest to go down,
15 to use an analogy to a mortgage.

16 And that's what you're attempting to show
17 in this document as well, is that after ten (10) years
18 there is a reduction in the annual costs attributable to
19 carrying Bipole 3?

20 MR. VINCE WARDEN: Yes.

21 MR. BOB PETERS: Now, is the rate of
22 decline, as between Bipole 3, expected to be comparable
23 to the rate of decline that would happen, say for a
24 Keeyask or a Conawapa or a Wuskwatim?

25 MR. VINCE WARDEN: Yes, I thi -- I would

1 expect the rate of decline to be similar. There's --
2 there's different service lives for transmission versus
3 generation, but the principal's still the same, so the --
4 the rate shouldn't be too different.

5

6

(BRIEF PAUSE)

7

8 MR. BOB PETERS: Historically, when --
9 you were talking about it earlier, Mr. Warden, was Bipole
10 3 initially contemplated for the transmission to bring
11 Keeyask down the east side of the province?

12

Was that its origin, do you recall?

13

14 MR. VINCE WARDEN: Yes, that was the --
15 in the long-term plans, from many years back.

16

17 MR. BOB PETERS: I didn't say I
18 personally recalled it. I was -- but it seemed to me
19 that that would -- that was intuitively the sense when I
20 looked back at the capital expenditure forecast, that it
21 --

22

23 MR. ROBERT MAYER: I personally recall
24 that.

25

CONTINUED BY MR. BOB PETERS:

26

27 MR. BOB PETERS: Oops. But -- but when I
28 looked back at the capital expenditure forecasts it

1 seemed to tie in with the development plans way back in
2 the early 2000s, maybe 2003.

3 MR. VINCE WARDEN: Yes, it would have
4 been, even prior to that, probably.

5 MR. BOB PETERS: Mr. Warden, I was trying
6 to get away from Bipole 3, but -- trying to watch some
7 television last night; and am I correct that I saw
8 Manitoba Hydro has recently launched a media campaign in
9 respect of Bipole 3?

10 MR. VINCE WARDEN: Yes, there is -- there
11 is a media -- yes, it's a campaign with respect to
12 transmi -- the -- the building of transmission in
13 Manitoba.

14 MR. BOB PETERS: When you say,
15 "campaign," you're talking it's not only a television
16 commercial, but it's in newspapers and maybe radios?

17 MR. VINCE WARDEN: Yes, that same ad that
18 you would have seen on television last night is appearing
19 in newspapers as well.

20 MR. BOB PETERS: All right. I suggested
21 radios, but maybe it's not on the radio. Or I don't
22 know.

23 Do you know?

24 MR. VINCE WARDEN: I personally haven't
25 heard it on the radio. It could very well be. But --

1 did -- did I say radio, or did you --

2 MR. BOB PETERS: No, I -- I suggested --

3 MR. VINCE WARDEN: Oh, okay.

4 MR. BOB PETERS: -- it, Mr. Warden, not
5 you, so don't -- I'm not holding you to that.

6 But in any event, the -- the advertisement
7 that I saw, and I'm pretty soon going to turn into a
8 witness myself, but the -- the advertisement -- there's
9 one (1) and only one (1) that you're aware of on the
10 television?

11 MR. VINCE WARDEN: Well, I believe it's
12 part of a series of advertisements that will appear on
13 television and in other media.

14 MR. BOB PETERS: In addition to -- is
15 there any other media buys as part of that that you're
16 aware of, other than the television and the newspapers?

17 MR. VINCE WARDEN: I -- I believe there's
18 a plan, if -- if it's not in place already, to have some
19 billboard advertisements as well.

20 MR. BOB PETERS: And the ad focusses on
21 Bipole 3? At least certainly the first one in the series
22 of ads focusses on Bipole -- Bipole 3?

23 MR. VINCE WARDEN: Yes, it does.

24 MR. BOB PETERS: Can you explain to the
25 Board, Mr. Warden, why Manitoba Hydro monopoly is

1 advertising Bipole 3?

2 MR. VINCE WARDEN: Well, I think it's --
3 it's a conscious effort on Manitoba Hydro's part to
4 inform the public more so -- perhaps more so than we have
5 in the past about some of the things that are important
6 to Manitoba Hydro.

7 We -- after what we've been through this
8 past couple of years, we recognize more than ever the
9 value of image. And this is part of making sure there --
10 that the public has an opportunity to comment on the
11 activities of the Corporation, and to realize the
12 importance of -- of Manitoba Hydro to -- to the province
13 and to the -- the well-being of its citizens.

14 MR. BOB PETERS: At whose request was
15 this media campaign, respecting Bipole 3, launched?

16 MR. VINCE WARDEN: I'm not sure that it
17 was at a request, Mr. Peters. I -- I believe it's just
18 part of our -- as I mentioned, it's part of the strategic
19 planning of Manitoba Hydro to be as open as we can be
20 with -- with customers and to make sure that they have
21 the opportunity to be informed about some pretty
22 important events.

23 MR. BOB PETERS: All right. I -- I can
24 take that answer, Mr. Warden. But you've told this Board
25 repeatedly that Manitoba Hydro's plans, I guess subject

1 to the escalation you and the Chairman talked about a few
2 minutes ago, it plans to build Bipole 3, come what may,
3 and consumers aren't going to have a choice as to whether
4 they -- whether Manitoba Hydro builds Bipole 3 or doesn't
5 build Bipole 3.

6 Isn't that also correct?

7 MR. VINCE WARDEN: Well, I think
8 consumers always have the option of expressing their
9 views, and in order for them to do so in a meaningful and
10 informed way they have to have that information. That's
11 part of what this is about.

12 MR. BOB PETERS: All of the -- the real
13 information about Bipole though would be on the Manitoba
14 Hydro website, would it not; not is a relatively short
15 television commercial?

16 MR. VINCE WARDEN: Well, it's --
17 absolutely, there's more information on the website, but
18 the commercial got your attention, and -- and perhaps it
19 would get others as well, so.

20 MR. BOB PETERS: It did that. How much
21 are the consumers paying for this media campaign, Mr.
22 Warden?

23 MR. VINCE WARDEN: I don't know the
24 answer to that. If -- if it's important though, we can --
25 - we can find that out.

1 MR. BOB PETERS: Is it important to
2 Manitoba Hydro to know how much it's costing for this
3 campaign?

4 MR. VINCE WARDEN: Oh, Manitoba Hydro
5 certainly knows. I don't have that number immediately
6 available.

7 MR. BOB PETERS: Well, I suppose then you
8 could undertake, if you would, to provide to the Board,
9 Manitoba Hydro's media budget related to the Bipole 3
10 transmission line media campaign that we've been talking
11 about.

12 Would that be acceptable?

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

14

15 --- UNDERTAKING NO. 81: Manitoba Hydro to provide its
16 media budget related to the
17 Bipole 3 transmission line
18 media campaign

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: And if it's -- the
22 objective is to -- one (1) of the objectives you put
23 forward was to inform the consumers, I think.

24 Have I got that right, Mr. Warden?

25 MR. VINCE WARDEN: Yes.

1 MR. BOB PETERS: There's no information
2 in the advertisement about the costs or the route
3 selected, is there?

4 MR. VINCE WARDEN: Well, as you pointed
5 out, Mr. Peters, the information is very high level.
6 It's -- what appears on television and in the newspaper,
7 is more to attract attention. And there -- there -- I
8 believe there are -- are references to the website, if --
9 if customers want to get more information.

10 MR. BOB PETERS: Mr. Surminski, Mr.
11 Cormie, you can help us on Bipole 3 here. Am I correct
12 in recalling that the output of Keeyask and Conawapa is
13 expected to be about a thousand gigawatt hours a month?

14

15 (BRIEF PAUSE)

16

17 MR. DAVID CORMIE: That sounds right, Mr.
18 Peters.

19 MR. BOB PETERS: Am I also correct that
20 the energy transmitted per month on Bipole 3 is estimated
21 to be 1,000 gigawatt hours after Keeyask and Conawapa
22 come in service?

23 MR. DAVID CORMIE: That sounds correct,
24 Mr. Peters.

25 MR. BOB PETERS: And am I correct that

1 the energy transmitted from Keeyask and Conawapa will be
2 destined, at least notionally, for the American
3 counterparties, with whom you have presently term sheets?
4

5 (BRIEF PAUSE)
6

7 MR. DAVID CORMIE: A portion will go to
8 serve Manitoba load, Mr. Peters, and a portion will go to
9 serve the export markets, depending on how much surplus
10 there is off the generation that's coming from the rest
11 of our system. So it -- it is necessary that we have new
12 transmission outlet for Keeyask or Conawapa. Without the
13 transmission line, we wouldn't be building the
14 generation.

15 So it is a prerequisite, but it is being
16 built regardless of whether we build Keeyask or Conawapa.
17

18 (BRIEF PAUSE)
19

20 MR. BOB PETERS: When we get to that
21 discussion about reliability, Mr. Cormie, and we -- we
22 may have that some day, the -- the acknowledgment by
23 Manitoba Hydro is that a routing down the east side would
24 carry more capacity than the -- than down the west side,
25 in the event Bipoles 1 and 2 went down?

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: It's dependent upon
4 whether we have parallelling capabil -- capability on --
5 on Bipole 3, Mr. Peters, and I don't think we've decided
6 that yet.

7 MR. BOB PETERS: Well, I think Manitoba
8 Hydro has decided in their answers to the Information
9 Requests that the energy that can be transmitted down
10 Bipole 3 would be greater on the east side of the
11 province than on the west; and it did have, I believe,
12 something to do with the parallelling issue that you
13 spoke of, of which I quite frankly don't understand.

14 But presently that is the understanding
15 and the intention?

16 MR. HAROLD SURMINSKI: Mr. Peters, if --
17 I think I had testified earlier that parallelling is --
18 is not possible on -- on the west side, and as a result,
19 the -- the flow will be -- flow from northern generation
20 will be reduced. But that's under contingency operations
21 where -- where there is an outage of the existing
22 corridor for 1 and 2.

23 MR. BOB PETERS: All right. And then --
24 and use my words, Mr. Surminski: Bipole 3 is more
25 reliable down the east side than it is on the west side

1 when 1 and 2 are out, because it can carry more energy to
2 southern Manitoba.

3 MR. HAROLD SURMINSKI: Yes, correct. It
4 has a greater capability on the east side.

5 MR. BOB PETERS: That greater capability
6 can be quantified if we attach a price to the energy that
7 would otherwise have to be imported, could we not?

8 MR. HAROLD SURMINSKI: Yes, but this is
9 under contingency operations and you'd have to estimate
10 the duration of the outage. This is a very rare event.
11 We don't expect outages for any duration of time.

12 MR. BOB PETERS: Yeah, but it's -- but
13 it's Manitoba Hydro who's suggesting reliability is the
14 driving factor, and I'm suggesting that reliability will
15 be most important if Bipoles 1 and 2 go down, heaven's
16 forbid.

17 But if they did go out for a three (3)
18 month outage, there could be -- a lot of additional
19 capacity would have come down on east-side routing than
20 on the west-side routing, correct?

21 MR. VINCE WARDEN: But, Mr. Peters, we're
22 not debating east-side versus west-side. East-side is
23 not available to Manitoba Hydro. We're building west
24 side if we build Bipole 3.

25 MR. BOB PETERS: I understand your point.

1 My point was I'm dealing with reliability. If we want to
2 quantify the reliability, Mr. Warden, we could put a
3 price tag on the additional costs of having the west-side
4 route compared to what it would have been had there been
5 a different routing down the east side. And that
6 reliability has a -- has a value.

7 MR. VINCE WARDEN: But we don't know what
8 the costs would have been down the hypothetical east-side
9 because we were just not at the point of -- of developing
10 those estimates.

11 MR. BOB PETERS: But you do know the
12 costs of importing energy that you will have to -- would
13 have had to import, but for the reliability of Bipole 3,
14 where it could carry more down one (1) side than the
15 other of the province?

16 MR. VINCE WARDEN: But it -- it --
17 there's -- Mr. Peters, it's kind of a -- well, it is a
18 complicated situation, because Bipole 3 coming down the
19 west-side could be built to a higher capacity and
20 therefore it -- it could provide more reliability than
21 some other alternative.

22 MR. BOB PETERS: You might be telling me
23 something for the first time that I hadn't heard or read,
24 Mr. Warden. But you're suggesting that the \$2.2 billion
25 present budget for Bipole 3 could be increased to

1 increase the capacity on that transmission line?

2 MR. VINCE WARDEN: Yes, that's one (1) of
3 the options.

4 MR. BOB PETERS: Is that being studied as
5 part of this independent study that's gone out to the
6 engineering firm?

7

8 (BRIEF PAUSE)

9

10 MR. VINCE WARDEN: I don't believe that's
11 within the terms of reference of this review, Mr. Peters,
12 but that -- that's subject to check.

13 MR. ROBERT MAYER: I was always of the
14 opinion that if you really wanted to convince somebody,
15 you ought to do something about reliability on your
16 Bipole lines. Somebody ought to just drive down number 6
17 as you pass underneath those -- both of those Bipole
18 lines on six (6) occasions. And, literally, when we talk
19 about going out, I saw a list of risks of doing some
20 damage to the Bipole lines, you'd better add one (1) --
21 one (1) semi in the wrong spot. You'll literally go
22 under those Bipole lines a lot.

23 And as you approach Winnipeg and watch the
24 transmission lines coming in and out of Dorsey -- and --
25 and I live in Northern Manitoba, those lines go down I

1 got more power than I ever know what to do with. But if
2 I lived in Winnipeg I'd really like to have an
3 alternative somewhere else.

4 MR. DAVID CORMIE: Mr. Mayer, I -- I
5 think your observations are -- are -- are absolutely
6 correct. The design of Bipole 1 and 2, the routing was
7 done at a day where Bipole 3 was going to follow almost
8 immediately. And un -- unfortunately, the decision to
9 build Bipole 3 was -- has been delayed for many, many
10 years, way past the time then it -- that it should have
11 been built for reliability.

12 So, the -- the -- the location of the two
13 (2) Bipoles side-by-side and -- and having that situation
14 go on for almost thirty (30) years now has -- has -- has
15 had risks associated with it. Unfortunately, in the cer
16 -- in the times that it did go down we were able to keep
17 the lights on with -- with -- with imports.

18 But that risk has always been there. And
19 it was thought that that risk would be minimal because
20 the time between Bipole 2 coming in and Bipole 3 coming
21 in was it tended to be very short, and we were -- we were
22 manage -- we were prepared to manage that -- that risk
23 during that time, but subsequent events caused a delay in
24 Bipole 3. So it -- it's clear that that is -- it needs
25 to be addressed and it needs to be addressed urgently.

1 MR. ROBERT MAYER: And even when you did
2 have that unfortunate incident, you got to consider us
3 all damn lucky that it took it out right next to a
4 highway, not somewhere between the river where it first
5 joins number 6, which the name will come to me in a
6 moment, and where it leaves the Gillam area.

7 I mean, if you -- if we got whacked, which
8 I'm assuming could have happened, we -- it was a tornado
9 as I understand it. If you got whacked somewhere in the
10 middle of the bush I think we'd have been looking at
11 significantly more time to fix it.

12 MR. DAVID CORMIE: And -- and you're
13 absolutely right. And in the last month, I -- I don't
14 know if you noticed in the paper, we've had had some
15 difficulties in the area just south of Kelsey that it's
16 been very difficult for staff to get in there to ensure
17 that those lines aren't damaged further by the ice on the
18 Nelson River. So it is -- it is a huge issue, and that -
19 - that just reinforces the urgency.

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: Mr. Warden, has Manitoba
23 Hydro prepared a net present value study of the benefits
24 of wes -- of Bipole 3 as -- on its proposed routing?

25 MR. VINCE WARDEN: No. As we've just

1 been discussing, Bi -- the Bipole 3 is being built for
2 reliability reasons, so there's no net present value
3 study that's -- that's relevant to that -- to that
4 decision.

5 MR. BOB PETERS: Can you indicate, Mr.
6 Warden, what advantages Manitoba Hydro sees with the
7 current west-side routing as over the previously looked
8 at east-side routing?

9

10 (BRIEF PAUSE)

11

12 MR. VINCE WARDEN: Mr. Peters, we need
13 Bipole 3 for reliability, number 1. It's -- it's urgent,
14 as Mr. Cormie just indicated. Every day that passes it's
15 more -- more urgent as that equipment ages, and an outage
16 could be disastrous for the province.

17 We -- we need the Bipole. The east route
18 was not available to us. We looked at the next best
19 option, and that was the west -- western routing. Are
20 there advantages to the western routing? Well, it -- it
21 gets the line built. That's -- that's the advantage.
22 There's no real advantage otherwise being on the west
23 side of the province that I'm aware of.

24 MR. BOB PETERS: If -- if we go back to
25 Mr. Cormie's discussion with the Vice-Chair and

1 reliability was an urgent concern, why didn't Manitoba
2 Hydro put in a combined-cycle combustion turbine, at
3 least in the short-term, up until now?

4

5

(BRIEF PAUSE)

6

7 MR. VINCE WARDEN: Well, as -- as Mr.
8 Rose indicated in his testimony, Manitoba Hydro has
9 access to a huge fleet of combined -- well -- well,
10 sorry, thermal generation south -- south of the border.
11 So the important thing for Manitoba Hydro is to get
12 access -- as much access to -- to that fleet as we
13 possibly can.

14 That's what the sale scenario does for us.
15 It -- it includes more transmission between Manitoba and
16 -- and that huge fleet of thermal generation, allows us
17 to respond to emergencies. So it would seem to make
18 little sense to be buil -- building more thermal in
19 Manitoba when -- when we are right next door to -- to
20 that large resource. All we have to have is -- is a way
21 of getting it there economically with transmission that's
22 -- that has huge benefits to both parties.

23 MR. BOB PETERS: But on that answer, Mr.
24 Warden, you can't divorce the transmission from the sale,
25 can you?

1 MR. VINCE WARDEN: You -- you -- you
2 could, but I -- I don't know why you would.

3 MR. BOB PETERS: I'm sorry, you're saying
4 that Manitoba Hydro could build a transmission line in
5 the United States?

6 MR. VINCE WARDEN: Well, Manitoba Hydro -
7 - if that was it's sole objective is to have access then
8 that -- that's possible. But I don't know why we'd want
9 to do that when we have -- counterparties in the US that
10 are willing to contribute greatly to that transmission so
11 they can benefit from the access to Manitoba Hydro's
12 clean power.

13 MR. BOB PETERS: Well, under the -- under
14 the discussion about whether, for reliability purposes,
15 Bipole 3 was needed years ago, you've brought it back to
16 tie it to the sales rather than to have reliability stand
17 on its own?

18 MR. VINCE WARDEN: No, I think we were
19 talking about other alternatives to building the bipole.
20 As the Chairman indicated earlier, is there a point at
21 which you just say, no, you're not going to build a
22 bipole if the -- if the cost goes to 6/10 billion. Then
23 you start looking at other -- other -- other options.

24 And one (1) of the options that you
25 started down the path towards was building more -- a

1 combined-cycle gas combustion turbine in -- in Manitoba.

2 MR. BOB PETERS: In terms of construction
3 of transmission lines in the United States, am I hearing
4 that Manitoba Hydro would have the ability to construct
5 the \$2 billion, let's say, transmission line that is the
6 subject of the MP and WPS term sheets on its own?

7

8 (BRIEF PAUSE)

9

10 MR. DAVID CORMIE: I -- I think, Mr.
11 Peters, if we asked our counterparties in Minnesota and
12 North Dakota to build us a line that would improve
13 regional reliability and we would pay for it, I'm -- I'm
14 -- I'm sure we could -- we could talk about that.

15 Whether we could get it through the
16 regulatory process in the United States is not known. I
17 think it's speculative. There's facilities in the United
18 States, there has to be a need for and a justification
19 just like there is in Canada. There's a permitting
20 process, and to build a major transmission line with --
21 whose sole benefit would be to Canada and there's no
22 benefits to the United States would be pretty hard to get
23 through the regulatory process, I would suggest.

24 MR. BOB PETERS: And if you put a \$1
25 billion, 1,000 megawatt combined-cycle combustion turbine

1 in Southern Manitoba, hooked it up to the \$2 billion --
2 or the \$2 billion transmission line, and had a billion
3 dollars to pay for natural gas, there could be benefits
4 to the United States as well, could there not?

5 MR. DAVID CORMIE: Well, Mr. -- Mr.
6 Peters, you're assuming that the alternate case is a -- a
7 combined-cycle combustion turbine world for Manitoba
8 Hydro. And our analysis indicates that that's not the
9 case, that's a way more expensive option.

10 But ultimately, as the Chairman and Mr.
11 Warden have suggested, there is a point where you can't
12 continue to spend -- you'll -- you'll find another
13 alternative that gives you the same level of reliability.
14 I don't believe we're at that point now.

15

16 (BRIEF PAUSE)

17

18 MR. BOB PETERS: Where is that line in
19 the sand, Mr. Warden and Mr. Cormie, as to when the
20 preferred development option becomes too expensive for
21 Manitoba Hydro and it's time to find a cheaper
22 alternative?

23 MR. VINCE WARDEN: Well, Mr. Peters, as I
24 indicated earlier, that's why we run alternative
25 scenarios. And one (1) of the scenarios we're studying

1 is an all-gas option.

2 MR. BOB PETERS: Is that in this twenty
3 (20) year study that's going to be forthcoming to the
4 Board after the audit committee sees it in the middle of
5 March?

6 MR. VINCE WARDEN: That is the plan, yes.

7 MR. BOB PETERS: Thank you. Mr.
8 Chairman, I'm going to change to a new area here, and I'm
9 prepared to maybe plow ahead for fifteen (15) or twenty
10 (20) minutes, or I can -- we can take the afternoon
11 recess, as it suits the Board.

12 THE CHAIRPERSON: We'll go for another
13 fifteen (15) minutes or so, Mr. Peters.

14 MR. BOB PETERS: Certainly.

15

16 CONTINUED BY MR. BOB PETERS:

17 MR. BOB PETERS: Mr. Warden and Mr.
18 Cormie, this -- these questions have more to do with
19 Manitoba Hydro's Exhibit 51, which was an undertaking
20 response, Undertaking number 3, addition -- additional
21 response filed as Manitoba Hydro Exhibit 51.

22 I'm just not sure if you have that at
23 hand, Mr. Cormie. Mr. Surminski, it might be your math
24 on that page, and that might best assist the Board.

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Mr. Warden, I'll start
4 with you. That we recall that for the current fiscal
5 year and the previous fiscal year, Manitoba Hydro's long-
6 term contracts from dependable sales are returning, I
7 think your number was five point seven (5.7) cents a
8 kilowatt hour. Have I got that right?

9 MR. VINCE WARDEN: That's very close to
10 that, Mr. Peters, yes.

11 MR. BOB PETERS: And likewise the
12 opportunity was -- was more like two point three (2.3)
13 cents a kilowatt hour over those same two (2) years.

14 MR. VINCE WARDEN: In that same range,
15 yes.

16 MR. BOB PETERS: So am I correct that the
17 average over those years was about three point three
18 (3.3) cents a kilowatt hour? And I'm looking, Mr.
19 Warden, at the bottom of page 2 of 3 of the response.
20 I'm not certain it's the answer to the question, but
21 that's where I got the number from.

22 MR. DAVID CORMIE: Mr. Peters, I -- I
23 think the -- the average price for energy in '09/'10 is
24 three point three (3.3). The previous year, '08/'09,
25 it's shown as four point nine (4.9) cents a kilowatt

1 hour.

2 MR. BOB PETERS: Thank you for that. But
3 in '09/'10 it's three point three (3.3), and in '10/'11
4 it's probably closer to the three point three (3.3)
5 range, is that accepted, Mr. Cormie, Mr. Warden?

6 MR. DAVID CORMIE: I -- I don't have the
7 number here, but it sounds reasonable, yes.

8 MR. BOB PETERS: And is it correct that
9 the prices Manitoba Hydro is getting on its surplus
10 energy sales remains also relatively low, consistent with
11 the '09/'10, and the '10/'11 information? Maybe even
12 lower than the -- than what that was returning?

13 MR. DAVID CORMIE: The -- the prices are
14 currently low, yes.

15 MR. BOB PETERS: And is it Manitoba
16 Hydro's view that the economy in the United States has --
17 has now recovered?

18 MR. DAVID CORMIE: No, I don't think
19 that's our view.

20 MR. BOB PETERS: What about in Canada,
21 has our recession ended?

22 MR. DAVID CORMIE: I don't know that, Mr.
23 Peters. I'm not an economist.

24 MR. BOB PETERS: Where's Mr. Wiens when
25 we need him. I'm just kidding, and I hope he's not

1 listening.

2 You had indicated previously that the
3 demand levels in the United States, at least for
4 electricity, have returned for pre-recessionary times?

5 MR. DAVID CORMIE: Yes, and as an example
6 we have one (1) customer who we have a term sheet with
7 who set new all-time record demand levels in this last
8 year, so for our customer base things have turned around.

9 MR. BOB PETERS: When you say they've
10 turned around, you didn't go so far as to agree with me
11 that the economy has recovered in the United States.

12 MR. DAVID CORMIE: No, but we don't sell
13 to the entire United States economy. We sell to the
14 local market in the upper Midwest, Mr. Peters, but that's
15 not to say every one (1) of our customers is setting new
16 peak demands, but this company is doing particularly
17 well.

18 MR. BOB PETERS: Or it's really, really
19 cold.

20 MR. DAVID CORMIE: No, I think it has to
21 do with the demand for iron ore.

22 MR. BOB PETERS: In the mining industry.

23 MR. DAVID CORMIE: Yes.

24 MR. BOB PETERS: All right. Excuse me.

25 The -- while the -- while the peak or the load may have

1 been shed and has recovered, the load growth yet has --
2 has not yet materialized.

3 Would you go that far, Mr. Cormie?

4 MR. DAVID CORMIE: I agree. I don't
5 think we're back to the -- the levels of demand that we
6 saw pre-recession. We're getting very close but I don't
7 think we're fully recovered yet.

8 MR. BOB PETERS: And with that thought we
9 now see that the export price hasn't recovered as
10 Manitoba Hydro would say yet either, has it?

11 MR. DAVID CORMIE: Not yet, no.

12 MR. BOB PETERS: Does that suggest then
13 that the supply of electricity in the United States is
14 still greater than the -- than the demand?

15 MR. DAVID CORMIE: I think it -- it
16 suggests that the supply of low-cost generation is -- is
17 greater than it was in the past and it's been -- that --
18 that situation has been exacerbated by the low natural
19 gas prices.

20 MR. BOB PETERS: Well, that's a second
21 factor then. It's not only is the supply greater than
22 demand but the supply that is now available is cheaper
23 than it used to be.

24 MR. DAVID CORMIE: Yes, and what that
25 means is that you don't have to run the more expensive

1 units, you can run the less expensive units and there --
2 there -- therefore the -- the market value of the
3 incremental energy is lower than it used to be.

4 MR. BOB PETERS: And at my peril I'll
5 raise that ICF's witness in Manitoba Hydro Exhibit 60 was
6 presenting a natural gas forecast that bears some witness
7 to that statement you made, Mr. Cormie, in that the
8 natural gas prices are -- are reduced by, in the near
9 term, at least 38 percent or 40 percent?

10 MR. DAVID CORMIE: Yes, and, you know, I
11 had thought about that over lunch and I think that's --
12 that's this one (1) view of this one (1) consultant.
13 And, you know, he may just be coming in line with where
14 all the other consultants that make up Manitoba Hydro's
15 forecast had already been so we don't know.

16 You know, you'd asked about what factors
17 would reduce the price of Manitoba Hydro's long-term
18 export price forecast and so the extent that they were
19 above or below the av -- the average of all the other
20 consultants is -- was a significant factor. So he may
21 just be moving in line where everybody else had already
22 been, so again, it's not -- he's not the only one out
23 there who's making forecasts.

24 MR. BOB PETERS: But only Manitoba Hydro
25 would know that because you're the ones -- "you" being

1 Manitoba Hydro would have access to those other
2 forecasts, correct?

3 MR. DAVID CORMIE: That's right, but we
4 don't -- we don't judge them, Mr. Peters, we -- we take
5 them as they are and average them out knowing that it's
6 better to have a consensus than to -- to rely on a single
7 forecaster.

8 MR. BOB PETERS: And neither Manitoba
9 Hydro or ICF has an end date for when the cheap natural
10 gas will disappear from the marketplace?

11 MR. DAVID CORMIE: No, and I don't think
12 Mr. Rose or Manitoba Hydro would assess that we actually
13 do know what the future is. We are taking a prudent
14 approach of using the -- a consensus forecast.

15 MR. BOB PETERS: All right. Just a point
16 that might be helpful today, Mr. Warden, is that the
17 Chairman had asked for some information from Manitoba
18 Hydro relative to its twenty (20) year forecast, and
19 Hydro has now indicated through its counsel that that
20 information that was requested by the Chairman will be
21 making its way through to the Manitoba Hydro-Electric
22 Board on March the 14th.

23 Are you aware that indication, sir?

24 MR. VINCE WARDEN: To -- to the -- I
25 believe the response was to -- to the audit committee of

1 the Board on March the 14th, yes.

2 MR. BOB PETERS: Yeah. Yes, you're --
3 you're more precise than I. The audit committee. That
4 means it's not -- that -- does that in itself mean that
5 the information requested isn't going to make its way to
6 the full Manitoba Hydro Board?

7 MR. VINCE WARDEN: It will but it will be
8 -- I believe the date of the full Board is March 21st, I
9 believe.

10 MR. BOB PETERS: But Manitoba Hydro's
11 intention is to provide it to this Board on or after
12 March 14th?

13 MR. VINCE WARDEN: Yes.

14 MR. BOB PETERS: And -- and before the
15 March 21st full board meets?

16 MR. VINCE WARDEN: Yes, I think actually
17 the response that we filed did have the caveat, "subject
18 to Audit Committee approval."

19 MR. BOB PETERS: Right.

20 MR. VINCE WARDEN: The Audit Committee
21 may not agree with what -- what's contained in the twenty
22 (20) year financial forecast, which is their prerogative,
23 of course, and they send us back to do some work, and if
24 that's the case, then it would delay the filing.

25 MR. BOB PETERS: Thank you, Mr. Warden.

1 And in terms of the IFF scenarios that are run, it's
2 accepted that Manitoba Hydro controls the electronic
3 spreadsheet for that model?

4 MR. VINCE WARDEN: Yes.

5 MR. BOB PETERS: It's treated as a
6 proprietary product by Manitoba Hydro?

7 MR. VINCE WARDEN: Yes, I think that's
8 fair to say.

9 MR. BOB PETERS: Is it also fair to say
10 that there's been no publically available version for the
11 -- for the Board or for Intervenors to use?

12 MR. VINCE WARDEN: Yes.

13 MR. BOB PETERS: And so if someone wants
14 to run an alternative scenario for whatever reason,
15 Manitoba Hydro has to first agree that it will run the
16 scenario, correct?

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

18 MR. BOB PETERS: And each scenario that
19 would be run would present a new result or a new point or
20 points for discussion.

21 Would that also be true?

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: And on those scenarios,
24 whatever they are, Manitoba Hydro may have a view as to
25 whether it's a good scenario, a bad scenario, or

1 otherwise, correct?

2 MR. VINCE WARDEN: Yeah, I agree.

3 MR. BOB PETERS: Does the twenty (20)
4 year IFF that's going to Manitoba Hydro's Audit Committee
5 of its Board of Directors on February the -- on March the
6 14th contain various sensitivities and alternative
7 development scenarios?

8 MR. VINCE WARDEN: It does, yes.

9 MR. BOB PETERS: Does it answer Pre-ask
10 number 4, as requested by the Chairman, on transcript
11 2,487?

12 MR. VINCE WARDEN: I think it -- for the
13 most part, it does respond to that pre-ask; perhaps, not
14 precisely as I recall the pre-ask. It did request a
15 scenario in which a combustion turbine was built; no
16 Bipole and Keeyask, which really would not make a lot of
17 sense to us because there would be no point in building
18 Keeyask without Bipole. So we would not be providing
19 that particular scenario, if I've understood the
20 Chairman's request correctly.

21 MR. BOB PETERS: Well, I -- I too will --
22 will have to maybe check on it. But you've acknowledged
23 that each scenario might present a new result or a point
24 for discussion, correct?

25 MR. VINCE WARDEN: Yes, I did acknowledge

1 that.

2 MR. BOB PETERS: And why would Manitoba
3 Hydro want to preempt the discussion, whatever the
4 discussion point is?

5 MR. VINCE WARDEN: Well, I -- I think for
6 practical reasons the -- the scenarios do take some time
7 to run. We wouldn't want to input a scenario that would
8 produce illogical results, and -- and some are just not
9 possible.

10 The discussion we had earlier today with
11 respect to, Well, let's put -- put together a scenario
12 with low gas prices; well, we just don't have the
13 facility to do that. That isn't part of the financial
14 forecasting model that we have available to us.

15 MR. BOB PETERS: Which gas forecast will
16 be in the twenty (20) year IFF that comes back to this
17 Board after the Audit Committee meets on March the 14th?

18 MR. VINCE WARDEN: Well, it'll be the --
19 based on the consensus price forecast that we had in hand
20 last year.

21 MR. BOB PETERS: Last year meaning the
22 information that went into IFF-09?

23 MR. VINCE WARDEN: That would be IFF-10.

24

25

(BRIEF PAUSE)

1 MR. BOB PETERS: And does the soon-to-be
2 newly minted twenty (20) year IFF-10 scenarios include
3 capital costs as filed by Manitoba Hydro in capital
4 expenditure forecast 2010?

5 MR. VINCE WARDEN: Yes.

6 MR. BOB PETERS: And I take it from our
7 discussions today, the Bipole 3 costs will remain at the
8 2007 CEF level?

9 MR. VINCE WARDEN: It will, but we are --
10 that's one (1) of the sensitivities we are running with
11 higher Bipole 3 cost.

12 MR. BOB PETERS: Mr. Chairman, this might
13 be an appropriate time for the afternoon recess if it
14 suits the Board.

15 THE CHAIRPERSON: Very good, sir.

16
17 --- Upon recessing at 2:45 p.m.

18 --- Upon resuming at 3:07 p.m.

19

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

22 Mr. Peters...?

23 MR. BOB PETERS: Yes, thank you.

24

25 CONTINUED BY MR. BOB PETERS:

1 MR. BOB PETERS: There's one (1)
2 information request, Mr. Chairman that I wanted to just
3 touch base with the witness panel on. And, Mr. Warden,
4 Manitoba Hydro responded to PUB Manitoba Hydro RISK 135.
5 The question, and I'll read it so you don't need to,
6 unless you want to, find it:

7 "Provide a table detailing the -- each
8 of the recommendations made by KPMG and
9 the Corporation's position relative to
10 each."

11 And the answer from Manitoba Hydro reads:

12 "Manitoba Hydro is in the process of
13 developing the Corporation's position
14 and schedule for addressing the
15 recommendations contained within the
16 ICF and the KPMG reports."

17 Do you recall, generally, at least, an
18 information request to that effect?

19 MR. VINCE WARDEN: Yes, Mr. Peters, I do.

20 MR. BOB PETERS: And has Manitoba Hydro
21 completed that process?

22 MR. VINCE WARDEN: Not entirely,
23 although, this is one (1) of the other undertakings,
24 although they don't call it that, I have with the audit
25 committee. So I'll be taking that to the audit committee

1 hopefully on the 14th of March, so we should be able to
2 file it with the Board shortly thereafter.

3 MR. BOB PETERS: All right. I -- I guess
4 that's what I wanted to do, was find out if this one (1)
5 had fallen through the cracks or whether it's still on
6 the -- on the stove, either the front or the back burner.

7 MR. VINCE WARDEN: Definitely.

8 MR. BOB PETERS: And --

9 MR. VINCE WARDEN: Definitely on the
10 front.

11 MR. BOB PETERS: On the front burner.
12 All right. And so we'll at least expect a response from
13 Manitoba Hydro following the audit committee meeting on
14 March 14th of this year as to where that matter sits?

15 MR. VINCE WARDEN: Yes.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Mr. Warden, in previous
20 discussions we came across the point that, and I'll see
21 if you'll agree with this, if future export prices on
22 average don't exceed the incremental cost of the new
23 generation in transmission, my recollection is your
24 evidence was to the effect that that would mean either or
25 both rate increases to domestic consumers or eroding the

1 equity in a retained earnings account?

2 Do you recall that discussion?

3 MR. VINCE WARDEN: Yes, I recall a
4 discussion, Mr. Peters. I'm not sure that -- you know,
5 in -- in -- in ju -- the way you just described it
6 though, we couldn't ignore the fact that new generation
7 is -- is required to serve the Manitoba load. So we'd
8 have to compare it to the -- that scenario to the -- the
9 base-case scenario where -- whereby we're -- we're
10 assuming there -- there will be a return on those export
11 sales.

12 MR. BOB PETERS: I'm not sure we have to
13 go that deep, Mr. Warden. If the cost of new generation,
14 and let's just pick the number that I pick is -- if it's
15 ten (.10) cents and that energy is going to be exported
16 for say eight (.08) cents, there's a shortfall between
17 the cost of producing it and the revenues received from a
18 counterparty. Are you with me on my example?

19 MR. VINCE WARDEN: Sure.

20 MR. BOB PETERS: And -- and that exists,
21 Mr. Warden, does it not, whether Manitoba Hydro thinks it
22 needs the generation for Manitobans in two (2) years,
23 five (5) years, or ten (10) years? There's still a
24 shortfall between the cost and what revenues come in for
25 -- for the energy exported.

1 MR. VINCE WARDEN: There is the potential
2 for a shortfall, yes.

3 MR. BOB PETERS: Sure. And we talked
4 about the potential for a shortfall, yes?

5 MR. BOB PETERS: Sure. And we talked
6 about the potential for the shortfall had to be made up
7 by somebody because certainly Manitoba Hydro will want to
8 recover all of the costs that it needs to relative to
9 producing the energy, correct?

10 MR. VINCE WARDEN: Correct.

11 MR. BOB PETERS: And I think the only two
12 (2) sources that I recall our discussions were through
13 rate increases to consumers, or causing the retained
14 earnings account to be -- to be depleted or the -- the
15 financial ratio to -- to degenerate, in my words.

16 MR. VINCE WARDEN: Yes, Mr. Peters, I --
17 I'm always hesitant to agree with simplistic examples
18 though, because we do have to consider what the embedded
19 costs are, and -- and the increases, even though there
20 will be increases required, the average increase of -- of
21 embedded plants is far less, and therefore you're looking
22 at something in-between the two (2) if you're looking at
23 what kind of rate increase consumers will have to bear.

24 MR. BOB PETERS: Yeah, and I wasn't
25 giving any numbers in terms of the rate increase, Mr.

1 Warden, but in that last answer are you suggesting to the
2 Board that Manitoba Hydro's vintage assets are going to
3 be used to meet export commitments?

4 MR. VINCE WARDEN: No. I think I -- I'm
5 saying that vintage assets contribute to the low cost
6 that Manitoba consumers enjoy, and they certainly do
7 contribute to any energy that's added at the margin.

8 MR. BOB PETERS: But Manitoba Hydro is
9 not selling the energy from the Winnipeg River system in
10 its term sheets to Wisconsin Public Service and Minnesota
11 Power.

12 MR. VINCE WARDEN: Well, not
13 theoretically, although as we discussed earlier, we don't
14 track where the electrons flow, but theoretically no.
15 No, the --

16 MR. BOB PETERS: And the reason that's
17 important to Manitoba Hydro, Mr. Warden, is that Manitoba
18 Hydro has plants that were built, and are being used and
19 paid for by Manitobans for their energy, correct?

20 MR. VINCE WARDEN: Well, ever since the
21 interconnections with our neighbouring utilities, those -
22 - the cost of those plants have been partly subsidized by
23 exports.

24 MR. BOB PETERS: And -- and that's where
25 we want to go to is the cost for the new plants that will

1 serve the new export contracts, are those going to have
2 to be subsidized by the domestic ratepayer or by the
3 financial reserves of the company?

4 MR. VINCE WARDEN: Well, I guess you
5 could turn around the other way and say that because we
6 do need new supply in Manitoba the -- that supply to
7 Manitobans will be subsidized by the -- whatever we get
8 on the export market.

9 MR. BOB PETERS: But Mr. Warden, if it
10 costs ten (10) cents to produce it, and the export market
11 returns eight (8) cents, there is no subsidy, is there?

12 MR. VINCE WARDEN: Well, it depends. In
13 -- in a year in which there's surplus for sale, that's
14 where the subsidies are derived. They're derived from
15 selling that surplus in export markets, so if we can get
16 eight (8) cents for any kind of surplus, then that's
17 good. That's to the benefit of -- of Manitobans.

18 Your point though, Mr. Peters, I don't
19 think is so much about the surplus, it's more towards the
20 firm sales that we're -- we're currently negotiating, and
21 to the extent that those firm sales don't return plants
22 specifically built for that purpose, then I agree with
23 your premise.

24 MR. BOB PETERS: And -- and the premise
25 seems to flow quite logically that if it cost ten (10)

1 cents to produce that kilowatt of energy, and the export
2 counterparty is only paying eight (8) cents for it, then
3 it's going to come to somebody else to pay the -- the two
4 (2) cents shortfall.

5 MR. VINCE WARDEN: Yes. It's just a
6 question of whether that somebody else is going to
7 benefit from that by having facilities in place over the
8 long-term that's going to provide a return on that
9 investment.

10 MR. BOB PETERS: And when Manitobans --
11 let's -- let's go down your example then, Mr. Warden.
12 When Manitobans need energy and it cost ten (10) cents to
13 generate, and existing consumer rates are six (6) or
14 seven (7) cents a kilowatt hour, there's going to have to
15 be a rate increase from those consumers to pay the
16 shortfall on that kilowatt hour, as well.

17 MR. VINCE WARDEN: Yes. New -- new
18 generation is going to cost more, there's no question.

19 MR. BOB PETERS: And either there's going
20 to be a rate increase to consumers or Manitoba Hydro is
21 going to allow the debt equity-ratio to deteriorate, in
22 my words.

23 MR. VINCE WARDEN: Yes, which we -- we
24 would be prepared to do on a short-term basis as long as
25 we could see that the returns are going to be there in

1 the subsequent years.

2 MR. BOB PETERS: I'm not sure if it was
3 in the evidence anywhere but does Manitoba Hydro have a
4 time frame in terms of the number of years in which it
5 would be reasonable, according to Manitoba Hydro, for
6 domestic customers to subsidize the exports or to allow
7 the financial ratios of the Corporation to -- to drop?

8 MR. VINCE WARDEN: I think, Mr. Peters,
9 that's a matter of judgment. We haven't specified any
10 number of years. However, in looking at the financial
11 forecasts we do see a drop, a deterioration, in the debt-
12 equity ratio into the -- from the current seventy-three
13 (73)/seventy-four(74) into the 80 percent range. It's
14 not -- it's not a -- a good thing. We wouldn't want to
15 perpetet -- perpetuate that for sure, but we do see in our
16 financial forecasts the crossover point occurring in the
17 not too distant future, which remains positive
18 thereafter.

19 So in terms of an investment you have to
20 look at how many years that investment will be paying
21 returns and how long it's going to take to get -- until
22 those returns are in place. In -- in the case of the
23 investments we're making, we think it's a tremendous
24 investment for the ratepayers of Manitoba.

25 MR. BOB PETERS: I understand and

1 appreciate what you've said, but did you give the
2 crossover -- did you give the year and I just missed it?
3 Was it 2032?

4 MR. VINCE WARDEN: Yes, I believe
5 2031/'32 was the crossover year.

6 MR. BOB PETERS: And that's based on the
7 current assumptions, correct? Well let me just rephrase
8 that. That's based on the assumptions in IFF '09?

9 MR. VINCE WARDEN: Yes, that's right.

10 MR. BOB PETERS: And it's not based on
11 the current assumptions which include updated capital
12 costs and perhaps even downgraded export forecasts?

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

14 MR. BOB PETERS: And in terms of getting
15 the crossover point, between now and then some of those
16 rate increases that we talked about that would have to be
17 borne by consumers, manifest themselves each and every
18 year, at least for planning purposes, at 3 1/2 percent,
19 to essentially rebuild the reserve.

20 MR. VINCE WARDEN: Yes, the -- the rate
21 increases that are in the financial forecast are at 3 1/2
22 percent. Of course, each year when a rate application --
23 every two (2) years when a rate application is brought
24 before this Board the -- an assessment will be made as to
25 whether or not that is the quantum of the rate increase

1 being sought. But yes, for planning purposes 3 1/2
2 percent is -- is what's in the financial forecast.

3 MR. BOB PETERS: Mr. Warden, is it
4 correct that if Manitoba Hydro updated its financial
5 information to reflect the latest capital expenditure
6 forecasts and even the latest natural gas price
7 forecasts, the crossover point that we had talked about
8 would likely be further out than 2032?

9 MR. VINCE WARDEN: Yes, but I don't have
10 that in front of me right now. But I don't believe it's
11 substantially further out because the higher capital
12 costs also affect the alternative scenario as well.

13

14 (BRIEF PAUSE)

15

16 MR. BOB PETERS: Mr. Cormie, in terms of
17 the NSP contract, would the Board's understanding be
18 correct that the information ICF had relative to the NSP
19 agreement was based on the October 31, 2006 term sheet as
20 between Manitoba Hydro and NSP?

21 MR. DAVID CORMIE: Yes, that's correct,
22 Mr. Peters.

23 MR. BOB PETERS: That October 31, 2006
24 term sheet does not contain the terms that are presently
25 before the Minnesota regulator, does it?

1 MR. DAVID CORMIE: No, the contract that
2 we eventually agreed upon differs from what was in the
3 initial term sheet.

4 MR. BOB PETERS: And is the Board's
5 understanding correct that when Xcel Energy or Northern
6 States Power, or NSP, as we refer to them in these
7 proceedings, is presenting its case, you called it a
8 needs for and justification before its regulator, it also
9 had to present some options that it considered in
10 addition to the purchase from Manitoba Hydro?

11 MR. DAVID CORMIE: I -- I see in their
12 application that they did compare it to alternatives.
13 I'm not sure if they're required to do that.

14 MR. BOB PETERS: You do know that the
15 October 31, 2006 term sheet was opposed by another
16 corporation in the energy industry in the states?

17 MR. DAVID CORMIE: I don't have that
18 information, but that wouldn't surprise me.

19 MR. BOB PETERS: And it wouldn't surprise
20 you that the NSP term sheet of October 31, 2006 was
21 proceeding by way of a contested case before the
22 Minnesota Public Utilities Commission?

23

24

(BRIEF PAUSE)

25

1 MR. DAVID CORMIE: I'm not -- my -- my
2 memory doesn't serve me very well there, Mr. Peters.

3 MR. BOB PETERS: All right. Does your
4 memory serve to remind you that in July of 2007 NSP or
5 its parent company asked the Minnesota Public Utilities
6 Commission to suspend its proceeding on the Manitoba
7 Hydro term sheet of October 31, 2006?

8 MR. DAVID CORMIE: Yes, I'm aware of
9 that.

10 MR. BOB PETERS: And at least part of
11 what precipitated that request were changed circumstances
12 that were cited by NSP?

13 MR. DAVID CORMIE: Yes, the legislature
14 in Minnesota passed a law requiring Northern States Power
15 to install 4,000 megawatts of wind generation. That was
16 a -- that was a change of circumstances for NSP and it
17 need -- and as a result, they needed to re-evaluate the
18 wisdom of proceeding with the purchase from Manitoba
19 Hydro.

20 MR. BOB PETERS: And, in essence, that
21 sent NSP back to the drawing board. Is that your
22 understanding?

23 MR. DAVID CORMIE: NSP had to -- had to
24 re-evaluate their -- their development plan, yes.

25 MR. BOB PETERS: And what happened to the

1 term sheet that Manitoba Hydro had with NSP? It just was
2 held in abeyance or it fell off the table so to speak?

3 MR. DAVID CORMIE: No, the term sheet
4 remained ad va -- remained valid. The parties agreed to
5 the hiatus. To the extent that the -- the date for
6 expiration needed to be adjusted to allow for NSP to
7 review their circumstances, the term sheet was amended,
8 and at all times it remained valid.

9 MR. BOB PETERS: It remained valid in
10 that Manitoba Hydro was prepared to proceed on it. Is
11 that what you're telling the Board?

12 MR. DAVID CORMIE: Manitoba Hydro was
13 confident that the resource that it was offering Xcel
14 would stand up to the re-evaluation, and we were quite
15 prepared to wait for Xcel to review their needs. And --
16 and once they did and they confirmed that it was still a
17 valuable option in their portfolio, we resumed
18 negotiations under the term sheets as they were
19 originally written.

20 MR. BOB PETERS: I'm sorry, what was the
21 -- the last part of that answer?

22 MR. DAVID CORMIE: We proceeded to
23 continue negotiations under the term sheets as they --
24 they were at that time.

25 MR. BOB PETERS: One (1) of the changes

1 that confronted your counterparty between October 31 of
2 2006 and May 27th of 2010, was the cost of competing
3 resources in NSP's evaluation had declined.

4 That is the cost of competing resources to
5 Manitoba Hydro's proposal had declined?

6 MR. DAVID CORMIE: That's correct, among
7 other factors. That was one (1) of the changes.

8 MR. BOB PETERS: And the May 27th, 2010,
9 date that I used, that's the day that there was a new
10 contract signed as between Manitoba Hydro and NSP?

11 MR. DAVID CORMIE: The May 27th date was
12 the date that the Xcel Board -- Board approved the
13 contract, yes.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: Is it correct that ICF
18 was not shown the May 27th, 2010 contract as between NSP
19 and Manitoba Hydro?

20 MR. DAVID CORMIE: They didn't -- didn't
21 see it because their assignment was over by that date.

22 MR. BOB PETERS: And they didn't see it
23 before they testified before this Board two (2) weeks
24 ago?

25

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: I'm not sure if
4 they've -- they've -- they've seen the contract, Mr.
5 Williams (sic).

6 MR. BOB PETERS: I think we have Ms.
7 Ramage's leading of an undertaking on that that was given
8 orally on the record, so we can check that to be
9 specific. The costs of NSP's competing resources, Mr.
10 Cormie, those were the costs of either the market or a
11 gas plant. Is that your understanding?

12 MR. DAVID CORMIE: I think to clarify
13 that, the market meaning going to an independent power
14 producer and purchasing the equivalent product from a --
15 a third party, or a self-build on behalf of NSP, where
16 they would build their own -- they would -- they would
17 build their own supply.

18 MR. BOB PETERS: No, I don't think we're
19 quite on the same page because I thought the two (2)
20 alternatives that NSP was looking at was the company
21 could either purchase capacity and energy from the
22 market, that is I presume the MISO market, or
23 alternatively, NSP could build or contract with a
24 developer to build and operate a new natural gas-fuelled
25 combined-cycle facility.

1 MR. DAVID CORMIE: Are -- are you quoting
2 from the --

3 MR. BOB PETERS: I'm paraphrasing.

4 MR. DAVID CORMIE: Yeah, I accept that.

5 MR. BOB PETERS: All right. Page 12, if
6 you wish to follow along. So do we interpret then what
7 NSP was saying is that, Hold on a second here, Manitoba
8 Hydro, we've got some changed circumstances, and we also
9 have competing resources of a -- either the marketplace
10 itself or a gas plant. Those costs have declined and we
11 have to now re-evaluate.

12 Is that Manitoba Hydro's understanding?

13 MR. DAVID CORMIE: Yes, those issues were
14 discussed.

15 MR. BOB PETERS: And is it correct, Mr.
16 Cormie, that in recognition of the decline in market
17 energy prices, NSP was able to obtain a decrease in the
18 energy price from Manitoba Hydro from what was included
19 in the original term sheet?

20 MR. DAVID CORMIE: Mr. -- Mr. Peters,
21 that's -- that's what it says in the -- the NSP filing.
22 However, what it doesn't say is -- is the other price
23 adjustments that were made through the negotiating
24 process from day 1 that -- you know, and I can't -- I --
25 I can't really discuss the puts and takes associated with

1 the contract, but I -- I must say that what Xcel has done
2 in their filing has pre -- presented a very favourable
3 picture of their negotiating process.

4 But I have to -- have -- have to say to
5 you that Manitoba Hydro also achieved price adjustments
6 through -- through the negotiating process, plus
7 additional terms and conditions that I'm -- I'm -- really
8 out of respect to the confidentiality agreement that I
9 have with Xcel needs to be respected.

10 In the -- in the final days of the
11 negotiations, it was true that what Xcel has filed with
12 their -- their regulator, but it doesn't -- doesn't
13 present the entire picture, so it -- it does -- but it
14 puts -- I'm at a handicap in not being able to discuss
15 where the price went through the negotiating process.
16 And I can say that the price that Manitoba Hydro
17 ultimately achieved was better, or at least as good as
18 what we had originally negotiated.

19 MR. BOB PETERS: Manitoba Hydro has read
20 NSP and Xcel Energy's filing to the Minnesto -- Minnesota
21 Public Utilities Commission?

22 MR. DAVID CORMIE: Yes.

23 MR. BOB PETERS: And in fact, Manitoba
24 Hydro has asked for redactions to be made in that
25 document, wouldn't that also be correct?

1 MR. DAVID CORMIE: Yes.

2 MR. BOB PETERS: And would it be correct
3 that all of the redactions in that document are from
4 Manitoba Hydro?

5 MR. DAVID CORMIE: I -- I don't -- I'm --
6 I don't know the answer to that, Mr. Peters.

7 MR. BOB PETERS: Are there any redactions
8 in the document that Manitoba Hydro didn't ask for? I
9 just -- your counsel has some questions of you first.

10

11 (BRIEF PAUSE)

12

13 MR. DAVID CORMIE: Well, Mr. Peters, both
14 companies have confidential information that they need to
15 protect. Which redactions were made by whom, I'm -- I
16 wasn't involved in that detailed process, so I can't
17 speak to that. But there's commercially sensitive
18 information that both companies want to keep
19 confidential.

20 MR. BOB PETERS: I'm just not sure you've
21 answered my question, Mr. Cormie, and no disrespect. But
22 maybe then you could check to see whether or not Manitoba
23 Hydro knows, and undertake to check whether any of the
24 redactions in the NSP filing before the Minnesota Public
25 Utilities Commission were redactions made because NSP

1 wanted them made, as opposed to Manitoba Hydro wanting
2 them made?

3 Would that be something you can check,
4 sir?

5 MR. DAVID CORMIE: We can -- we can check
6 on that, yes.

7 MR. BOB PETERS: Maybe I'll give Ms.
8 Ramage a minute. She's looking for something.

9

10 (BRIEF PAUSE)

11

12 MR. DAVID CORMIE: Mr. Peters, it's clear
13 from the filing that Xcel requested that the pricing
14 information be kept confidential. Manitoba Hydro is also
15 of that -- was also of that view.

16 So both companies wanted the pricing to be
17 kept confidential. Whether there are any additional
18 redactions made at the request of Xcel, I will have to
19 check.

20

21 --- UNDERTAKING NO. 82: Manitoba Hydro to indicate if
22 there are any redactions in
23 the NSP and Xcel Energy's
24 filing to the Minnesota
25 Public Utilities Commission

1 document that Manitoba Hydro
2 didn't ask for; and to check
3 whether any of the redactions
4 in the NSP filing before the
5 Minnesota Public Utilities
6 Commission were redactions
7 made because NSP wanted them
8 made, as opposed to Manitoba
9 Hydro wanting them made

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Do you know, Mr. Cormie,
13 if there was an update to the June 10th, 2010, filing by
14 Xcel Energy to the Minnesota Public Utilities Commission?

15 MR. DAVID CORMIE: I don't know that at -
16 - at hand, no.

17 MR. BOB PETERS: Is that something you
18 could also check, to see whether there was --

19 MR. DAVID CORMIE: We'll check.

20 MR. BOB PETERS: -- an update provided?

21

22 --- UNDERTAKING NO. 83: Manitoba Hydro to indicate if
23 there was an update to the
24 June 10th, 2010, filing by
25 Xcel Energy to the Minnesota

1 Public Utilities Commission

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: Mr. Cormie, I'm going to
5 paraphrase what I heard you say ten (10) minutes ago, and
6 -- and Manitoba Hydro can decide whether it can answer
7 this question. And I'll just give Ms. Ramage a minute.

8 The question that I'd like to pose, with
9 Ms. Ramage's full attention is: What you've said to the
10 Board is what you lost on the swings, you made up on the
11 merry-go-round?

12 MR. DAVID CORMIE: I'll take that. Yes,
13 that sounds reasonable.

14 MR. BOB PETERS: All right. I've tried
15 to stay a long way away from any specifics on that
16 suggestion, Mr. Cormie, but that's the message you're
17 trying to convey to this Board; is that while it is
18 correct that NSP received a decrease in the energy price
19 from what was included in the October 31, 2000, and term
20 sheet. By the time the May 27th, 2010 contract was
21 signed Manitoba Hydro had, in its view, made up what it
22 lost on the energy price in other terms, conditions and
23 pricing mechanisms.

24 Are you prepared to go that far?

25 MR. DAVID CORMIE: Well, no, I'm not

1 market energy prices we were able to
2 obtain a decrease in the energy price
3 from what was included in the original
4 term sheet."

5 MR. DAVID CORMIE: Mr. Peters, I can't
6 answer that question. You're putting me into a situation
7 where I'm -- I'm not pre -- I'm not prepared to go on the
8 record and -- and respond to that. It -- it -- you --
9 it's -- this is an awkward situation so I can't respond
10 to that question.

11 MR. BOB PETERS: You can't respond to
12 whether or not that's factually correct?

13 MR. DAVID CORMIE: That's right.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: the document I am
18 referring to, Mr. Cormie, it's -- it's a matter of --
19 it's a public document, correct?

20 MR. DAVID CORMIE: Yes, I -- I realize
21 that. And Xcel has to make their case to the regulator
22 and I don't want to make their task anymore difficult
23 than it already is.

24

25 (BRIEF PAUSE)

1 MR. BOB PETERS: Mr. Cormie, are you able
2 to confirm that the fixed prices in the NSP contract
3 covered about 50 percent of the average annual estimated
4 contract sales of about 4,000 gigawatt hours?

5

6 (BRIEF PAUSE)

7

8 MR. DAVID CORMIE: Mr. Peters, the -- all
9 the guaranteed energy in the contract is at a fixed
10 price; to the extent that the energy is not fixed or it
11 is marketplace there is no obligation for Manitoba Hydro
12 to sell, so therefore it is not contracted energy.

13 A hundred percent of the energy that is --
14 that is guaranteed is at the fixed price. The balance of
15 the energy is at market, and -- and Manitoba Hydro can
16 sell it to them, to -- to NSP, if -- if we have it, if
17 it's surplus. But there is no obligation for us to sell.

18 So the statement that the contract energy
19 includes non-firm energy implies we have an obligation to
20 sell the non-firm, and we don't.

21 MR. BOB PETERS: Okay. Thank you for
22 that. Then are you suggesting that Manitoba Hydro only
23 expects to sell about 2,000 gigawatt hours of annual
24 energy in an average flow year?

25

1 (BRIEF PAUSE)

2

3 MR. DAVID CORMIE: I -- I believe our
4 obligation is -- is less than that, Mr. Peters. I -- I
5 don't have the precise number here.

6 MR. BOB PETERS: I was wondering if I'd
7 find it in the power resource plan that Mr. Surminski and
8 I are scrambling to find.

9

10 (BRIEF PAUSE)

11

12 MR. DAVID CORMIE: Yeah, I -- I think the
13 number is around 1,400 gigawatt hours a year is our --
14 our obligation.

15 MR. BOB PETERS: And, Mr. Cormie, I want
16 to make sure the Board is understanding that if the
17 obligation is 1,400 gigawatt hours a year, that is not
18 all that Manitoba Hydro expects to sell in an average
19 year.

20 Would that be fair?

21 MR. DAVID CORMIE: In an average year, we
22 expect to sell more than that because the contract gives
23 Manitoba Hydro the right to use all 900 megawatts of firm
24 transmission that NSP owns on the US side. And to the
25 extent that we have additional energy above the 1,400

1 gigawatt hours, we'll use that firm transmission to
2 ensure that we gain market access to the MISO market.

3 So on an average year, yes, we will -- we
4 will sell more than the fourteen hundred (1,400), but the
5 fourteen hundred (1,400) is the -- is the energy that is
6 at a fixed price, and...

7 MR. BOB PETERS: And the excess in an
8 average year that you would sell over and above the 1,400
9 gigawatt hours, it would be sold into the MISO market.

10 Is that correct?

11 MR. DAVID CORMIE: No, it -- it actually
12 gets sold to Xcel; Xcel has an obligation to buy it.
13 But, in effect, we are -- we are using Xcel to gain
14 market access because of the use of their transmission in
15 the United States.

16 MR. BOB PETERS: All right, maybe I'm
17 confusing the issue for the Board over the -- the
18 mandatory requirements.

19 But in an average year, Manitoba Hydro
20 expects to sell more than 1,400 gigawatt hours of energy,
21 and it would be sold on the basis that anything over and
22 above the fourteen hundred (1,400) would be made
23 available by Manitoba Hydro as surplus, and that surplus
24 would then be required to be purchased by NSP?

25 MR. DAVID CORMIE: Yes, it's a very

1 favourable arrangement for Manitoba Hydro in that if we
2 have surplus energy above what's needed for our load and
3 -- and our guaranteed deliveries to NSP, we can use that
4 same transmission, whether it's during the daytime, or at
5 night, or on weekends, to -- to get to the MISO market.

6 And that's a risk that we've been dealing
7 with for the last few years, especially under high water
8 when we have to rely on the non-firm transmission, and
9 that non-firm transmission is subject to curtailment.
10 And so the use -- being able to use the transmission as a
11 right rather than as a possibility has value to Manitoba
12 Hydro.

13 MR. BOB PETERS: To conclude that it's a
14 favourable transaction with respect to the non-firm
15 dependable energy, Mr. Cormie, one would also want to
16 know what the price is, correct?

17 MR. DAVID CORMIE: Well, like all energy
18 that's interruptible, it -- it will have a value
19 determined by the market price at that time, so it'll be
20 -- it is surplus, and it'll go to the market at market
21 price.

22 MR. BOB PETERS: And, really, to correct
23 your answer, instead of going to the market, it will end
24 up going to NSP?

25 MR. DAVID CORMIE: It'll be going to the

1 market through NSP.

2 MR. BOB PETERS: NSP is going to stroke
3 the cheque to pay for it?

4 MR. DAVID CORMIE: Well, the -- the way
5 all the transactions are held now, whether they are
6 bilateral or they are market, they are cleared through
7 the market, so the money will be transferred. The firm
8 energy will be -- will be a -- will be paid for through
9 the market and -- and the market energy will be cleared
10 through the market. It's all done through the market
11 now.

12 MR. BOB PETERS: Maybe I was clumsy in my
13 question, but I had understood from your correcting me
14 earlier, Mr. Cormie, that the surplus over and above the
15 dependable energy that Manitoba Hydro expects to sell
16 will, in fact, be purchased and consumed by NSP's
17 customers?

18 MR. DAVID CORMIE: I didn't say they
19 would consume it. I said that they have to purchase it.
20 They will have to then resell it to the market. So it'll
21 -- it'll affect flow through their system. But they --
22 we have the right to sell, they have an obligation to buy
23 everything that Manitoba Hydro makes available on the
24 firm transmission, they must buy. We ow -- we have the
25 right to sell, but we don't have an obligation to sell.

1 MR. BOB PETERS: I think those are the
2 key words that I should have memorized the last time we
3 talked, but, thank you, Mr. Cormie, for -- for clarifying
4 that.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Mr. Cormie, in addition
9 to what I've read to you about what NSP is telling its
10 regulator about the energy price that they obtained, NSP
11 is also telling its regulator certain information related
12 to other terms and conditions.

13 Are you aware of that?

14 MR. DAVID CORMIE: Well, I -- they filed
15 the contract with the regulators, so I'm -- I'm sure
16 that's true.

17 MR. BOB PETERS: And just -- just a point
18 to cover, I should have asked it previous, Mr. Cormie,
19 but no new transmission is needed for Manitoba Hydro's
20 pending sale with NSP to commence in 2015, is it?

21 MR. DAVID CORMIE: And not only
22 transmission, no new generation is required as well. So
23 there are -- there are no new assets necessary to serve
24 the sale.

25 MR. BOB PETERS: No new generation, no

1 new transmission on behalf of Manitoba Hydro or on behalf
2 of NSP?

3 MR. DAVID CORMIE: That's correct.

4 MR. BOB PETERS: Although, Manitoba Hydro
5 is building Wuskwatim, which will have available
6 additional energy that can be used to serve the NSP
7 arrangement?

8 MR. DAVID CORMIE: The NSP sale stands on
9 its own merits without -- even without Wuskwatim, Mr.
10 Peters. It doesn't need Wuskwatim to -- to make it
11 possible.

12 MR. BOB PETERS: And even in light, I
13 suppose, Mr. Cormie, even more so than if the load
14 forecast is down 1,000 gigawatt hours a year and, as
15 well, if the load that has been shed by some of the
16 industrial customers or the major customers has also
17 dropped and -- or is forecast to drop hundreds if not a
18 thousand gigawatt hours a year, that energy is also all
19 available still to service the NSP sale from existing
20 resources?

21 MR. DAVID CORMIE: Yes, to the extent --
22 to the extent that it's load reductions and they're not
23 offsetting sale agreements with other counterparties, it
24 will make it less expensive to serve the NSP sale.

25 MR. BOB PETERS: Mr. Cormie, I'm going to

1 ask you a question to find out if it's factually correct,
2 related to the sale. And that is, and -- on the October
3 31st, 2006, term sheet with NSP, the inflation risk was
4 all borne by NSP.

5 Are you able to confirm that?

6

7 (BRIEF PAUSE)

8

9 MR. DAVID CORMIE: As we do in every
10 long-term contract, there are escalators in the -- in the
11 term sheets and, ultimately, in the negotiated contracts.
12 The escalator in the -- there's still escalation in the -
13 - in the sale agreement but it's trade secret and
14 confidential.

15 MR. BOB PETERS: No, I'm not asking you
16 to divulge that, but I'm just asking you to confirm that
17 in the initial term sheet all of the inflation risk
18 rested on NSP.

19

20 (BRIEF PAUSE)

21

22 MR. DAVID CORMIE: Well, I -- I think I
23 said, Mr. Peters, there's an -- there was an escalator,
24 and I can't tell you what that escalator was in the term
25 sheet. That's confidential, and to the extent that there

1 is risks associated, there's risk for both parties,
2 right.

3 MR. BOB PETERS: I'm not reading it the
4 same way, Mr. Cormie. I'm reading it from the filing
5 done by NSP, that in the June 10th, 2007, petition, if it
6 is, to the Manitoba -- or to the Minnesota Public
7 Utilities Commission, there's an indication that Manitoba
8 Hydro now bears some inflation risk that previously
9 wasn't borne by Manitoba Hydro in the earlier term sheet.

10 I'm just asking if you can confirm that to
11 be correct or incorrect.

12 MS. PATTI RAMAGE: Mr. Peters, could you
13 give us a reference because it makes it a lot easier --

14 MR. BOB PETERS: Yes, page 13, Ms.
15 Ramage.

16 MS. PATTI RAMAGE: -- to --

17 MR. BOB PETERS: Page 13 of the June
18 10th, 2010...

19 MR. DAVID CORMIE: Well, Mr. Peters, the
20 -- as I said, there's always risk no matter what
21 escalator you use. The initial term sheet wasn't risk
22 free from an escalation perspective, from Manitoba
23 Hydro's perspective.

24 And it's still not risk free, so both
25 companies bore escalation risk not only in the term

1 sheet, but that exists in the -- in the final agreement,
2 as well.

3

4

(BRIEF PAUSE)

5

6 CONTINUED BY MR. BOB PETERS:

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(BRIEF PAUSE)

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(BRIEF PAUSE)

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: I'm reading from page 14
3 of the petition document, Mr. Cormie, under,
4 Environmental Risks, and halfway through the sentence is:

5 "Manitoba Hydro will allocate and
6 transfer environmental attributes in
7 respect of the energy supplied by
8 Manitoba Hydro."

9 And my question is is that a provision
10 that existed in the contract that was not in the October
11 31, '06, term sheet?

12 MR. DAVID CORMIE: I don't have the term
13 sheet with me, so I can't say whether that is a
14 confidential subject at that time, but it's true that we
15 have sold the environmental attributes associated with
16 the transaction -- associated with the generation as part
17 of the -- as part of the final terms and conditions.

18 And that was one (1) of those factors for
19 which it was discussed during the negotiations, and
20 ultimately Xcel now holds those rights.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: I'll come back to it a
25 bit later, but those environmental attributes would then

1 apply to all of the energy sold to NSP.

2 Would that be correct?

3 MR. DAVID CORMIE: As part of the
4 contract, Mr. Peters, there are certain resources
5 identified from which Xcel will take their environmental
6 attributes, and mainly the existing fleet of -- of
7 generating stations that Manitoba Hydro has. And so the
8 -- at the present time there is no market for those
9 attributes.

10 So to the extent that Xcel can generate --
11 or generate value by holding those environmental
12 attributes in Minnesota, where there is no market, that
13 will be beneficial to Manitoba Hydro because all our
14 legacy generation environmental attributes have no value
15 and there's -- there's -- there's value in now
16 transferring those -- some of those to Xcel. If they
17 make a market in Minnesota for those, either by getting
18 the legislation changed or finding a way of monetizing
19 them that will bring value to Manitoba Hydro's energy
20 that doesn't go to Xcel under the sale.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: I didn't understand the
25 last part of your answer, Mr. Cormie. It'll bring --

1 environmental attributes will bring value to Manitoba
2 Hydro's energy that is not part of the NSP sale?

3 MR. DAVID CORMIE: Yes, in a normal year
4 Manitoba Hydro has about 10 million megawatt hours of
5 surplus energy that has environmental attributes that --
6 that have no value. So let's say that in -- over the
7 course of the sale agreement we transfer to Xcel 2
8 terawatt hours of attributes a year, they will try and
9 create value from those two (2) by either having the
10 legislation in Minnesota changed to recognize existing
11 hydro so that they can claim those. To the extent that
12 they're successful, Manitoba Hydro will be able to
13 monetize the balance of the eight (8) in that
14 marketplace.

15 Right now, I think, if my memory holds me,
16 as of last month we have something like 30 million
17 megawatt hours of attributes in the bank that are sitting
18 there going stale, and we would like to have a market for
19 them. So transferring to Xcel attributes from existing
20 generation gives them incentive to create a market and to
21 bring value to Manitoba Hydro.

22 MR. BOB PETERS: When you say there's no
23 present value, what value does Manitoba Hydro put on
24 these, at least notionally, these environmental
25 attributes?

1 MR. DAVID CORMIE: In our long-term
2 energy price forecast there is a component of the price
3 that's associated with the RECs, and it's built into the
4 -- into the price forecast. And that's -- that's part of
5 that export electricity price, the value of the
6 attributes.

7 MR. BOB PETERS: Which is confidential
8 and in some ways unknown to Manitoba Hydro?

9 MR. DAVID CORMIE: Yes. But -- but we do
10 take to the market the environmental attributes for the
11 energy that we take title to from the wind farms, and
12 we're able to monetize those in the market today. I
13 think last year we -- we sold about a million dollars
14 worth of environmental attributes from our wind farm
15 because there is a market for -- for wind energy
16 attributes.

17 But for our large hydro, from -- from the
18 legacy plants there is no market yet and we need to make
19 that market.

20 MR. BOB PETERS: You'd said that you have
21 30 million in the bank, and I take it you would have been
22 talking about environmental attributes?

23 MR. DAVID CORMIE: Yes, they have a shelf
24 life of two (2) years. So after they're two (2) years
25 old they're -- the attributes are worthless. So if I

1 looked in the bank I've got -- I've got a bunch that are
2 for sale but I don't have a -- I don't have any buyers.

3 MR. BOB PETERS: And you don't have a
4 price on them either?

5 MR. DAVID CORMIE: Well, the price is
6 zero because there's no market.

7 MR. BOB PETERS: And if the market does
8 change, Mr. Cormie, such that there is a value to these
9 environmental attributes, does that mean that Manitoba
10 Hydro will then have to pay the penalty on any imports it
11 brings in from the United States?

12

13 (BRIEF PAUSE)

14

15 MR. DAVID CORMIE: Mr. Peters, Manitoba
16 Hydro retains the attributes associated with imports.

17 MR. BOB PETERS: What attributes are
18 there on coal-generated electricity?

19 MR. DAVID CORMIE: Exactly. There are --
20 there aren't any today. But to the extent that they've --
21 - they -- they make up a portion of the energy that is --
22 is delivered to Manitoba Hydro. Manitoba Hydro keeps
23 those attributes and -- and is not transferring those
24 attributes to -- to Xcel.

25 MR. BOB PETERS: Oh, I see. I see your

1 answer. Mi -- mine was even a bit more simple question,
2 Mr. Cormie, and I'll make up some numbers here just to
3 help the example. But if Manitoba Hydro wants to bring
4 in a kilowatt hour of energy from North Dakota or
5 Minnesota and that's coming from a coal plant and let's
6 assume that there's a two (2) cent carbon cost on that,
7 Manitoba Hydro will have to pay the market price for that
8 coal, which includes the two (2) cent penalty.

9 Would that be correct?

10 MR. DAVID CORMIE: Yes. And I think,
11 ultimately, that's where the environmental value will be
12 built into -- the cost of carbon will be embedded in the
13 cost of production and reflected in the energy price.
14 There won't be a separate market for the attributes.

15 But if we -- if we purchase energy from
16 the market at night, that energy is used to serve
17 Manitoba load at night, and the hydro energy stays in
18 storage. Because we're serving Manitoba load with
19 purchases rather than with hydro, that increases the
20 amount of hydro that's available for export the next day,
21 and the export energy goes to market with the hydro
22 attribute associated because it was the source of the
23 generation.

24 Manitoba Hydro and its customers benefit
25 from the difference between the on-peak and the off-peak

1 price. That's -- that's what they're getting in exchange
2 for buying the -- the off-peak energy and -- and
3 arbitraging it into the on-peak, but, in addition,
4 they're bearing the cost of any of those attributes.

5 Xcel, under this contract, will only take
6 the attributes -- the hydraulic attributes. They're not
7 taking any of the attributes from our coal-fired or our
8 wind generation or our imported energy.

9 MR. BOB PETERS: I understand that, and
10 thank you, Mr. Cormie, but only so long as the dif -- as
11 the difference between the on-peak and the off-peak is
12 greater than two (2) cents, as in my example, will it be
13 a benefit to Manitoba Hydro?

14 MR. DAVID CORMIE: Yes, that's right.
15 And -- and there has to be a fundamental value
16 proposition before we would purchase for resale. And to
17 the extent that -- that carbon affects the off-peak price
18 and it doesn't affect the on-peak price, that
19 differential will go down and there will be less -- less
20 megawatt hours bought and sold.

21 MR. BOB PETERS: I'm not following that
22 answer, Mr. Cormie. You're suggesting that the carbon
23 adder will only apply on only one (1) of on-peak or off-
24 peak energy?

25 MR. DAVID CORMIE: No, it will apply to -

1 - to both, but it'll depend on what percentage of the
2 off-peak energy is coming from a high carbon resource as
3 opposed to a low carbon resource in the on-peak. So if -
4 - if you assume that the marginal cost of generation in
5 the on-peak was from a combustion turbine, it has half
6 the carbon output as a coal-fired generating station in
7 the off-peak, so the prices between the resources will
8 levelize because of their -- the additional cost
9 associated with emissions.

10 MR. BOB PETERS: Meaning that the gas
11 turbine will have a penalty of only one (1) cent, or
12 maybe even less than one (1) cent under my example.

13 MR. DAVID CORMIE: That's right.

14 MR. BOB PETERS: All right. Would you
15 agree, Mr. Cormie, that under the examples we've been
16 just talking about, of Manitoba Hydro importing energy,
17 that will in fact raise Manitoba Hydro's and Manitoba's
18 carbon footprint?

19

20 (BRIEF PAUSE)

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22 MR. DAVID CORMIE: Physically, I don't
23 think it will change anything, Mr. Peters, but from a
24 reporting perspective it may change because if we are
25 transferring to -- we're transferring to some of our

1 customers some of the hydraulic attributes, there --
2 there are less attributes available for Manitobans to
3 claim. But our -- our studies have shown that over the
4 life of the NSP sale there's a very minor deterioration
5 in the quality of the product that Manitobans are
6 enjoying because of the transfer of hydraulic attributes
7 to NSP.

8 It's -- it's still in the high 90s,
9 percent of the time Manitoba energy will be served from
10 hydraulic resources to the extent that we transfer some
11 of the attributes to NSP. It goes down, but only a very
12 minor amount.

13 MR. BOB PETERS: Can the Board interpret
14 that last answer, Mr Cormie, as saying that while for
15 reporting purposes, yes, the Manitoba carbon footprint
16 gets larger, it's not going to cost Manitobans more
17 money?

18 MR. DAVID CORMIE: No, I think on the
19 contrary. I think it -- it -- it -- it -- it -- it -- it
20 results in a very favourable situation for Manitoba Hydro
21 because without the attributes NSP wouldn't purchase the
22 power. The price in the contract is significantly higher
23 than the existing price.

24 In addition, we retain the rights to use
25 the transmission system 100 percent of the time. And

1 overall, I think it'll result in lower rates to our
2 domestic customers than they would otherwise have.

3 MR. BOB PETERS: I wasn't that far along
4 on the net present value analysis, Mr. Cormie. I was
5 looking only at the -- the suggestion that while, for
6 reporting purposes, Manitoba -- Manitoba's carbon
7 footprint is growing, it's not going to cost more in
8 terms of electricity rates for the energy that is bought
9 and sold by Manitoba Hydro even in the short-term?

10 MR. DAVID CORMIE: No, because we -- we
11 don't have a -- an environmental standard in Manitoba
12 Hydro -- in Manitoba yet. There's no obligatory
13 requirement to serve the domestic load at a specific
14 percentage. So transferring some of the surplus hydro
15 attributes to a third-party has no -- has no cost
16 associated.

17 MR. BOB PETERS: Will Manitoba Hydro ever
18 be faced with a Canadian or Manitoba carbon tax on its
19 imports?

20

21 (BRIEF PAUSE)

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23 MR. DAVID CORMIE: I -- I don't have the
24 answer to that question, Mr. Peters. But if it -- if
25 there were to be a tax on imports, that would affect the

1 amount of energy that gets imported into Manitoba, and it
2 may result in us having to generate more thermal energy
3 in Manitoba as an alternative.

4 MR. BOB PETERS: Mr. Cormie, let's turn
5 to the term sheets with Minnesota Power and Wisconsin
6 Public Service. Those term sheets you've told the Board
7 were executed, I think one (1) was in December of 2007,
8 the other in March of 2008.

9 Is that right?

10 MR. DAVID CORMIE: That's correct.

11 MR. BOB PETERS: Have there been any
12 changes to the term sheets from what was originally
13 signed? Are you able to tell us that?

14 MR. DAVID CORMIE: I can tell you, Mr.
15 Peters, that negotiations are ongoing with both those
16 term sheets. They are proceeding very favourably. And
17 as part of those negotiations, all items are on the table
18 for discussion.

19 MR. BOB PETERS: Things are in a state of
20 flux then, Mr. Cormie.

21 Would that be fair?

22 MR. DAVID CORMIE: Well, I -- I did use
23 the word "favourable," Mr. Peters, and I -- I think it's
24 more than flux. Significant progress has been made.

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1 (BRIEF PAUSE)

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MR. BOB PETERS: It may not help the discussion, I know we're trying to dance around the perimeter on it, Mr. Cormie, but significant progress means different things to different people, just as it did when Mr. Warden wouldn't answer my question about natural gas being a significant part of the export forecast.

I was just -- what -- what I -- can the Board take from your answer though that the terms and conditions from December '07 and March of '08 have, to some extent, changed?

MR. DAVID CORMIE: Not wanting to be repetitive, Mr. Peters, but negotiations have continued, and negotiations mean that we are resolving the issues, and -- and significant progress is being made.

MR. BOB PETERS: You were repetitive, Mr. Cormie, even if you weren't meaning to be, but I understand. I understand the point. The point that -- there is evidence before this Board that one (1) of the conditions precedent in each of those two (2) term sheets is a requirement that for Minnesota Power, it is to construct, or have constructed, in the United States new transmission facilities to provide 250 megawatts of

1 incremental import/export capability.

2 Is that something you can accept and agree
3 to?

4 MR. DAVID CORMIE: Yes. Both companies
5 are required in the -- in the term sheets to build major
6 new transmission.

7 MR. BOB PETERS: And the Wisconsin Public
8 Service term sheet has a condition precedent that
9 Wisconsin Public Service must build, or have built, in
10 the United States new transmission facilities to provide
11 not less than 650 megawatts of incremental export
12 capability, and up to 750 megawatts of incremental import
13 capability.

14 MR. DAVID CORMIE: That's correct.

15 MR. BOB PETERS: And in terms of the cost
16 of that transmission facility, you heard ICF's witness
17 indicate that the ballpark price tag is about \$2 billion
18 US, but there's some things that that does not include.

19 Do you remember that?

20 MR. DAVID CORMIE: Yes. If the -- if the
21 transmission that is built is solely built to serve the
22 sales between Manitoba Hydro and its customers, that will
23 be the cost. That's the cost estimate.

24 However, the transmission project that is
25 being considered now is being viewed as a regional

1 transmission upgrade that incorporates not only our --
2 our contractual requirements but considers the upgrades
3 that other transmission-owning utilities in Minnesota
4 require.

5 And -- and through a cooperative
6 transmission expansion planning process, we believe that
7 our needs for a new interconnection can be met for the re
8 -- can be met, and the other transmission users can have
9 their needs met with a transmission plan that is -- has
10 been optimized for the region, rather than just for the
11 specific needs of any individual transmission company.

12 And so the companies that we're working
13 with beyond Minnesota Power and Wisconsin Public Service
14 are referred to the CAPEX utilities, and they are the
15 transmission-owning utilities in Minnesota, companies
16 like NSP, Great River Energy, Minnesota Power, Otter Tail
17 Power, and several others, I think there's about ten (10)
18 of them in total, have accepted the -- the new major
19 Manitoba Interconnection as an addition to the Minne --
20 to the -- to the transmission plan that will benefit
21 everyone.

22 And they've -- now have put the Manitoba
23 Interconnection into the MISO Transmission Expansion Plan
24 that we expected to be approved by the MISO Board in the
25 summer of 2011. And our -- our plan is and the schedule

1 is that that plan will be approved and will -- our
2 project will become a reality in the summer of 2012.

3 Ultimately, what that -- the cost of that
4 plan will be is still -- still being worked out, but the
5 2 mill -- the two (2) -- the \$2 billion is probably the
6 most that it would -- it would cost if it wasn't an opt -
7 - a regional optimized project.

8 So the significant progress has been made,
9 not only in the contract negotiations but also with
10 proceeding with having the transmission plan and our
11 proposal included in that transmission plan being brought
12 forward and accepted by the regional transmission owning
13 utilities.

14 The other area of progress has been how
15 the costs of that -- that regional transmission project
16 would be paid for, and over the last year MISO has
17 amended their tariff to allow for multi-value projects.
18 Multi-value projects are projects that are regional in
19 nature and they bring benefits to -- to the region as a
20 whole, both from a reliability perspective and allowing
21 the interconnection of new -- renewable resources to the
22 grid.

23 And multi-value transmission projects are
24 paid for by all load in MISO, not just the load that --
25 in -- that's in the local area. And as a result, there

1 is potential that a hundred percent of the costs of the
2 \$2 billion could be spread across all load in MISO. And
3 if that were to be the case, the viability of the
4 Manitoba purchase by Wisconsin and Minnesota Power would
5 become -- it would be ver -- extremely attractive.

6 So we're still working on how much of the
7 costs of the transmission expansion plan will be subject
8 to multi-value project cost allocation and there remains
9 some uncertainty to that. And it's not likely that we'll
10 have cost certainty on that five hundred (500) line until
11 -- till the summer of 2012.

12 So I think that's kind of the status
13 report where -- where we on -- are on the negotiations
14 and the transmission studies.

15 MR. BOB PETERS: Is that what's taken so
16 long and delayed the terms sheets up till now, Mr.
17 Cormie?

18 MR. DAVID CORMIE: Yes, because of -- of
19 -- of what -- what facilities are required and who is
20 going to pay for them, we needed to get the tariff
21 changed, we needed to get it approved by FERC. It was
22 approved by FERC in December. The MISO Board of
23 Directors has now actually approved projects under the
24 multi-value project type and all these things take time.
25 And so far everything has been going in the direction

1 that is favourable to this project and -- and you're
2 right it has taken time but it is -- we are making
3 significant progress.

4 MR. BOB PETERS: Would this optimization
5 process that you called a regional upgrade being accepted
6 by the transmission owning utilities, would that result
7 in those same utilities also paying any costs over and
8 above the \$2 billion if there were any?

9 MR. DAVID CORMIE: Well, to the extent
10 that there are costs, they would be allocated to all
11 customers in MISO footprint, whether it's -- it was 1
12 billion or 2 billion or 3 billion, those costs would be
13 socialized in effect.

14

15 (BRIEF PAUSE)

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17 MR. BOB PETERS: Does that mean the power
18 for the counterparty is coming to it, essentially, with
19 no transmission charge?

20 MR. DAVID CORMIE: If -- if -- if it was
21 just a private line being built between the Manitoba
22 Hydro and Minnesota Power or Wisconsin, those companies
23 would have to bear a hundred percent of the US
24 transmission costs, and they would have -- they would
25 have to bear those in their rates.

1 As a regional transmission project, the
2 cost of the transmission gets spread across the entire
3 MISO footprint, and so it will have a minor effect on
4 this individual cus -- any individual customers' rates.
5 So instead of paying, you know, the -- yeah, it -- it
6 gets -- it gets socialized, so it's -- it -- they pay for
7 it but a very small percent of it, because they -- as in
8 any individual utility they are a small portion of the
9 total load.

10 MR. BOB PETERS: And I was going to see
11 if you'd guesstimate or ballpark a percentage for either
12 Minnesota Power or Wisconsin Public Service.

13 MR. DAVID CORMIE: I -- I don't have that
14 number.

15 MR. BOB PETERS: Is it proportional to
16 what their load is in the entire MISO footprint?

17 MR. DAVID CORMIE: If just -- if one (1)
18 of the companies had a load of say 2,000 megawatts out of
19 a hundred thousand megawatt load they would pay 2 percent
20 of the cost of the transmission, because it would be
21 allocated in a proportion to their load ratio.

22 MR. BOB PETERS: What does that do to the
23 price of the energy?

24 MR. DAVID CORMIE: It doesn't change the
25 price of the energy. The price of the energy is

1 independent of the cost of the transmission, except that
2 it makes the project much more attractive to the US
3 purchaser because they don't have to risk that
4 investment.

5 THE CHAIRPERSON: Mr. Cormie, it's very
6 interesting, and we heard some of this from another
7 witness. But, presumably as part of the transmission
8 plans, there'd be plans that other utilities have under
9 discussion as well, that if they were too socialized,
10 have effect similar to the one that you're talking about.

11 Is that not true?

12 MR. DAVID CORMIE: Yes. And, you know,
13 the -- the project that MISO has already approved, it's
14 called the Michigan Thumb Project, and it's -- develops -
15 - allows the development of wind resources in the upper
16 peninsula of Michigan and gets those -- provides
17 generator outlet transmission. Everybody in MISO will
18 pay for that. That -- that 345 kV upgrade line gets --
19 gets socialized over the entire footprint.

20 So there's -- everybody is going to be
21 paying for this; it gets spread across. And that's the
22 direction that FERC has been -- has been going in order
23 to get transmission that is necessary to make renewables
24 to get it paid for by -- by panca -- or spreading it out
25 over the entire footprint.

1 MR. ROBERT MAYER: At some point in time,
2 I guess the Americans -- I know Mr. Rose just about spit
3 every time he used the word "socialized". It does strike
4 me as a strange word because when I usually consider
5 socialization I consider socialized medicine, something
6 which has a one (1) -- one (1) person payer, and that's
7 the government or the taxpayer.

8 It has always struck me that with the MISO
9 plan there's a much closer resemblance to what I know as
10 a cooperative, as opposed to socialized transmission.
11 And I'm not asking a question; I just find it strange the
12 way they pick the words to describe what is actually
13 happening.

14 MR. DAVID CORMIE: And -- and, you know,
15 maybe another word is "regionalised". Right now, the
16 transmission costs are paid for by the region that
17 benefits. Now they'll be shared among regions, but
18 everybody will -- will be -- will -- in the MISO
19 footprint all regions will be paying it.

20 Some regions have renewables and some
21 don't, and -- like Wisconsin has very few renewable
22 resources. It makes them difficult to have a renewable
23 portfolio standard that comes close to being near what
24 the national standard might be. If -- if they can gain
25 access to renewables in Manitoba or wind out of North

1 Dakota, that would -- that would help them, but they need
2 -- renewables require -- generally they require long
3 transmission, and those costs need to be -- need to be
4 paid for.

5 THE CHAIRPERSON: Thank you, Mr. Cormie.
6 I think we'll take the -- we'll call it -- call it a day
7 now. Thanks. We'll see you tomorrow at 9:30.

8

9 (PANEL RETIRES)

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11 --- Upon adjourning at 4:26 p.m.

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13 Certified Correct,

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18 Cheryl Lavigne, Ms.

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