



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO  
2017/18 and 2018/19  
GENERAL RATE APPLICATION  
PUBLIC HEARING

Before Board Panel:

Robert Gabor	- Board Chairperson
Marilyn Kapitany	- Vice-Chairperson
Larry Ring, QC	- Board Member
Shawn McCutcheon	- Board Member
Sharon McKay	- Board Member
Hugh Grant	- Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
December 7, 2017  
Pages 874 to 1156

## APPEARANCES

1  
2 Bob Peters ) Board Counsel  
3 Dayna Steinfeld )  
4  
5 Patti Ramage ) Manitoba Hydro  
6 Odette Fernandes (np) )  
7  
8 Byron Williams ) Consumers Coalition  
9 Katrine Dilay )  
10  
11 William Gange ) GAC  
12 Peter Miller (np) )  
13  
14 Antoine Hacault ) MIPUG  
15  
16 George Orle ) MKO  
17  
18 Senwung Luk (np) ) Assembly of  
19 Corey Shefman (np) ) Manitoba Chiefs  
20  
21 Kevin Williams ) Business Council  
22 Douglas Finkbeiner (np) ) of Manitoba  
23  
24 Daryl Ferguson (np) ) City of Winnipeg  
25



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10		The gross total peak net of DSM.	965
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1 --- Upon commencing at 9:01 a.m.

2

3 THE CHAIRPERSON: Good morning,  
4 everyone. Ms. Steinfeld, would you like to take us  
5 through today.

6 MS. DAYNA STEINFELD: Thank you, Mr.  
7 Chair. Everyone will be happy to know that we have  
8 Mr. Peters on for the day today. The schedule on the  
9 screen before you says that we won't be concluding  
10 today at 5:30, but we will in fact be concluding today  
11 at 4:30, so, another piece of good news. Thank you,  
12 Mr. Chair.

13 THE CHAIRPERSON: On that happy note,  
14 Mr. Peters.

15 MR. BOB PETERS: Thank you. That may  
16 have been a first in my career, but I'll thank counsel  
17 opposite.

18

19 CONTINUED MANITOBA HYDRO PANEL 2 re REVENUE

20 REQUIREMENT

21 LIZ CARRIERE, Resumed

22 LOIS MORRISON, Resumed

23 DAVID CORMIE, Resumed

24 SANDY BAUERLEIN, Resumed

25 JOEL WORTLEY, Resumed

1 SUSAN STEPHEN, Resumed  
2 CHUCK STEELE, Resumed  
3 JAMES MCCALLUM, Resumed  
4 HAL TURNER, Resumed  
5 GERALD NEUFELD, Resumed  
6 DAVID SWATEK, Resumed

7

8 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

9 MR. BOB PETERS: Mr. Chair and panel  
10 members and Manitoba Hydro witnesses, good morning.  
11 I'd like to try to catch up on a couple points  
12 yesterday that I reviewed and want to make sure that  
13 the panel is -- is clear on.

14 Starting on volume 1 of Board counsel  
15 book of documents, page 283. And this is on the  
16 record as Public Utilities Board Exhibit 42-1. And in  
17 fact, all of Board counsels' books of documents are  
18 marked as PUB Exhibit 42, and there are four (4)  
19 subsets to match each of the volumes.

20 Ms, Carriere, you were assisting the  
21 Board's panel on understanding some of the issues that  
22 were before the Board back at the NFAT days, and  
23 that's because you had some involvement at that time,  
24 correct?

25 MS. LIZ CARRIERE: That's correct.

1                   MR. BOB PETERS:    And on the slide in  
2 front of us on page 283 of volume 1 of Board counsels'  
3 book of documents, is -- is the indication that  
4 Manitoba Hydro is embarking upon its development plans  
5 from a position of strength.

6                   Do you see that?

7                   MS. LIZ CARRIERE:    Yes.  I thought --  
8 I think we talked a bit about this yesterday when we  
9 were talking about how the Corporation had been in the  
10 strongest financial position since -- in its history.

11                  MR. BOB PETERS:    And so the statement  
12 on the screen was factually correct?

13                  MS. LIZ CARRIERE:    At the time, yes.

14                  MR. BOB PETERS:    Well, even with the  
15 benefit of the -- the rearview mirror that I've been  
16 using, is it also not true that Manitoba Hydro felt it  
17 was embarking on these development plans from a  
18 position of strength because of its debt/equity ratio?

19                  MS. LIZ CARRIERE:    Yes.

20                  MR. BOB PETERS:    And then the last  
21 point was, as measured by the equity ratio, the  
22 Corporation is well situated to move forward with its  
23 upcoming capital investments.

24                  And that makes your point, Ms.  
25 Carriere, that from a debt-to-equity ratio the

1 Corporation had really never been in a stronger  
2 position?

3 MS. LIZ CARRIERE: That's correct.

4 MR. BOB PETERS: At the top of page  
5 283 on the screen -- on the monitors, Ms. Carriere, it  
6 says in the title that the financial risk is  
7 manageable and debt self-supporting.

8 The last part of that in terms of debt  
9 being self-supporting, that was measured by the  
10 Corporation's cash flow statements in its integrated  
11 financial forecast 12 and 13?

12 MS. LIZ CARRIERE: Well, being self-  
13 supporting refers to the Corporation's ability to  
14 continue to make its -- its interest obligations -- or  
15 pay its interest obligations. So, yes.

16 MR. BOB PETERS: In terms of making  
17 the Corporation's interest obligations, where that's  
18 visible, is on the cash flow statement that Ms.  
19 Bauerlein prepares; would that be correct?

20 MS. LIZ CARRIERE: Yes, that's true.

21 MR. BOB PETERS: All right. And --  
22 and maybe just worthwhile we'll turn back in volume 1  
23 to page 183. And we see -- and we'll pick -- we'll  
24 look at the projected cash flow statement that is in  
25 Manitoba Hydro's integrated financial forecast 16,

1 updated with the interim rate included.

2 And, Ms. Bauerlein, please assist the  
3 panel in understanding the responses to my questions.

4 In the top of this cash flow statement  
5 there's a line item called Interest Paid. And in 2018  
6 it appears to be \$531 million; correct?

7 MS. LIZ CARRIERE: That's correct.  
8 Although I'll say that the 531 doesn't include the  
9 interest that's actually being paid on capitalized  
10 projects.

11 MR. BOB PETERS: Right. And -- and  
12 even though we didn't share my notes you -- you're  
13 jumping ahead to them to say that the interest paid --  
14 or the interest capitalized is part of the new metric  
15 that the Corporation has introduced?

16 MS. LIZ CARRIERE: No, I wouldn't say  
17 that.

18 MR. BOB PETERS: So the interest being  
19 paid here is the interest being paid to your  
20 bondholders?

21 MS. LIZ CARRIERE: That's correct.

22 MR. BOB PETERS: And when you said  
23 that the Corporation was self-supporting, you were  
24 indicating that it was able to meet its interest  
25 obligations to its bondholders?

1 MS. LIZ CARRIERE: That's correct.

2 MR. BOB PETERS: So by this measure of  
3 cash flow, Manitoba Hydro says that it is self-  
4 supporting?

5 MS. LIZ CARRIERE: Self-supporting,  
6 yes. I did neglect to mention that you have to be  
7 able to fund your operations as well.

8 MR. BOB PETERS: All right so self-  
9 supporting and now we have to see about funding  
10 operations. So that's where we look on the screen in  
11 front of us on page 183 and we see that at the top  
12 part of the page, again, there is when we -- the math  
13 is done for us, \$734 million showing up as a line  
14 item.

15 Do you see that?

16 MS. LIZ CARRIERE: Yes.

17 MR. BOB PETERS: And so that -- that  
18 \$734 million arises after Manitoba Hydro has -- has  
19 paid its suppliers, after it's paid its employees, and  
20 after it's paid its debt holders; correct?

21 MS. LIZ CARRIERE: Plus the interest  
22 that's on capital projects that's included in  
23 property, plant and equipment. Maybe this calls for a  
24 little bit of a history here.

25 At one time, and I can't remember the

1 timing of it, but the interest on property, plant and  
2 equipment was originally included up with the interest  
3 paid. But some time ago we had decided to reclassify  
4 this -- that -- the interest associated with capital  
5 projects and put them into the P P and E because  
6 readers of the cash flow statement were having  
7 difficulty reconciling between the P P and E line and  
8 our capital expenditure forecast, which obviously  
9 includes the interest capitalized to projects.

10                   So we made that adjustment it -- quite  
11 a while ago, but obviously the -- in doing that,  
12 you're -- you're now missing when you're looking at  
13 the cash flow from operations, you're missing that  
14 piece of interest that's -- that we're actually paying  
15 cash out the door to.

16                   So, you know, it's -- it's, you know, I  
17 think it's a bit misleading when you say 734 million.

18                   MR. JAMES MCCALLUM: If I may, Mr.  
19 Peters, I think this is an important area of  
20 discussion that I just want to make sure we're --  
21 we're -- we're kind of working through it  
22 understanding where things lie on this cash flow  
23 statement, because -- I don't want to call it opaque,  
24 but it's -- it's important to know where things sit.

25                   You had made the statement that the

1 \$734 million you referenced in 2018 was what was sort  
2 -- as I understood you anyway, was what was left over  
3 after we paid the employees and after we'd paid our  
4 interest. That's not correct.

5                   That's after we paid some of our  
6 employees and some of our interest. There is a  
7 portion of our salaries and benefits that go -- and  
8 are capitalized to our -- both our major projects and  
9 our ongoing, you know, regular capital needs. And  
10 there's the interest on -- on our major projects and  
11 our ongoing capital needs that we capitalized to the  
12 project, and that you'll see all wrapped up in that  
13 \$3.660 billion number further down the page.

14                   MR. BOB PETERS: Yes, thank you, Mr.  
15 McCallum, Ms. Carriere, for those refinements.

16                   The interest on the bonds -- the  
17 bondholders get paid out of the interest paid line at  
18 the top part of the page, Ms. Carriere, as I  
19 understood your evidence?

20                   MS. LIZ CARRIERE: Yes.

21                   MR. BOB PETERS: All right. And then  
22 in addition to that, Mr. McCallum thinks that the --  
23 well, if I did -- the \$734 million that is shown up on  
24 that subtotal line is money that is available to be  
25 applied to other expenses of the Corporation, correct?

1                   MR. JAMES MCCALLUM:   Well, again,  
2 "expenses" is a word that has a -- a certain meaning  
3 to the accounting types.

4                   This is the money that's available to  
5 be applied for other interest that we need to pay to  
6 bondholders. It's typically all the bondholders. And  
7 other costs or expenditures which we put on to the  
8 balance sheet.

9                   So to the layperson, I suppose, a cost  
10 and expense, you -- you know, a burden a -- you maybe  
11 use them all synonymously, but I just want to, you  
12 know, kind of be clear on "expense" has a specific  
13 meaning for -- for financial statements.

14                  MR. BOB PETERS:   Okay. See if I can  
15 bring this down a few feet in terms of altitude.

16                  Manitoba Hydro has, I think we've  
17 agreed, approximately one (1) out of every three (3)  
18 employees working on a capital project or having their  
19 time charged to a capital project.

20                  Would that be approximately correct?

21                  MS. LIZ CARRIERE:   That's correct.

22                  MR. BOB PETERS:   And the refinement  
23 that you're making, Mr. McCallum, as I understand it  
24 is, even if those people are working on a capital  
25 project, they still expect a paycheque every two (2)

1 weeks and Hydro has to pay them?

2 MR. JAMES MCCALLUM: Yes.

3 MR. BOB PETERS: All right. How  
4 Manitoba Hydro accounts for how they pay for them on  
5 this sheet I think your word was "opaque," but if we  
6 go down to the investing activities, we see that in  
7 the 2018 year Manitoba Hydro is forecasting property,  
8 plant and equipment net of contributions of 3.3 --  
9 sorry, \$3.660 billion; correct?

10 MR. JAMES MCCALLUM: Yeah, that's  
11 correct. So -- so --

12 MR. BOB PETERS: So included in that  
13 \$3.66 billion is where Manitoba Hydro records one-  
14 third (1/3) of their employee wages and benefits  
15 because they're working on capital projects. Am I --

16 MR. JAMES MCCALLUM: That -- that's  
17 correct.

18 MR. BOB PETERS: And in addition to  
19 that, if Manitoba Hydro has interest to pay on the  
20 projects that are under construction, that's where  
21 Manitoba Hydro records that interest on the assets  
22 that are being constructed?

23 MR. JAMES MCCALLUM: That's correct.

24 MR. BOB PETERS: Not to get too far  
25 ahead of ourselves but when that \$3.66 billion worth

1 of assets -- and that's what it is, isn't it, it's --  
2 it's assets worth \$3.66 billion is -- is what's  
3 represented there under property, plant and equipment?

4 MR. JAMES MCCALLUM: That's right,  
5 that would be the addition to the property, plant and  
6 equipment line on the -- what's the new word for the  
7 balance sheet? Statement of financial position,  
8 pardon me. I was trained a while ago.

9 MR. BOB PETERS: So the question that  
10 I want the Board to understand is that when that \$3.66  
11 billion worth of new assets is finished, Manitoba  
12 Hydro will move -- will move it out of the property,  
13 plant and equipment line and it will become part of  
14 the assets in service of the Corporation?

15 MS. BAUERLEIN: Technically, that is  
16 in -- under in the prop -- built into property, plant  
17 and equipment. You have assets under construction and  
18 then assets in service. So it's moving from assets  
19 under construction to assets in service.

20 MR. BOB PETERS: And thank you, Ms.  
21 Bauerlein. The distinction is that when the asset is  
22 placed in service, Manitoba Hydro wants ratepayers to  
23 start paying for that asset; is that correct?

24 MS. SANDY BAUERLEIN: The carrying  
25 costs of that asset that's under construction will

1 then be reflected on the statement of income upon in-  
2 service. So, you'll have the interest costs,  
3 depreciation, et cetera.

4 MR. BOB PETERS: Okay, so maybe I  
5 didn't ask my question properly.

6 But when the asset is placed in  
7 service, that is when Manitoba Hydro wants ratepayers  
8 to start paying for that asset that's coming into  
9 service?

10 MS. SANDY BAUERLEIN: That is when  
11 it's reflected in the revenue requirement lines on the  
12 statement of income.

13 MR. BOB PETERS: Okay. Thank you for  
14 that. Included in the revenue requirement on the  
15 income statement, there is also capitalized interest  
16 in that number for the interest that has been  
17 capitalized while this asset was under construction  
18 under the property, plant and equipment line; is that  
19 correct?

20 MR. JAMES MCCALLUM: No, I don't -- I  
21 don't believe that it is. Included on the income  
22 statement you will see a line item for depreciation  
23 and amortization.

24 MR. BOB PETERS: You'll also see a  
25 finance expense line.

1 MR. JAMES MCCALLUM: Yeah and that  
2 won't ever include -- the finance expense line on the  
3 income statement does not include capitalized interest  
4 not before, not after the project or asset comes into  
5 service.

6 The way we deal with capitalized  
7 interest is it gets added in to the property, plant  
8 and equipment, the in-service -- net plant in-service,  
9 and we depreciate the capitalized interest, if that  
10 makes sense.

11 MR. BOB PETERS: Well, it -- I  
12 thought that's what I asked initially. What you're  
13 doing is you're -- you're telling the Board, and I  
14 will use the \$3.66 billion number, on the day that  
15 that -- and just assume that's an asset, one asset and  
16 I know it's multiple -- but when that asset comes into  
17 service that \$3.66 billion includes the capitalized  
18 interest that we've talked about, it includes the  
19 capitalized salaries of one (1) out of every three (3)  
20 Manitoba Hydro employees, and it actually includes the  
21 costs for the cement, the steel, the generators, the -  
22 - the widgets?

23 MR. JAMES MCCALLUM: The widgets.  
24 Yep.

25 MR. BOB PETERS: Okay. And once it

1 comes out of the -- onto the income statement, that's  
2 when Manitoba Hydro shows it to this Board and says it  
3 needs a revenue requirement to make sure it can pay  
4 the costs associated with bringing that \$3.66 billion  
5 asset into service?

6 MR. JAMES MCCALLUM: That -- that's  
7 correct. On -- on -- at least as to how it shows up  
8 on our income statement. The three point -- the costs  
9 of carrying that 3.660 billion, if it were one (1)  
10 asset as you described, we would have an on -- having  
11 debt finance the entirety of that. We would have an  
12 interest expense -- or interest cost that year of --  
13 let's use 5 percent or roughly \$200 million. And we'd  
14 have a depreciation expense. And let's assume that  
15 it's a -- sort of a fifty (50) year asset, we would  
16 have another \$80 million of depreciation expense.

17 MR. BOB PETERS: The amount of  
18 capitalized interest that we're talking, Mr. McCallum,  
19 is not insignificant, is it?

20 MR. JAMES MCCALLUM: No. In a given  
21 year, there is a -- and particularly is -- as Keeyask  
22 advances, you know, we're starting to see if you look  
23 to this interest paid line, you know, we're -- I'd  
24 have to -- to check and somebody will right away I'm  
25 sure but, you know, in 20,000 -- 2018 we're showing

1 interest paid on this cash flow statement of 530  
2 million.

3 In fact, you know, we owed our  
4 bondholders on account of, you know, the actual debt  
5 roughly 750 -- 900 million. And as you move across by  
6 the time you get to 20 -- 2021/2022 our interest --  
7 cash interest requirements are over \$1 billion per  
8 year.

9 MR. BOB PETERS: Well, let's show the  
10 Board that and if I could ask to go to PUB Exhibit 42-  
11 3, which is the third volume in Board counsels' book  
12 of documents on page 245. I'll put on the screen in  
13 front of you, Mr. McCallum, and Ms. Bauerlein and Ms.  
14 Carriere, one (1) of the Information Request responses  
15 that the Corporation provided.

16 And as we scroll below the chart, we  
17 can see that for the years ending in 2018 what  
18 Manitoba Hydro is telling the Board is that of their  
19 \$22 billion of assets, that includes \$3 billion of  
20 capitalized interest.

21 Have I got that right, Mr. McCallum?

22 MR. JAMES MCCALLUM: I -- I didn't see  
23 the top of the page to see if this was based on MH16  
24 or MH16 Update, but nonetheless, it would -- it would  
25 be roughly accurate.

1                   MR. BOB PETERS:    It's the former, I  
2 believe.  We could scroll up to the top and just see  
3 it underneath -- or above the chart.  I think it's  
4 based on Manitoba Hydro's integrated financial  
5 forecast 16.

6                   MR. JAMES MCCALLUM:    Okay.

7                   MR. BOB PETERS:    Well the -- well the  
8 dol -- well the exact dollar numbers, Mr. McCallum,  
9 aren't -- aren't what's at issue here.  What -- what  
10 we're showing the Board is that when the Corporation's  
11 assets are in-service and it comes time to pay for  
12 them, included in that depreciation expense item is an  
13 amount that can be either notionally or actually  
14 attributed to capitalized interest?

15                  MR. JAMES MCCALLUM:    Yes.

16                  MR. BOB PETERS:    And what the Board  
17 saw -- and perhaps when the Chairman of this Board  
18 spoke to Manitoba Hydro's President -- if there was a  
19 delay in Keeyask, one (1) of the consequences is that  
20 more interest gets capitalized to that project than  
21 what's currently forecast?

22                  MS. LIZ CARRIERE:    That's correct.

23                  MR. JAMES MCCALLUM:    But to be clear,  
24 we still need to make those interest payments.

25                  MR. BOB PETERS:    I under -- I

1 understand your point and if you don't have the cash  
2 in the bank, you're going to have to go borrow that?

3 MR. JAMES MCCALLUM: Correct.

4 MR. BOB PETERS: And in fact, you  
5 won't have the cash in the bank because your bank  
6 account isn't that flush?

7 MR. JAMES MCCALLUM: No.

8 MR. BOB PETERS: And even with the  
9 rate increases you're asking of this Board, your bank  
10 account won't be flush enough to pay the capitalized  
11 interest for Keeyask, as well as Bipole III, and all  
12 items on an annual basis, will it?

13 MR. JAMES MCCALLUM: That's correct.  
14 Not in the next few years.

15 MS. SUSAN STEPHEN: Excuse me, can I  
16 just clarify just so individuals have a sense of the  
17 amount of interest that's being capitalized.

18 If we turn to page 170 of your book of  
19 documents. I think we can visually represent the  
20 figures that we're talking about and explain possibly  
21 a little bit better what we're doing with.

22 MR. BOB PETERS: I just want to make  
23 sure we're all on the same -- in the same hymn book,  
24 so to speak Ms. Stephens (sic). Are you referring to  
25 the cash flow statement?

1 MS. SUSAN STEPHEN: No, I'm referring  
2 to the finance expense graph on page 170 in volume 3.

3 MR. BOB PETERS: Okay, thank you.

4 MS. SUSAN STEPHEN: So if you scroll  
5 down the page. So you see on this graph -- what this  
6 graph depicts is the actual amount of finance expense.  
7 And it shows in light blue the amount of interest  
8 that's allocated to construction.

9 So while we're doing -- or during our  
10 construction phase only the dark blue amount is what's  
11 showing up in your cash flow from operations. The  
12 light blue is showing up in our property, plant and  
13 equipment.

14 So once Keeyask comes in-service you  
15 can see that our income statement is being shielded by  
16 the full impact of the interest.

17 So the amounts in light blue is what's  
18 going to -- is being allocated to the asset and will  
19 be depreciated over time.

20 MR. BOB PETERS: And thank you,  
21 that's helpful, Ms. Stephens, (sic) and this is a  
22 normal course of business for the Utility in terms of  
23 how it's financed itself over the decades?

24 MS. SUSAN STEPHEN: Correct.

25 MR. BOB PETERS: And so when I talked

1 --

2 THE VICE-CHAIRPERSON: Excuse me, Mr.  
3 Peters, can I just ask some clarification?

4 MR. BOB PETERS: Oh, certainly.

5 THE VICE-CHAIRPERSON: I thought that  
6 Ms. Carriere said that that line under P P and E  
7 included assets under construction and in-service.

8 So that doesn't seem to be what you're  
9 saying. I just want to understand the difference.

10 MS. LIZ CARRIERE: On the cash flow  
11 statement it's the P P and E on that line is the cash  
12 -- is the projects under construction. That's because  
13 that -- assets in service, the cash has already gone  
14 out the door. And those -- those assets are reflected  
15 in P P and E on the balance sheet.

16 Only the ones under construction are --  
17 because we're -- we're paying for these -- these  
18 projects as they're being constructed on a projected  
19 basis, those are on the -- on the cash flow statement,  
20 the projected cash flow statement.

21 MR. JAMES MCCALLUM: Did -- did that  
22 help you, Madam Vice-Chair? I might add, just -- in -  
23 - in this gigantic pile of 3.660 billion, there are  
24 also projects that don't carry over multiple years,  
25 such as a Keeyask or a Bipole. There are some things

1 that Manitoba Hydro does quite quickly and so they'll  
2 -- those are expenditures that -- that we make in the  
3 course of the year and the project doesn't last, you  
4 know, and so in there there are probably a few hundred  
5 million dollars of expenditures that we just make them  
6 to put back up a wood pole or replace a transformer, t  
7 those sort of things.

8

9 CONTINUED BY MR. BOB PETERS:

10 MR. BOB PETERS: If I could ask to go  
11 back, please, on -- I guess we're back to volume 1.  
12 Sorry, Ms. Stephens, (sic) to get your hopes up, but  
13 page 179 of volume 1 of Board counsel book of  
14 documents.

15 Ms. -- Ms. Stephens, under the 2018  
16 column if we go down to the expenses, there is an  
17 expense called Finance Expense. And if we follow it  
18 over we see \$587 million forecast for 2018.

19 Are you with me on that, Ma'am?

20 MS. SUSAN STEPHEN: No, I'm not.

21 MR. BOB PETERS: All right. I  
22 apologize. I'm back in volume 1 of Board counsels'  
23 book of documents, and I've asked for it to be put on  
24 the monitor --

25 MS. SUSAN STEPHEN: Okay.

1 MR. BOB PETERS: -- if that will help  
2 you.

3 MS. SUSAN STEPHEN: Okay, yeah. Thank  
4 you.

5 MR. BOB PETERS: I see -- I see  
6 finance expense for 2018 at about \$587 million?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: The Board members  
9 would've seen that depicted on the chart that you  
10 helpfully took them to as the dark blue bar chart  
11 remember, correct?

12 MS. SUSAN STEPHEN: Correct.

13 MR. BOB PETERS: And that would have  
14 been approximately that number?

15 MS. SUSAN STEPHEN: Correct.

16 MR. BOB PETERS: If we turn -- if we  
17 turn to page 183 in the same volume 1 of the book of  
18 document -- documents, and we go down to the property,  
19 plant and equipment line item again, that's where that  
20 light blue shading on the chart that you brought us to  
21 would be captured for accounting purposes?

22 MS. SUSAN STEPHEN: Correct.

23 MR. BOB PETERS: And to Vice-Chair  
24 Kapitany's point, included in the property, plant and  
25 equipment line item as depicted here on the cash flow

1 statement, there would be assets that are going to be  
2 completed in 2018, and there will be other assets that  
3 are still under development by Manitoba Hydro?

4 MS. SUSAN STEPHEN: Correct.

5 MR. BOB PETERS: And whether they are  
6 under development or going to be completed in 2018,  
7 the interest that is on the debt to construct them  
8 will show up under this property, plant and equipment  
9 line item on the cash flow statement?

10 MS. SUSAN STEPHEN: Correct. That  
11 said, if they are completed earlier on in the year  
12 than you would see a portion of that interest  
13 reflected in interest paid.

14 MR. BOB PETERS: All right. And  
15 that's a refinement that we can't tell from the  
16 granularity of the cash flow statement in front of us?

17 MS. SUSAN STEPHEN: Correct.

18

19 (BRIEF PAUSE)

20

21 MR. BOB PETERS: All right. Now,  
22 let's get to Mr. McCallum's point, that is, no matter  
23 where the accountants hide the interest on the  
24 statements, he's got a -- he's got to pay for it every  
25 year. That's -- that's your reality, Mr. McCallum?

1 MR. JAMES MCCALLUM: Well, it's a  
2 relief to me to report I don't personally pay it but  
3 you're -- you're correct.

4 MR. BOB PETERS: Okay. And I -- I  
5 have a bad habit of referring to you in the -- the  
6 royal sense. But Manitoba Hydro has to pay it?

7 MR. JAMES MCCALLUM: That's right. But  
8 also maybe just because these transcripts seem to echo  
9 through time and I wouldn't want my successor fifteen  
10 (15) years from now to be responding to the comment,  
11 "we hide the interest costs," but that's where they're  
12 represented.

13 MR. BOB PETERS: Those were my words,  
14 if -- if you were accurate on that. But let's --  
15 let's say that Manitoba Hydro is acknowledging how  
16 interest is treated for accounting purposes and that's  
17 depicted on your income statement, your cash flow  
18 statement. Am I correct?

19 MR. JAMES MCCALLUM: And the balance  
20 sheet, yes.

21 MR. BOB PETERS: Yes. And then the  
22 revenue requirements that you bring before this Board  
23 are based on internationally accepted accounting  
24 principles and standards?

25 MS. SUSAN STEPHEN: The cash flow

1 statement itself, there is no standard in terms of  
2 what is captured in what buckets but there are  
3 standards that dictate how you account for things not  
4 necessarily how you display them for presentation  
5 purposes.

6 MR. BOB PETERS: And so, Manitoba  
7 Hydro has introduced -- would it be for the first time  
8 in a General Rate Application, Ms. Carriere, the --  
9 the modified cash flow to capital expenditure metric?

10 MS. LIZ CARRIERE: Yes. This is the  
11 first time the PUB would have seen the presentation of  
12 the cash flow statement in this manner. It's meant to  
13 be -- it's meant to augment what's already in our  
14 standard presentation.

15 MR. BOB PETERS: When did Manitoba  
16 Hydro first start preparing -- and I'll call it -- the  
17 modified cash flow to capital expenditure metric.  
18 When -- when was that first calculated by Manitoba  
19 Hydro?

20 MR. JAMES MCCALLUM: I -- I can't  
21 speak for the entire history, clearly, and others at  
22 the table can as to different analyses that the  
23 company has performed. I do -- and maybe I'm getting  
24 too caught up on words, hesitate with the  
25 characterization as it being a metric. Although --

1 what we've done here is owing to some of the  
2 challenges that we've just work through, Mr. Peters,  
3 around what lies where in this -- in this cash flow  
4 statement is we've tried to -- to state this in a way  
5 that is a little more clear what's happening in terms  
6 of the cash flows required to support the operating  
7 part of the business.

8                   So it's really not so much a metric as  
9 it is an effort at further clarity.

10                   MR. BOB PETERS: All right. I'm --  
11 I'm not clear in that answer to the question, Mr.  
12 McCallum, but I think we understand this is the first  
13 time it's been presented to the Board to augment their  
14 understanding of Manitoba Hydro's actual experiences.

15                   Have I got that right, Ms. Carriere?

16                   MS. LIZ CARRIERE: I'm not sure what  
17 you mean by "actual experiences?"

18                   MR. BOB PETERS: All right. It's --  
19 it's to augment what this Board already receives by  
20 way of the audited financial statements, as well as  
21 the income statement, the cash flow statement and the  
22 balance sheet or the statement of position?

23                   MS. LIZ CARRIERE: Yeah, it's -- it's  
24 meant to take certain line items of the -- of the --  
25 the formal cash flow statement and help you understand

1 what some of those other items are and -- and put it  
2 in a way that just helps you understand what the sort  
3 of the true cash flow picture looks like.

4 MS. SANDY BAUERLEIN: I just want to  
5 add a comment that maybe can help with some  
6 clarification.

7 So this statement here is your cash  
8 balance. What your cash balance is at the end of the  
9 year because you do receive my monies from debt in  
10 your financing activities. So, that's your cash  
11 balance as a result of all the -- the cash that you  
12 receive, whether you received that cash from domestic  
13 or export customers, or whether you receive that cash  
14 from debt borrowings.

15 What the other analysis is showing you  
16 is what our cash position looks like if we didn't  
17 borrow and how that's affecting the operations of the  
18 company.

19 MR. BOB PETERS: Thank you for that  
20 perspective --

21 MS. LIZ CARRIERE: I'm just going to  
22 clarify -- or add to Sand -- what Sandy says. There's  
23 two (2) ways to prepare a cash flow statement. What  
24 you're seeing here is called a direct method, and  
25 you're breaking it up, and it tells you where the

1 money is coming from.

2                   The other method is an indirect method,  
3 where you start with your income statement, and then  
4 you add back all your non-cash items. So that gives  
5 you sort of an idea of what puts your -- your --  
6 embedded within your net income, what are your -- your  
7 actual cash needs from the Corporation over and above  
8 net income?

9                   And then to the bottom of that is how  
10 you finance that. So it -- it doesn't -- that method  
11 does a better job of breaking out what your cash needs  
12 are, and then how you pay -- how you pay for that.

13                   MR. BOB PETERS: I apologize if I  
14 didn't write down that -- the answer but I didn't -- I  
15 didn't hear, and therefore I didn't write down, when  
16 Manitoba Hydro first started using this modified cash  
17 flow analysis.

18                   MR. JAMES MCCALLUM: Well, as we said,  
19 this was the -- this was the first time we've provided  
20 this analysis to the Public Utilities Board. This is  
21 something that, in moving into my role, I asked that  
22 we look at, feeling that the basket of financial  
23 statements that the Public Utilities Board was working  
24 from needed additional perspective to show the true  
25 picture.

1                   MR. BOB PETERS:   All right.  And is  
2 the cash flow statement that's on the screen in front  
3 of us, which if I could see the top, I -- it might be  
4 page 183 of Board counsel book of documents.  Yes.  
5 This is the cash flow statement, Ms. Stephens (sic),  
6 that you provide to the credit rating agencies?

7                   MS. SUSAN STEPHEN:   We do not directly  
8 provide this cash flow statement to the credit rating  
9 agencies.  What we do is we provide a presentation to  
10 the agencies, which we have not amended it  
11 significantly in the last few years, which shows  
12 graphs which depict the cash flow from operations in a  
13 graph with our capital expenditures.

14                   MR. BOB PETERS:   And the new cash flow  
15 analysis that Mr. McCallum has brought to the  
16 Corporation, is that shared with the credit rating  
17 agencies?

18                   MS. SUSAN STEPHEN:   We do not discuss  
19 that particular metric analysis.  We do not discuss  
20 that particular analysis with the credit rating  
21 agencies.  We do talk about cash flow.  We do talk in  
22 -- in detail about our capital expenditure plans, but  
23 that particular analysis is not discussed with the  
24 agencies.

25                   MR. BOB PETERS:   And so at the time

1 Manitoba Hydro embarked on many of its capital  
2 projects, Manitoba Hydro was not using internally this  
3 analysis, or this method of analysis, of cash flow  
4 that Mr. McCallum has introduced?

5 MS. SUSAN STEPHEN: Not that I'm aware  
6 of.

7 MS. LIZ CARRIERE: Well, I'll just  
8 clarify that. Even though we didn't have a -- a  
9 presentation of the cash flow in that format, we do  
10 understand ourselves and are capable of -- of  
11 determining what Manitoba Hydro's true cash flows --  
12 requirements are.

13 MR. BOB PETERS: Well, Ms. Carriere,  
14 when you say that, Mr. McCallum has shown us on his  
15 slides of a deficiency in cash flow that arises as a  
16 result of having to pay for the interest on capital  
17 projects that are of the base, or sustaining, variety,  
18 correct?

19 MS. LIZ CARRIERE: That's correct.

20 MR. BOB PETERS: So can you explain to  
21 the Board here why Manitoba Hydro would even embark on  
22 some of those capital projects if it knows it doesn't  
23 have the cash flow to pay for the -- to pay for them?

24

25

(BRIEF PAUSE)

1 MS. LIZ CARRIERE: I -- in terms of  
2 the sustaining capital, that's capital we're spending  
3 to keep the lights on. Some of it, it's -- I would  
4 say most of it is not discretionary.

5 MR. JAMES MCCALLUM: This is, in fact,  
6 the -- the issue, Mr. Peters, is that we are  
7 borrowing. We're borrowing because we don't have  
8 sufficient rates. We are borrowing and have been  
9 borrowing in order to provide for the sustaining  
10 capital needs of the Company, which are in the main  
11 expenditures. We don't have a choice. The lights go  
12 off if we don't replace that transformer that  
13 explodes.

14 MR. BOB PETERS: And for how long --  
15 thank you, Mr. McCallum -- for how long has Manitoba  
16 Hydro been borrowing to do that?

17 MR. JAMES MCCALLUM: Well, and we --  
18 we -- this question was asked earlier on Monday or  
19 Tuesday, and my answer then was, I don't know. And I  
20 -- I haven't gone back to look. We perform this  
21 analysis back to 2014/'15, I believe, subject to  
22 check, and each year from 2014/'15 through to this  
23 year, 2017/'18, we see substantial deficiency.

24 MR. BOB PETERS: So using the new  
25 metric, Manitoba Hydro was deficient in its cash flows

1 as far back as approximately 2014 or '15?

2 MR. JAMES MCCALLUM: That's correct.

3 MR. BOB PETERS: Possibly earlier, but  
4 you haven't done the math?

5 MR. JAMES MCCALLUM: Correct.

6 MR. BOB PETERS: Okay. Thank you for  
7 that, sir. Now, Ms. Stephens...

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: Ms. Stephens, you  
12 were helpful in showing us the -- the graph. Thank  
13 you for reading the book of documents.

14 The interest that is capitalized, I  
15 believe the Corporation has explained to the Board  
16 that on the screen in front of us, on page 183, in the  
17 2018 year, the interest that is capitalized on those  
18 projects that are being constructed is included in the  
19 \$3.66 billion num -- number, correct?

20 MS. SUSAN STEPHEN: That's correct.

21 MR. BOB PETERS: And, Mr. McCallum,  
22 that interest that is being capitalized is the same  
23 number that you want to have cash on hand to pay,  
24 correct?

25 MR. JAMES MCCALLUM: No, that's --

1 that's actually not correct.

2 MR. BOB PETERS: Okay. Let me refine  
3 the question, and I -- the interest on sustaining  
4 capital items, Ms. Stephens, that are under  
5 construction is included in the property, plant, and  
6 equipment line item, correct?

7 MS. SUSAN STEPHEN: That's correct.

8 MR. BOB PETERS: Okay, I'll refine the  
9 question, Mr. McCallum, that on those base and  
10 sustaining projects as now classified by Manitoba  
11 Hydro, the cost of those projects is also included in  
12 the new cash flow analysis that you prepared?

13 MR. JAMES MCCALLUM: That's correct.

14 MR. BOB PETERS: Thank you. Now,  
15 sitting on the outside and observing this, Manitoba  
16 Hydro is going to ask this Board to give it rates to  
17 recover the \$3.66 billion of property, plant and  
18 equipment when that comes into service, correct?

19 MR. JAMES MCCALLUM: Well, I would  
20 maybe distinguish between the impact on our financial  
21 results of the \$3.66 billion coming into service and  
22 anything that the -- the Board decides to do vis-a-vis  
23 rates.

24 MR. BOB PETERS: Let me ask another  
25 way, Mr. McCallum. I'm -- I'm just trying to keep it

1 at a level -- and I appreciate you're giving us a  
2 refinement, but when those property, plant, and  
3 equipment assets that are under construction come into  
4 service, the attendant costs of that will hit the  
5 income statement?

6 MR. JAMES MCCALLUM: That is correct.

7 MR. BOB PETERS: And based on that  
8 income statement, the Corporation will have a revenue  
9 requirement that it will present to the Public  
10 Utilities Board when it wants the Board to consider  
11 rate applications?

12 MR. JAMES MCCALLUM: Well, it will  
13 produce a -- a cost side of an income statement that  
14 we can judge whether the revenue is sufficient for.

15 MR. BOB PETERS: So I -- whether you  
16 have a revenue requirement or a revenue surplus is  
17 what you're saying?

18 MR. JAMES MCCALLUM: That's correct.

19 MR. BOB PETERS: Okay. But the point  
20 I don't want to lose the panel on is that included in  
21 that property, plant, and equipment are the capital  
22 costs, including capitalized interest, for the base  
23 and sustaining capital projects?

24 MR. JAMES MCCALLUM: This is true,  
25 yes.

1                   MR. BOB PETERS:    Is it also true, Mr.  
2 McCallum, that those very same costs are included in  
3 your cash flow metric that I've called the modified  
4 cash flow metric, correct?

5                   MR. JAMES MCCALLUM:    Yes.

6                   MR. BOB PETERS:    So then why should we  
7 not consider that as a double counting, because on one  
8 (1) hand you're wanting the cash today to pay the  
9 interest and the capitalized costs of an asset that  
10 you will include in your depreciation expense when it  
11 comes in service?

12                  MR. JAMES MCCALLUM:    Yeah.  So I -- I  
13 think it's -- what we're doing with this cash flow  
14 analysis is trying to portray the cash needs of the  
15 business to run it year to year to year, and you are  
16 correct that we take the capitalized interest and add  
17 it to the property, plant, and equipment, and  
18 depreciate that, and that that goes into our  
19 depreciation expense over time.

20                  But at the same time, we've borrowed  
21 the money to -- to -- in the main, borrowed the money  
22 to build these -- these assets, and we're paying that  
23 interest in cash each year as well.  So I think for a  
24 complete picture of what are the cash needs of the  
25 business year to year, day to day, you need to be

1 aware. And what we're trying to do is create a level  
2 of awareness of the actual burden of cash on the  
3 business.

4 MR. BOB PETERS: So Manitoba Hydro --  
5 I think your words to me yesterday were reminiscent of  
6 what my father told me, is you can't spend the same  
7 dollar twice, correct?

8 MR. JAMES MCCALLUM: Correct.

9 MR. BOB PETERS: But can you account  
10 for the same dollar in two (2) different ways? And I  
11 think the answer you've told the Board is, Yes, you  
12 can, because it's included under property, plant, and  
13 equipment, and it's also included in a -- a new metric  
14 on cash flow?

15 MR. JAMES MCCALLUM: Then I must have  
16 misunderstood your question. No, that's -- that --  
17 that wouldn't be what I meant, no.

18 MS. LIZ CARRIERE: If -- if I may,  
19 with respect to -- there's no double counting in this  
20 case. If you have -- although you have interest  
21 capitalized that will be amortized over the remaining  
22 life of that project, you also don't have the debt on  
23 the books. If we're collecting money now, that means  
24 we're not borrowing for it, so we don't have the  
25 associated finance expense, so it offsets one another.

1                   MR. BOB PETERS:    What you're telling  
2 the Board, Ms. Carriere, is that if -- if you have the  
3 cash flow to pay for the asset before it comes into  
4 service, you don't have to carry on with an interest  
5 cost after it comes into service?

6                   MS. LIZ CARRIERE:    That's correct.

7                   MR. BOB PETERS:    All right.  I think  
8 we have your point.  I'd like to move to a new topic  
9 on credit ratings.

10                   Do I take it, Ms. Stephens and Mr.  
11 McCallum, that credit rating agencies, it's a fact of  
12 life for Manitoba Hydro?

13                   MS. SUSAN STEPHEN:    That's correct.

14                   MR. BOB PETERS:    And you told us, I  
15 think, this morning, Ms. Stephens, that Manitoba Hydro  
16 makes presentations to the credit rating agencies, but  
17 in no way does Manitoba Hydro control the opinions or  
18 ratings that the credit agencies provide?

19                   MS. SUSAN STEPHEN:    That's correct.  
20 The credit rating agencies produce reports on the  
21 Province of Manitoba, and some of the agencies produce  
22 reports on Manitoba Hydro, and we have an opportunity  
23 to review the drafts prior to publication to amend  
24 only any factual errors or any -- remove any  
25 confidential information.  The opinions of the

1 agencies are their own.

2 MR. BOB PETERS: And you understand,  
3 Ms. Stephens, that the Province of Manitoba does  
4 likewise? It makes presentations to the credit rating  
5 agencies?

6 MS. SUSAN STEPHEN: Yes. The Province  
7 of Manitoba makes presentations to the credit rating  
8 agencies, and Manitoba Hydro is in attendance at those  
9 meetings.

10 MR. BOB PETERS: Manitoba Hydro is in  
11 attendance at those meetings?

12 MS. SUSAN STEPHEN: Correct.

13 MR. BOB PETERS: All right. Manitoba  
14 Hydro has its own borrowing capabilities that I  
15 believe are capped at about \$1/2 billion?

16 MS. SUSAN STEPHEN: Yes, we do have a  
17 \$500 million commercial paper program which we can  
18 issue debt into the US market or into the Canadian  
19 market in our own name.

20 MR. BOB PETERS: And so to the extent  
21 that Manitoba Hydro has its own \$1/2 billion facility,  
22 Manitoba Hydro has a -- gets a credit rating related  
23 to that as well?

24 MS. SUSAN STEPHEN: That's correct.

25 MR. BOB PETERS: To put the order of

1 magnitude before the panel, if we could turn to Board  
2 counsel book of documents Volume III, at Tab 32, it's  
3 Exhibit PUB 42-3. And specifically starting on page  
4 157...

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Perhaps on 155, we --  
9 Manitoba Hydro's response to this Information Request  
10 indicates that the vast majority -- just down to the  
11 response area -- the vast majority of Manitoba Hydro's  
12 debt is issued by the Province and then advanced to  
13 Manitoba Hydro. That's what you're telling this  
14 Board, correct?

15 MS. SUSAN STEPHEN: That's correct.

16 MR. BOB PETERS: And then if we do go  
17 to page 157, Manitoba Hydro starts to list all of the  
18 borrowings that have occurred by the Province of  
19 Manitoba, and then that the Province of Manitoba has  
20 advanced, if that's the correct word, to Manitoba  
21 Hydro?

22 MS. SUSAN STEPHEN: That's correct.

23 MR. BOB PETERS: Does Manitoba Hydro  
24 get the same terms as the Province of Manitoba obtains  
25 except for the interest rate?

1 MS. SUSAN STEPHEN: We get the same  
2 terms, including the interest rate, as the Province of  
3 Manitoba.

4 MR. BOB PETERS: Okay. That -- but in  
5 addition to that, Manitoba Hydro also pays a premium  
6 to the Province?

7 MS. SUSAN STEPHEN: We do. We pay a 1  
8 percent guarantee fee on our debt to the Province of  
9 Manitoba.

10 MR. BOB PETERS: But it's the Province  
11 of Manitoba that issues the debt. It's not Manitoba  
12 Hydro that issues the debt?

13 MS. SUSAN STEPHEN: That's correct.

14 MR. BOB PETERS: So Manitoba Hydro is  
15 not guaranteeing the Province's debt?

16 MS. SUSAN STEPHEN: What the Province  
17 of Manitoba is doing, we have an arrangement with  
18 them. They are taking on the risks such that if  
19 Manitoba Hydro were not able to make our interest  
20 payments, they are taking on the risk of making those  
21 interest payments on our behalf. It is like an  
22 insurance premium, so we are paying them that fee for  
23 that insurance premium.

24 MR. BOB PETERS: Thank you, Ms.  
25 Stephens. Before I leave page 157 that's on the

1 monitor, the panel will see that these appear to have  
2 been stacked or organized with the -- with the debt  
3 that's maturing the earliest at the tops of the page,  
4 correct?

5 MS. SUSAN STEPHEN: Yes.

6 MR. BOB PETERS: And so -- and so, Ms.  
7 Stephens, Manitoba Hydro is going to have to make some  
8 decisions as to whether to pay off this debt or to  
9 refinance this debt. Is that in a high level what one  
10 (1) of the decisions that you have to make?

11 MS. SUSAN STEPHEN: That's correct.

12 MR. BOB PETERS: And when I say "you",  
13 I do mean you?

14 MS. SUSAN STEPHEN: That's correct  
15 too.

16 MR. BOB PETERS: All right. What we  
17 will have seen, for example, and just help me with  
18 this, the first debt maturity date at the top of the  
19 page was in September of 2017. That's historic at  
20 this point in time, and so can you tell the Board what  
21 practically did Manitoba Hydro do about that \$55  
22 million of debt?

23 MS. SUSAN STEPHEN: For that  
24 particular debt issues series C-11. We actually  
25 refinanced that piece of debt. We are planning for

1 the next debt issue for series BM, which matures in  
2 January, to make a sinking fund withdrawal to repay  
3 part of that debt issue.

4 MR. BOB PETERS: And -- and those are  
5 the internal workings of your department in terms of  
6 how you practically do that?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: When Manitoba Hydro  
9 refinanced that 55 million, are you able to put on the  
10 public record what the yield rate was for that?

11 MS. SUSAN STEPHEN: Currently,  
12 Manitoba Hydro is pre-funded by approximately, I  
13 believe, 800 million, subject to quote. So the  
14 particular dollars that went to pay for that debt  
15 series, we don't have a one-to-one relationship there.

16 MR. BOB PETERS: Okay.

17 MS. SUSAN STEPHEN: What I can ans --

18 MR. BOB PETERS: Most of that I didn't  
19 understand, so let's start with the part I did.  
20 Manitoba Hydro is pre-funded, so that means you have  
21 money in the bank --

22 MS. SUSAN STEPHEN: That's correct.

23 MR. BOB PETERS: -- so to speak?

24 MS. SUSAN STEPHEN: That's correct.

25 MR. BOB PETERS: Physic -- really, or

1 it's just --

2 MS. SUSAN STEPHEN: That is --

3 MR. BOB PETERS: -- notionally?

4 MS. SUSAN STEPHEN: -- it's not  
5 necessarily in the bank. It's actually residing with  
6 the Province of Manitoba, held in trust for Manitoba  
7 Hydro.

8 MR. BOB PETERS: So the dollars are  
9 actually physically existing in a trust account?

10 MS. SUSAN STEPHEN: Correct.

11 MR. BOB PETERS: And that's \$800  
12 million?

13 MS. SUSAN STEPHEN: Subject to check,  
14 it's roughly that.

15 MR. BOB PETERS: All right. And  
16 you're -- you spent 55 million of that in September to  
17 refinance this -- this amount?

18 MS. SUSAN STEPHEN: That particular  
19 debt issue.

20 MR. BOB PETERS: So -- so why is the  
21 Province of Manitoba sitting on an \$800 million trust  
22 account with your money in it?

23 MS. SUSAN STEPHEN: We have been, as  
24 has the Province, been pre-funded for the last few  
25 years. The last few years, we've seen periods of

1 market volatility, and there's been times when it's  
2 more difficult to access the market than others.

3                   We are -- the market is currently  
4 getting better, but given that we're under a huge  
5 capital expansion, we've deemed it prudent to be -- to  
6 borrow in advance of our requirements such that we're  
7 not held essentially hostage to the markets. That  
8 way, we can -- we can issue debt at times when there  
9 is good market tone, good investor demand.

10                   We've also taken opportunities to issue  
11 internationally and achieve savings through some  
12 international issuance, which takes pressure off of  
13 our credit spreads.

14                   MR. JAMES MCCALLUM: I think, Mr.  
15 Peters, just to -- we're -- we're in the midst of a --  
16 a -- an unprecedented capital program, so as a matter  
17 of prudence, we've taken the decision for several  
18 years now to be sitting on a cash balance reflective  
19 of what we anticipate our next three (3) months  
20 outflows to be.

21                   So if you see a -- a balance of in the  
22 order of \$800 million, it's been upwards of a billion,  
23 it's been down around 600 million, but that's kind of  
24 the range. That's based on our forecast of what we  
25 think is going to flow out of the Company on a net

1 basis over the next three (3) month period.

2 MR. BOB PETERS: You're paying  
3 interest on that amount, Mr. McCallum?

4 MR. JAMES MCCALLUM: Absolutely.

5 MR. BOB PETERS: And you're earning  
6 interest on it in a trust account?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: And is it costing the  
9 ratepayers, or are the ratepayers gaining on that  
10 transaction?

11 MR. JAMES MCCALLUM: The -- the  
12 interest rate we're paying is higher than the interest  
13 rate we're receiving, and so, yes, it's a net cost.

14 MR. BOB PETERS: And the net cost  
15 would be seen in the finance expense on the Integrated  
16 Financial Forecast?

17 MS. SUSAN STEPHEN: Correct. Now,  
18 keep in mind we are locking in rates also at  
19 historically low levels. The last thirty (30) year  
20 debt issue, which we transacted at the end of  
21 November, had an all-in yield of 3.19 percent for  
22 thirty (30) years. These are historically low rates,  
23 and we think it's prudent to -- to act to lock in  
24 these rates at this time.

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

1 another part that I didn't understand from your  
2 responses a -- a few minutes ago, Ms. Stephens, is  
3 that there wasn't a one-to-one relationship. Should  
4 the Board understand that to mean you didn't just go  
5 to market for \$54.45 million, you just went to the  
6 trust account and drew that down to -- to refinance  
7 this?

8 MS. SUSAN STEPHEN: Correct.

9 MR. BOB PETERS: And so whatever the  
10 interest rate is of that trust account is what this  
11 \$55 million is now on your books for?

12 MS. SUSAN STEPHEN: Subject to check.  
13 We can probably attribute it to particular debt issue,  
14 if you hold on for one second.

15 MR. BOB PETERS: I -- that's a detail  
16 that I don't think we need to get refined to. But  
17 what you're doing is you -- you brought the 7.49  
18 percent interest rate down to a lower number?

19 MS. SUSAN STEPHEN: We did.

20 MR. BOB PETERS: And then likewise, in  
21 2018, and even, I guess, for most of 20 -- well,  
22 starting in September of 2018, you have a number of 10  
23 percent yields of debt that will need to be  
24 refinanced, and the expectation is that that will be  
25 reduced by the credit facilities and the borrowings

1 that'll be done at the time?

2 MS. SUSAN STEPHEN: Correct. So just  
3 to give you an idea, our weighted average interest  
4 rate for new debt issuance for this fiscal year is  
5 2.55 percent, and that includes a mix of five (5) year  
6 debt, appro -- approximately a billion of five (5)  
7 year debt, quite a bit of long debt, some ten (10)  
8 year debt.

9 MR. BOB PETERS: In looking at those  
10 on the screen in front of us, I'm MR.  
11 ALAN EHRLICH: starting -- series , and  
12 then the -- some BU-1, BU-2, those are  
13 maturing in -- and after September of  
14 2018, correct?

15 MS. SUSAN STEPHEN: Correct.

16 MR. BOB PETERS: Would -- would you  
17 know, just off the top, how long were those bonds out  
18 there for in the first place?

19 MS. SUSAN STEPHEN: I would have to  
20 double check to see when they were issued. I believe  
21 that series BU has been on our books for quite some  
22 time.

23 MR. BOB PETERS: And when you say  
24 "quite some time"...

25 MS. SUSAN STEPHEN: I believe it was a

1 thirty (30) year issue. If you'd like me to check, I  
2 can.

3 MR. BOB PETERS: Only if there's some  
4 -- something markedly different in that that you want  
5 to bring to the Board's attention, Ms. Stephens, but  
6 what you're saying is that thirty (30) years ago, when  
7 this money was obtained, those were the terms that  
8 were negotiated on behalf of Manitoba Hydro with --  
9 with the creditor?

10 MR. JAMES MCCALLUM: Yeah. I -- I  
11 think this is reflective, and we showed this in our  
12 presentation on Monday of a long-standing pattern of  
13 declining interest rates. So where you see, you know,  
14 yield rates of 10.5 percent, it reflects having issued  
15 debt securities at a time when interest rates were  
16 significantly higher.

17 MR. BOB PETERS: Ms. Stephens...?

18 MS. SUSAN STEPHEN: Sorry. Just  
19 specifically with respect to these bonds that you've  
20 selected, they are, as Jamie indicated, they have been  
21 on our books for quite some time.

22 But these particular ones were actually  
23 origin -- originated in US dollars, and we've recently  
24 converted them into Canadian dollar principle. The US  
25 coupon payments have remained in coupon, so they are

1 what we call dual currency bonds. The rates  
2 reflective for series BU, I do recall, was a 9.65  
3 coupon in the US.

4 MR. BOB PETERS: And you still believe  
5 they were probably of the order of magnitude of thirty  
6 (30) years?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: All right. I'd like  
9 to turn to page 159 in the book of documents. And  
10 scroll to the bottom of the page. Get back -- the  
11 total issued by the Province, \$18 billion is the --  
12 the total as of the time this calculation was  
13 performed, Ms. Stephens?

14 MS. SUSAN STEPHEN: That's correct.

15 MR. BOB PETERS: And we see also on  
16 the bottom of the page, while we're looking at it,  
17 that there is some debt that has been issued out to  
18 2063, and that would be certainly about thirty-six  
19 (36) years from now, but that could have been forty  
20 (40) year debt at the time it was placed?

21 MS. SUSAN STEPHEN: No. So these bonds  
22 -- you'll note that there are some that are out to  
23 2063 and close to that, these are bonds that we refer  
24 to as ultra longs. So these are usually one-off  
25 issues with a particular investor. So sometimes an

1 investor will indicate that they would like to have  
2 long-dated exposure to Manitoba, or Hydro's name on  
3 their books, and they will approach us, reversing cre  
4 -- and we will negotiate with them the terms of that  
5 particular issue.

6                   So in -- look -- most cases, we have  
7 actually negotiated an inversion to the yield. So,  
8 for example, say if our thirty (30) year yield today  
9 is pricing at three-o-five (305), we can, depending on  
10 market conditions, negotiate a forty (40) year bond at  
11 three-o-two (302) percent. So, these bonds are  
12 extremely attractive to Manitoba Hydro. We can lock  
13 in long-dated debt at extremely low rates. We will  
14 always have debt in our capital structure, and debt  
15 like this is good debt.

16                   MR. BOB PETERS:    The voice of Vince  
17 Warden coming from those transcripts of yesterday, Ms.  
18 Stephens. I don't know if you were listening for  
19 that, but the what you're telling the Board here is  
20 that this debt, even though it was a -- was a -- I  
21 think you called a -- or I wrote down a one-off type  
22 investment, that investor would have approached the  
23 Province of Manitoba, or would they have approached  
24 Manitoba Hydro directly?

25                   MS. SUSAN STEPHEN:   No. The investor

1 would have -- we work through our syndicate, so the  
2 investor would be approaching their salesperson and  
3 the syndicate, who would contact the individuals that  
4 we deal with in our syndicate.

5 MR. BOB PETERS: All right. The  
6 syndicate can have many meanings, I suppose, and --  
7 and in the case that you're referring to, this is a  
8 group of investment banks --

9 MS. SUSAN STEPHEN: Investment  
10 bankers, yes.

11 MR. BOB PETERS: And this syndicate  
12 would be who the Province would go to to say, We'd  
13 like to go to market and raise some money. What's it  
14 looking like out there?

15 Am I being too flippant with that?

16 MS. SUSAN STEPHEN: No. No, you're  
17 not at all. So the Province -- and we utilize the  
18 Province's syndicate for our deals, as the Province  
19 issues the debt in their name. The Province has a  
20 structure whereby they have lead investment banks,  
21 which they will alternate who actually leads a  
22 particular deal.

23 The way the syndicate works is that the  
24 lead syndicate -- the lead investment bank will get  
25 the largest portion of bonds to sell. So say they

1 would get 40 percent of the bonds to sell. And the  
2 residual members of the syndicate would a get lower  
3 portion of the bonds to sell.

4                   So when we go ahead and do a deal,  
5 those in -- investment banks are taking on the risk of  
6 selling our bonds. So it's in everyone's interests  
7 for our deal to go well. They are taking the risk.  
8 We will get our money regardless of whether the bond  
9 issues does not sell out or not, or sells out or not.

10                   MR. BOB PETERS: Because the syndicate  
11 -- the syndicated lead investment bank will have to  
12 pay you that money?

13                   MS. SUSAN STEPHEN: Correct.

14                   MR. BOB PETERS: And then they have  
15 the responsibility to go place it?

16                   MS. SUSAN STEPHEN: Correct.

17                   MR. BOB PETERS: And what they're  
18 placing is Province of Manitoba debt, correct?

19                   MS. SUSAN STEPHEN: Correct.

20                   MR. BOB PETERS: I wanted to turn to  
21 page 160. Just before we leave 159, we're -- we're  
22 scrolling into 160, we see that the Province has 18  
23 billion dollars of debt issued on behalf of Manitoba  
24 Hydro, and that as a percentage, it's 99.18. So if we  
25 can just keep that in mind and scroll to the -- down

1 page 160, to the middle, we see that the balance of  
2 Manitoba Hydro's debt is based on data that Manitoba  
3 Hydro itself has issued, correct?

4 MS. SUSAN STEPHEN: Correct.

5 MR. BOB PETERS: And this is under the  
6 -- I think you told us before, Ms. Stephens, that the  
7 \$500 million maximum facility, if I've got the words  
8 right, that you have avail -- that Manitoba Hydro has  
9 available?

10 MS. SUSAN STEPHEN: So these -- these  
11 particular bonds would not be included in that  
12 facility. That facility is for commercial paper for -  
13 - for short-term borrowing.

14 MR. BOB PETERS: All right. Thank you  
15 for the correction. And then if we scroll up just a  
16 little bit to see the top of this page 160 and some of  
17 the headings -- thank you -- these are -- I see  
18 mitigation bonds.

19 Can you, in short, tell us -- tell the  
20 panel what a mitigation bond is and why Hydro would  
21 issue it?

22 MS. SUSAN STEPHEN: Mitigation bonds  
23 are bonds that have been negotiated as part of  
24 settlements with First Nations. Ms. Carriere might be  
25 able to provide more detail in terms of the set -- the

1 actual settlements from her history. But these are  
2 agreements as per -- these are bonds that are  
3 negotiated as per the agreements with First Nations.

4 MR. BOB PETERS: These are not  
5 guaranteed by the Province?

6 MS. SUSAN STEPHEN: No, they are not.

7 MR. BOB PETERS: And so the -- the  
8 yield rate is the rate that Manitoba Hydro has, in  
9 fact, obtained on its own standing?

10 MS. SUSAN STEPHEN: The yield rate, we  
11 -- the yield rate is a market rate of the day, so we  
12 have a process in place for pricing the bonds. We get  
13 three (3) quotes from three (3) investment dealers,  
14 and we take the mid-quote on the day of pricing, and  
15 that is the yield for that particular bond.

16 MR. BOB PETERS: So am I  
17 understanding, Ms. Stephens, you're telling the Board  
18 that that's not necessarily what Manitoba Hydro pays  
19 is what's shown as the yield rate, you may pay  
20 something less than that?

21 MS. SUSAN STEPHEN: The -- well,  
22 technically, we will be going to market. We don't --  
23 we don't actually get these funds. This is a  
24 settlement that we're providing to the First Nations.  
25 So in order for us to make interest payments, we would

1 be borrowing at a different rate, yes.

2 MS. LIZ CARRIERE: Just to be clear,  
3 Mr. Peters, these rates are what Manitoba Hydro would  
4 be able to obtain on that day --

5 MS. SUSAN STEPHEN: On that day.

6 MS. LIZ CARRIERE: -- so it's an  
7 equivalent cost. In other words, it's just a -- a  
8 flow-through for us.

9 MR. BOB PETERS: And then also on this  
10 page there's some Manitoba Hydro electric board  
11 Winnipeg Hydro bonds.

12 Are those the inherited when Manitoba  
13 Hydro acquired Winnipeg Hydro?

14 MS. SUSAN STEPHEN: I suppose you  
15 could see that. Those are bonds that we created. We  
16 called them mirror bonds at the time of the purchase  
17 to replicate what the City Winnipeg had outstanding at  
18 that time.

19 MR. BOB PETERS: Because Manitoba  
20 Hydro paid the City of Winnipeg the cash and then  
21 Manitoba Hydro had to step into the shoes on the  
22 liability side.

23 MS. SUSAN STEPHEN: Correct.

24 MR. BOB PETERS: Thank you. Hydro  
25 bonds do they still issue those? Are those still

1 actively issued?

2 MS. SUSAN STEPHEN: No, the program --  
3 the Province of Manitoba, which -- which we ran a  
4 builder bond with them, and we ran a Manitoba Hydro  
5 bond program as well in conjunction. That program, as  
6 far as I know, has ceased to be in existence as of the  
7 last two (2) years. So these bonds that we have left  
8 on our books are residual, and I believe will be  
9 maturing in 2018.

10 MR. BOB PETERS: I want to turn with  
11 you, Ms. Stephens (sic), with the careful watch by Ms.  
12 Ramage, to some credit rating agency reports that have  
13 been filed in these proceedings. And I will indicate,  
14 as a caution, that there are some reports are not on  
15 the public record.

16 And it's my understanding that they're  
17 not on the public record because of the contractual  
18 arrangements under which Manitoba Hydro obtains them,  
19 that Manitoba Hydro is not at liberty to put them on  
20 the public record.

21 Would that be your understanding?

22 MS. SUSAN STEPHEN: Yes, that's my  
23 understanding.

24 MR. BOB PETERS: I also heard Mr.  
25 McCallum quoting from some of the bond or credit

1 rating agency reports that are not on the public  
2 record, because Manitoba Hydro has permission to talk  
3 about excerpts from them as long as the document is  
4 not placed on the public record.

5                   Would that be your understanding?

6                   MS. SUSAN STEPHEN:    That's correct.

7                   MR. BOB PETERS:    Would it also be  
8 correct that this concern about placing it on the  
9 public record would go away if a customer like  
10 Manitoba Hydro would pay more or pay for a higher  
11 level of service from the bond rating agency?  Or do  
12 they -- do they not allow their reports on the public  
13 record at all, regardless of the fee paid?

14                   MS. SUSAN STEPHEN:    That I'm not sure.

15                   MR. BOB PETERS:    That's fine.  That's  
16 fine.

17                   MS. SUSAN STEPHEN:    We have not -- we  
18 have not --

19                   MS. PATTI RAMAGE:    That would not be  
20 correct, Mr. Peters.

21                   MR. BOB PETERS:    Okay.  Last week, Ms.  
22 Stephens, both Moody's and Dominion Bond Rating  
23 Service published new reports.

24                   Are you aware of that?

25                   MS. SUSAN STEPHEN:    Yes, I'm aware

1 that Moody's published a report on Manitoba Hydro and  
2 DBRS published a provincial outlook, which is not a  
3 credit rating report per se. It's a research report.

4 MR. BOB PETERS: And because Manitoba  
5 Hydro is a customer of -- of those credit rating  
6 agencies, those would be made available to Manitoba  
7 Hydro under some terms?

8 MS. SUSAN STEPHEN: Correct.

9 MR. BOB PETERS: And Manitoba Hydro  
10 has filed the Moody's November 2017 report with the  
11 Public Utilities Board as a confidential document, and  
12 it won't be put on the screen on the -- first of all,  
13 it won't be put into the public record by -- by me.  
14 And it also won't be displayed on the monitor, and it  
15 won't be included as an exhibit in these proceedings.

16 But as I understand it, Ms. Stephens,  
17 you are comfortable responding to certain extracts  
18 that I may quote or ask you about.

19 Would that be fair?

20 MS. SUSAN STEPHEN: I will respond.

21 MR. BOB PETERS: Okay. Thank you.

22 Now, the Dominion Bond Rating Service, if that's their  
23 old name, maybe they're just known as the DBRS, I'm  
24 not aware, they did a 2018 Canadian Provincial  
25 Government Outlook Report as well? Is that one (1) of

1 the ones you'd mentioned?

2 MS. SUSAN STEPHEN: Correct.

3 MR. BOB PETERS: All right. And would  
4 Manitoba Hydro be prepared to file that as a public  
5 exhibit to through Ms. Ramage?

6 MS. PATTI RAMAGE: Subject to  
7 confirmation of the DBRS's consent, yes, we would.

8 MR. BOB PETERS: All right. I don't  
9 want to put Manitoba Hydro in an awkward position, Ms.  
10 Ramage. I was understanding the consent had been  
11 received or am I premature?

12 MS. PATTI RAMAGE: I understand that  
13 consent has been received also.

14 MR. BOB PETERS: You just want to see  
15 it in writing.

16 MS. PATTI RAMAGE: I would just like  
17 to see it in writing before we put --

18 MR. BOB PETERS: Okay. Ms. Ramage, so  
19 you'll take that as an undertaking to file as a  
20 Manitoba Hydro exhibit, the DBRS 2018 Canadian  
21 Provincial Government Outlook Report once you're  
22 satisfied that you have the requisite consent?

23 MS. PATTI RAMAGE: Yes, we will.

24 MR. BOB PETERS: All right. Thank you  
25 for that.

1 --- UNDERTAKING NO. 3: Manitoba Hydro to provide  
2 the 2018 DBRS Canadian  
3 Provincial Government  
4 Outlook Report  
5

6 CONTINUED BY MR. BOB PETERS:

7 MR. BOB PETERS: Ms. Stephens, has  
8 Manitoba Hydro experienced any difficulty in having  
9 the province borrow money that is ultimately provided  
10 to Manitoba Hydro for Bipole III and Keeyask?

11 MS. SUSAN STEPHEN: Not to this point,  
12 no.

13 MR. BOB PETERS: And maybe -- maybe  
14 that question -- Manitoba Hydro doesn't earmark the  
15 debt for a particular capital project; does it? So,  
16 try...

17 MS. SUSAN STEPHEN: There we go. No,  
18 we don't. We borrow on a consolidated basis.

19 MR. BOB PETERS: That consolidated  
20 basis means, and I like to think you use the word  
21 "buckets," but when -- when your bucket of money is  
22 getting empty you go and borrow and try to fill it up  
23 again because you know in the next three (3) months  
24 that your capital expenditures are going to be  
25 forecasted to use a significant amount of money?

1 MS. SUSAN STEPHEN: Correct. We  
2 maintain -- we maintain a corporate cash forecast,  
3 which we update regularly. And we know on a day-to-  
4 day basis what our upcoming three (3) month  
5 requirements are going -- going to be.

6 We prepare a quarterly strategy, and --  
7 for our borrowings, are in regular discussion with the  
8 Province of Manitoba in terms of what our plans are as  
9 far as borrowing, and regular discussions in terms of  
10 when market tone is good to go, and investor demand as  
11 far as what investors are looking for.

12 MR. BOB PETERS: So the -- the only  
13 analogy I can draw on, Ms. Stephens, is if a -- if a  
14 person wanted to buy a truck and they didn't have the  
15 cash and they had to borrow it, they'd seek to get a  
16 loan, and the loan would be tied to the asset of the  
17 truck.

18 You can accept that as a pretty basic  
19 anal -- example?

20 MS. SUSAN STEPHEN: It's a basic  
21 example.

22 MR. BOB PETERS: And in terms of how  
23 Manitoba Hydro conducts its business, Manitoba Hydro  
24 doesn't tie any of the borrowings to any of its assets  
25 in a -- in -- in that direct way?

1 MS. SUSAN STEPHEN: That's correct.

2 MR. BOB PETERS: Okay. Has the  
3 Province of Manitoba put limitations on Manitoba Hydro  
4 as to how much the province is prepared to borrow for  
5 Manitoba Hydro's capital projects?

6 MS. SUSAN STEPHEN: Yes, we go through  
7 a process every year after we have prepared our  
8 integrated financial forecast. And we know how much  
9 borrowing we're going to require for the following  
10 year and the year beyond, and we put together what's  
11 called a loan act request, which is approved in the  
12 legislature. This provides us with limits on new  
13 borrowing authority.

14 We also have refunding authority  
15 available to us. So if we have a particular debt  
16 issue which comes due, which we will have to refund  
17 because we cannot repay, we have authority associated  
18 with that to refund that debt issue. And that's given  
19 by the Financial Admin -- Administration Act.

20 MR. BOB PETERS: And so would it be  
21 correct in the panel understanding that it's Manitoba  
22 Hydro who goes to the province and say, Here's our  
23 expected borrowings in the next twelve (12) months,  
24 and as well as the next twenty-four (24) months.  
25 Please get us the requisite legal authority to -- to

1 do that.

2 MS. SUSAN STEPHEN: That's correct.

3 MR. BOB PETERS: Has the Province of  
4 Manitoba ever reduced the amount that they're prepared  
5 to put forward and proposed for Manitoba Hydro?

6 MS. SUSAN STEPHEN: Not to my  
7 knowledge.

8 MR. BOB PETERS: Has the Province of  
9 Manitoba ever put restrictions on Manitoba Hydro as to  
10 when the province will borrow on behalf of Manitoba  
11 Hydro's capital projects?

12 MS. SUSAN STEPHEN: The only  
13 restrictions that I can think of would be in periods  
14 of blackout around elections. If there's any  
15 sensitive timing in terms of when quarterly results  
16 are coming out we are in blackout around those events.

17 MR. BOB PETERS: Does that mean  
18 Manitoba Hydro cannot borrow during those blackouts?

19 MS. SUSAN STEPHEN: That's correct.  
20 Normally, they're short-lived. And that's just to  
21 give the investors a chance to respond to any news  
22 that could be in quarterly results. You don't want to  
23 be doing a debt issue the day before quarterly results  
24 come out and have bad news, because investors may --  
25 may not like that.

1                   MR. BOB PETERS:   All right.  And has  
2 the Province of Manitoba put restrictions on Manitoba  
3 Hydro as to the term or the duration of the debt that  
4 the province is prepared to arrange on Manitoba  
5 Hydro's capital projects?

6                   MS. SUSAN STEPHEN:   No, they have not.

7                   MR. BOB PETERS:   Would I cor --  
8 understand correctly, Ms. Stephens, from what you told  
9 the Board earlier about the syndicate that there is an  
10 informality, if I may, in terms of the communication  
11 such that the Province of Manitoba could ask the  
12 syndicate, Is this a good time for us to go to the  
13 market?  Would it be that casual?

14                  MS. SUSAN STEPHEN:   I -- well, I don't  
15 know if I'd qualify that as casual.  There in reg --  
16 the Province Manitoba is in regular discussions every  
17 day with all the members of the syndicate.  They get a  
18 variety of opinions from different investment banks.  
19 They can assess for themselves, based on the input  
20 that they're getting from several sources, as to  
21 whether it's a good time to go to market.  They're not  
22 relying at any one (1) point on one (1) investment  
23 banker.

24                  MR. BOB PETERS:   But the syndicate  
25 could tell the Province of Manitoba that, you know,

1 Just hold off for a couple days because we're doing  
2 something for Ontario in the next couple of days or  
3 some other province, perhaps?

4 MS. SUSAN STEPHEN: There could be  
5 messaging like that. Ontario is the largest borrower,  
6 and we do -- normally if Ontario is going to come to  
7 market we will let them go first.

8 MR. BOB PETERS: And that's because  
9 Manitoba prices against the Ontario spread?

10 MS. SUSAN STEPHEN: They are the  
11 largest -- largest borrower and all provincial spreads  
12 are measured relative to Ontario.

13 MR. BOB PETERS: Okay. Mr. Chairman,  
14 I'd like to turn to a document that will not be marked  
15 as an exhibit, but that doesn't mean that a copy  
16 cannot be provided to the panel. And I would ask Mr.  
17 Simonsen to provide the panel with a copy of the  
18 Moody's investors credit opinion dated November 28th  
19 of 2017. I wasn't asking him to leave.

20

21 (BRIEF PAUSE)

22

23 MR. BOB PETERS: Ms. Stephens, have  
24 you a copy of this document, and Mr. McCallum as well?

25 MS. SUSAN STEPHEN: I do.

1 MR. BOB PETERS: You can share one (1)  
2 if you --

3 MR. JAMES MCCALLUM: For efficiency's  
4 sake, we'll share.

5 MR. BOB PETERS: Thank you, sir.

6 MS. SUSAN STEPHEN: Cost cutting.

7

8 (BRIEF PAUSE)

9

10 MR. BOB PETERS: So, Ms. Stephens,  
11 while the panel is maybe just familiarizing  
12 themselves, a relatively short document two and a half  
13 (2 1/2) pages long; correct?

14 MS. SUSAN STEPHEN: Correct.

15 MR. BOB PETERS: When the Province of  
16 Manitoba is meeting with the credit rating agencies  
17 and Manitoba Hydro is in the room, as I understood  
18 your evidence?

19 MS. SUSAN STEPHEN: Manitoba Hydro is  
20 normally in the room.

21 MR. BOB PETERS: And -- and when I --  
22 when we say that, can I take it to a different level  
23 that on some occasions it may be, in fact, you in the  
24 room with the province?

25 MS. SUSAN STEPHEN: Correct.

1 MR. BOB PETERS: And you're  
2 representing Manitoba Hydro as their treasurer?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: Would this Board  
5 understand correctly that Manitoba -- the Province of  
6 Manitoba is telling the credit rating agencies that  
7 some of the debt that the province will come to market  
8 for will be going to the electric utility?

9 MS. SUSAN STEPHEN: The credit rating  
10 agencies would understand that, yes.

11 MR. BOB PETERS: And the province  
12 would tell the credit rating agencies, the magnitude  
13 of the capital projects that Manitoba Hydro has  
14 embarked on?

15 MS. SUSAN STEPHEN: Yes, I actually  
16 review a presentation with the rating agencies to give  
17 them detail on our financial results, our capital  
18 program, our cash flow situation, our liquidity  
19 situation, talk about our rate environment. That  
20 presentation, which has been filed and is on record,  
21 has not changed, as I mentioned, appreciably in the  
22 last few years.

23 MR. BOB PETERS: No, I think we have  
24 it. It might be in one of the books of documents. But  
25 were you doing this back in 2014, Ms. Stephens?

1 "This" being the treasurer?

2 MS. SUSAN STEPHEN: I was not  
3 treasurer in -- in 2014. I became treasurer in April  
4 of this year.

5 MR. BOB PETERS: All right.

6 MS. SUSAN STEPHEN: Mr. Shultz was  
7 treasurer --

8 MR. BOB PETERS: All right.

9 MS. SUSAN STEPHEN: -- at that time.

10 MR. BOB PETERS: But you were still  
11 involved in the treasury function?

12 MS. SUSAN STEPHEN: Yes, and I  
13 attended meetings with Mr. -- Mr. Schultz in 2014.

14 MR. BOB PETERS: All right. We showed  
15 yesterday, the panel, Manitoba Hydro's integrated  
16 financial forecast 14 that is memorable only because  
17 it had eight (8) years of losses that totalled  
18 approximately \$900 million.

19 Do you -- are you familiar with that?

20 MS. SUSAN STEPHEN: Yes, I am.

21 MR. BOB PETERS: And that information  
22 would've been shared with the credit rating agencies;  
23 would it?

24 MS. SUSAN STEPHEN: It would have been  
25 shared by our graphs. They would've seen the

1 deterioration at that time.

2 MR. BOB PETERS: They would've seen  
3 negative net income?

4 MS. SUSAN STEPHEN: They would have  
5 seen a reduction in equity. We produce an equity  
6 graph, and they would have seen the reduction to the  
7 equity levels.

8 MR. BOB PETERS: And so through --  
9 they would deduce that the if equity is going down  
10 it's because there's not enough net income, and they  
11 would assume that there would be losses in those  
12 years, is your understanding?

13 MS. SUSAN STEPHEN: That's correct.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: I want to turn to the  
18 -- the Moody's investor service credit opinion, and I  
19 -- I planned to ask you questions based on this  
20 document. And if Ms. Ramage feels that I've  
21 overstepped, I'm sure her hand will not be far from  
22 the microphone.

23 But are we on common ground that  
24 Manitoba Hydro electric board's commercial paper is  
25 rated at prime minus one (1) stable?

1 MS. SUSAN STEPHEN: Yes.

2 MR. BOB PETERS: And --

3 MS. SUSAN STEPHEN: Yes.

4 MR. BOB PETERS: -- and you'll have to  
5 help me with the nomenclature, Ms. Stephens. And then  
6 the provincial government has a rating of Aa2 stable.  
7 Would that also be correct?

8 MS. SUSAN STEPHEN: That's correct.  
9 Just for clarity, the P-1 stable, that is with respect  
10 to the commercial paper, the short-term. And the  
11 senior unsecured is Aa2 stable rating is with respect  
12 to senior debt. So we actually -- Manitoba Hydro has  
13 a flow-through rating from the pov -- from the  
14 Province of Manitoba. So we borrow our long-term debt  
15 based off of that Aa2 stable.

16 MR. BOB PETERS: Right. And the P-1  
17 stable is for your short-term borrowings, which I  
18 believe you've explained would be to a maximum of half  
19 a billion dollars?

20 MS. SUSAN STEPHEN: Correct. And I --  
21 I think it's actually just P-1 stable.

22 MR. BOB PETERS: Not P minus one (1).  
23 Okay. Thank you. In the middle of the page that I'm  
24 looking at, Ms. Stephens, Manitoba Hydro is rated  
25 prime 1 based on Moody's global short-term rating

1 scale; correct?

2 MS. SUSAN STEPHEN: Correct.

3 MR. BOB PETERS: And Moody's then says  
4 that the rating on the province would have to be  
5 downgraded four (4) notches to A3 before Moody's would  
6 downgrade Manitoba Hydro's prime 1 rating prime 2.

7 Do you see that there?

8 MS. SUSAN STEPHEN: I do.

9 MR. BOB PETERS: What -- can you  
10 explain to the panel what that means from your  
11 understanding? And I appreciate you didn't author the  
12 -- the document.

13 MS. SUSAN STEPHEN: And I'm sure we  
14 have this on the record. I believe this in tab 4. If  
15 we can pull it up. It would be in tab 4, towards the  
16 end of the --

17 MR. BOB PETERS: Page 27, maybe?

18 MS. SUSAN STEPHEN: -- or -- of our  
19 application?

20 MR. BOB PETERS: Yes. I think Ms. --  
21 is this what you were looking for?

22 MS. SUSAN STEPHEN: Yes, that's what  
23 I'm looking for. That will make our job easier here.  
24 So when they indicate that the rating on the province  
25 would have to be downgraded four (4) notches to A3, so

1 if we're looking at Moody's you can see that currently  
2 in Moody's, which is in the middle column, they are at  
3 Aa2. So if we count down four (4), one (1), two (2),  
4 three (3), four (4), you're sitting at A3.

5 So what Moody's is telling us is that  
6 the province would have to deteriorate four (4)  
7 notches for their long-term debt in order for Moody's  
8 to downgrade Manitoba Hydro to the P-1/P-2 level.

9 MR. BOB PETERS: All right. I  
10 appreciate that. So the Moody's has downgraded the  
11 province in the last year?

12 MS. SUSAN STEPHEN: Moody's downgraded  
13 the province back in 20 -- July of 2015.

14 MR. BOB PETERS: It was '15?

15 MS. SUSAN STEPHEN: Yeah.

16 MR. BOB PETERS: Okay. I apologize.  
17 So what we're looking at on the screen in front of us  
18 is that the province used to be Aa1, and now it's Aa2.

19 That would be your understanding?

20 MS. SUSAN STEPHEN: Correct.

21 MR. BOB PETERS: And for Manitoba  
22 Hydro's short-term credit rating to be downgraded from  
23 P-1 the province itself would have to be downgraded  
24 four (4) steps on this ladder?

25 MS. SUSAN STEPHEN: That's correct.

1 MR. BOB PETERS: Thank you for that.

2 Moody's also indicates that Manitoba Hydro having the  
3 prime 1 rating is the highest short-term rating that  
4 Moody's can assign.

5 Is that correct?

6 MS. SUSAN STEPHEN: That's correct.

7 MR. BOB PETERS: And Moody's says that  
8 that's indicative of a superior ability to repay  
9 short-term debt obligations. So that's their opinion;  
10 correct?

11 MS. SUSAN STEPHEN: Correct.

12 MR. BOB PETERS: They also say that  
13 Manitoba Hydro's prime 1 rating cannot have any upward  
14 revision. And I take it that's because it's already  
15 at the top, and we're seeing that on page 27 of 34 of  
16 tab 4 that's on the screen in front of us.

17 MS. SUSAN STEPHEN: Correct.

18 MR. BOB PETERS: Thank you. When we  
19 turn the page -- well, I guess we won't turn the page  
20 publicly. When we -- those of us who have a copy turn  
21 the page, we see that there's some more information  
22 provided.

23 And at the end of the paragraph there's  
24 an indication that Moody's continues to expect  
25 Manitoba Hydro to operate as a self-sufficient

1 Corporation to service its debt and afford payments to  
2 the province, such as water rentals and assessments.

3 Do you see -- do -- do you see that?

4 MS. SUSAN STEPHEN: Yes, I do.

5 MR. BOB PETERS: And Manitoba Hydro  
6 would have told Moody's in your presentation or  
7 someone's presentation from treasury that Manitoba  
8 Hydro is paying payment to the province, including for  
9 such things as water rentals and other assessments?

10 MS. SUSAN STEPHEN: Correct.

11 MR. BOB PETERS: And when Moody's  
12 talks about being expected to operate as a self-  
13 sufficient Corporation, what is Manitoba Hydro's  
14 understanding of what Moody's is getting at?

15 MS. SUSAN STEPHEN: I think what  
16 Moody's has put in their reports in the past is that  
17 they would expect Manitoba Hydro to be -- to have  
18 sufficient cash flow for operations and to be able to  
19 make our debt servicing costs, as well as our payments  
20 to government, without recourse to government for a  
21 subsidy.

22 MR. BOB PETERS: And the best document  
23 that we've seen this morning, Ms. Stephens, is the  
24 cash flow statement appended to the integrated  
25 financial forecast that would give Moody's that

1 comfort?

2 MS. SUSAN STEPHEN: They have access  
3 to all of our public information that's on the record,  
4 including our application, which I know they have  
5 reviewed. One (1) thing that I can share with you, as  
6 Ms. Ramage said that I can, I wasn't quite sure.

7 I did have a discussion with the  
8 Moody's utility analyst prior to this report being  
9 published. He did indicate to me that at the time  
10 they do consider Manitoba Hydro to be self-supporting,  
11 but based on some of the -- the material in our  
12 applications they have grave concerns about our EBIT,  
13 earnings before interest and tax, interest coverage  
14 ratio.

15 In some projections they see that the  
16 interest coverage ratio falls under one (1) for  
17 several years. This is of great concern to Moody's.  
18 This means that potentially Manitoba Hydro may not be  
19 able to service its debt. And he indicated that they  
20 will be looking forward -- if there are not mitigants  
21 enacted, they will be looking forward, and they may  
22 change our status of self-supporting.

23 MR. BOB PETERS: And did Moody's say  
24 what they expect the mitigants would be to give them  
25 the comfort that they shouldn't consider downgrading?

1 MS. SUSAN STEPHEN: Well, they do  
2 indicate in this report, and I will read it so that I  
3 -- I get the words correct here:

4 "While rates -- rate increases are  
5 nominally set on a cost-of-service  
6 basis, rate increases in recent  
7 years have clearly not kept up with  
8 cost, as evidenced by ongoing weak  
9 financial metrics."

10 When I asked the utility analyst about  
11 that metric he indicated the interest coverage ratio  
12 was a great concern. They also indicate later on in  
13 the report on the last paragraph with respect to our  
14 targets, so we do have an EBITDA, interest coverage  
15 ratio, of 1.8, and a equity to capitalization target  
16 of 25. They indicate that:

17 "Both targets are not expected to be  
18 met for an extended period of time  
19 due to the large generation and  
20 transmission projects currently  
21 underway, such as Keeyask and  
22 Bipole, and limited rate increases."

23 MR. BOB PETERS: So the credit rating  
24 agency is aware of the targets not being expected to  
25 be met for an extended period of time because of the

1 capital expenditure program?

2 MS. SUSAN STEPHEN: And limited rate  
3 increases.

4

5 (BRIEF PAUSE)

6

7 MR. BOB PETERS: Ms. Stephens, are you  
8 able to tell this Board what information you  
9 understand Moody's was considering when it suggested  
10 that the EBIT coverage ratio was below one (1)?

11 MS. SUSAN STEPHEN: In terms of what  
12 source document they were viewing?

13 MR. BOB PETERS: Correct.

14 MS. SUSAN STEPHEN: I am unaware. I  
15 know that they have reviewed our application and all  
16 of the public information. I'm not aware of the exact  
17 document.

18 MR. BOB PETERS: All right. Thank  
19 you.

20 MR. JAMES MCCALLUM: I'd maybe just  
21 had that, at least in my experience, and Ms. Stephen  
22 can -- can speak better because she is closer to them,  
23 that these agencies, and -- and as importantly,  
24 really, bond investors, will look at everything that  
25 Manitoba Hydro produces, puts on the public record.

1                   But they also do their own work. They  
2 do their own mathematics. They look at things the way  
3 they like to look at them. So we might not be privy  
4 to the entirety of any ratio metric or analysis they  
5 do in reaching their views and conclusions.

6                   MR. BOB PETERS: Thank you. So they  
7 may develop their own, I called them metrics, and  
8 maybe didn't like that, but they do their own analysis  
9 and their own -- they -- they have a way of looking at  
10 how they may consider a matter just like you  
11 introduced to the Corporation, Mr. McCallum, a new  
12 analysis in terms of cash flow.

13                   MR. JAMES MCCALLUM: Yeah. That's  
14 right. And when I use the word "metric" I -- I --  
15 that to me is synonymous with a ratio or a, you know,  
16 sort of a statistic just for --

17                   MR. BOB PETERS: All right.

18                   MR. JAMES MCCALLUM: -- clarity in how  
19 I use the term.

20                   MR. BOB PETERS: Ms. Stephens, near  
21 the end of the materials that we have from Moody's,  
22 the opinion talks about being aware of -- of risks in  
23 case of unexpected events such as low water level,  
24 cost overruns, construction delays, given the nature  
25 of the hydroelectric plants long construction cycle

1 prior to the start of operations and cash flow.

2                   And then offsetting the risks they say,  
3 Manitoba Hydro benefits and they list three (3)  
4 factors. One (1) is access to funding from the  
5 province. Secondly is seeking rate increases. And  
6 thirdly curtailing -- curtailing capital spending to  
7 continue as a self-supporting Corporation.

8                   So would Manitoba Hydro understand that  
9 the -- the mitigants that Moody's might be suggesting  
10 are contained in those three (3)? Either access to  
11 funding from the province, rate increases, or  
12 curtailed spending?

13

14   (BRIEF PAUSE)

15

16                   MS. SUSAN STEPHEN: I'm -- I'm not  
17 sure whether or not they're saying that these are  
18 mitigants. I think they're -- they're saying these  
19 items are offsetting the risks. The fact that we can  
20 access cash through the Province of Manitoba provides  
21 us with more a attractive rate than if we were a stand  
22 alone.

23                   With respect to curtailing capital  
24 spending, obviously that would be something that would  
25 be a risk in terms of specifically our sustainable

1 capital spending. That would be a risk return item.  
2 So I'm not sure. I'm not familiar enough with their  
3 curtailing capital spending. I can't speak to that  
4 part.

5 MR. BOB PETERS: Okay. Thank you.  
6 Mr. McCallum, before I ask for the morning recess,  
7 this raises a topic about access to funding from the  
8 province. I'm not sure we talked about this when you  
9 sat on the first panel of Hydro's witnesses along with  
10 your president. But there was some indication,  
11 perhaps in the Boston Consulting Group report if I  
12 recall, that equity from the province was an option  
13 for Manitoba Hydro.

14 Is that correct? Do you recall that?

15 MR. JAMES MCCALLUM: Maybe I can ask  
16 you to just clarify specifically what you want to get  
17 to, so I can answer your question properly.

18 MR. BOB PETERS: Thank you, sir. Has  
19 Manitoba Hydro asked the Province of Manitoba for an  
20 equity injection into Manitoba Hydro?

21 MR. JAMES MCCALLUM: My -- my  
22 understanding is that the board of Manitoba Hydro did  
23 do that, yes.

24 MR. BOB PETERS: Did Manitoba Hydro  
25 management do that?

1                   MR. JAMES MCCALLUM:    Manitoba Hydro  
2 management assisted in preparation of some analysis  
3 and materials to support the Board of Directors  
4 visiting with provincial staff to make the request.

5                   MR. BOB PETERS:     How large of an  
6 equity injection was requested by Manitoba Hydro?

7                   MS. PATTI RAMAGE:     Mr. Peters, and I  
8 don't think anyone's try -- trying -- there's a lack  
9 of transparency here. But we are venturing into  
10 territory where we're dealing with Manitoba Hydro's  
11 board's communications with government, and I don't  
12 think we have consent to -- to discuss that on the  
13 public record without government weighing in on it.

14                  MR. BOB PETERS:     I'm not asking for  
15 Manitoba Hydro's board's position, Ms. Ramage. I'm  
16 asking for Manitoba Hydro's management's position in  
17 terms of what management was part of requesting from  
18 the province.

19

20                                       (BRIEF PAUSE)

21

22                  MR. JAMES MCCALLUM:    Yeah, I -- I  
23 don't -- the Board of Directors of Manitoba Hydro  
24 asked the management team to assist in the preparation  
25 of certain analyses, and a presentation in support of

1 a proposal to the Province of Manitoba to make an  
2 equity contribution to the company. So I don't know  
3 that management per se had a position.

4 MR. BOB PETERS: And so while you are  
5 aware, Mr. McCallum, of the -- of the dollar amount,  
6 you're telling this Board that that dollar amount was  
7 from your Board of Directors to the government and  
8 because of that, through the advice of your counsel,  
9 you don't want to put that number on the public  
10 record?

11

12 (BRIEF PAUSE)

13

14 MS. PATTI RAMAGE: That's a question,  
15 Mr. Peters, if I don't believe we are authorized to  
16 put that -- those sort of communications on the public  
17 record.

18 MR. BOB PETERS: So I'd -- I'd ask Ms.  
19 --

20 MS. PATTI RAMAGE: Certainly without  
21 obtaining the appropriate consents.

22 MR. BOB PETERS: I apologize for  
23 interrupting, Ms. Ramage. Thank you. I would ask  
24 that Manitoba Hydro undertake to obtain the permission  
25 to put on the public record the amount of the equity

1 request made by Manitoba Hydro of the Province of  
2 Manitoba. And to the extent that it's at hand, the --  
3 the analysis information that management provided to  
4 support the request, Ms. Ramage.

5 MS. PATTI RAMAGE: We can make the  
6 ask.

7 MR. BOB PETERS: Thank you. Thank  
8 you, ma'am.

9  
10 --- UNDERTAKING NO. 4: Manitoba Hydro to obtain  
11 government permission to  
12 place on the public record  
13 the amount of the equity  
14 request made by Manitoba  
15 Hydro of the Province of  
16 Manitoba, as well as the  
17 analysis information to  
18 support the request

19  
20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: Mr. McCallum, this  
22 request was done and was made of the province prior to  
23 Manitoba Hydro filing its General Rate Application?

24 MR. JAMES MCCALLUM: That's -- that's  
25 correct.

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Mr. Chairman, in  
4 light of the hour, and I'll have an opportunity to go  
5 through my notes and catch up, I'd ask that the Board  
6 consider taking the morning recess at this time.

7 THE CHAIRPERSON: We will break until  
8 eleven o'clock. Thank you.

9

10 --- Upon recessing at 10:42 a.m.

11 --- Upon resuming at 11:05 a.m.

12

13 THE CHAIRPERSON: Mr. Peters, before  
14 you begin, I believe Mr. Hacault has something he  
15 wants to say on the record.

16 MR. ANTOINE HACAULT: Thank you, Mr.  
17 Chair. It's with respect to the exchange that  
18 occurred between Ms. Ramage and Mr. Peters on the  
19 issue of what was the request being made of Manitoba -  
20 - or by Manitoba Hydro of the province.

21 And we'd like to reserve our -- our  
22 rights to be able to put forward a position on that  
23 depending on the -- on whether the document gets  
24 produced.

25 I haven't considered the position

1 fully, but two (2) things strike me, firstly, they  
2 were public statements so if -- there might be a  
3 waiver of any privilege if it did exist; and secondly,  
4 I believe the law is with respect to advice provided  
5 to administer a request would not be advice.

6           So, -- but I'm not limiting our  
7 arguments or positions on that issue, I just want to  
8 note that we'd like to reserve our rights to be able  
9 to argue that issue if the information is not being  
10 produced.

11           THE CHAIRPERSON: Thank you. We'll --  
12 we'll await the position of Manitoba Hydro and then  
13 we'll -- we'll determine the --

14           MS. PATTI RAMAGE: We're taking the  
15 request under advisement --

16           THE CHAIRPERSON: Yeah, no, that's  
17 understandable.

18           MS. PATTI RAMAGE: -- and he'll get a  
19 -- a fulsome response once we've had a chance to look  
20 at it. And -- and it may, quite frankly, not be -- it  
21 may turn into a nonissue --

22           THE CHAIRPERSON: Correct.

23           MS. PATTI RAMAGE: -- and it may -- if  
24 there is one there may be reasons beyond the advice to  
25 adminis -- or something like that. Relevance may also

1 come into it.

2 But bef -- while I have the mic?

3 THE CHAIRPERSON: Yes.

4 MS. PATTI RAMAGE: We have distributed  
5 around the room two (2) documents. We were hoping to  
6 just have them entered in case Mr. Peters moves along  
7 in his cross to where we -- no, no. Sorry, Bob.

8 Oh, and here they come. One is -- and  
9 it's because we already assigned it a number. It's  
10 going to be Manitoba Hydro Exhibit 69, and that was --  
11 we located the written notes from Mr. Riley's  
12 presentation that -- and that was requested as an  
13 undertaking at transcript page 484.

14 So we just want to get that one in  
15 because the next one we need to get in so that Mr.  
16 Peters has fair warning that Ms. Morrison noted a  
17 correction in one (1) of her MF -- of her IR responses  
18 that Mr. Peters has in his book. So, we wanted to get  
19 it out there so that he could perhaps look at that and  
20 -- and be able to maybe shorten some time if there's  
21 confusion because of that.

22 And that is a correction to PUB-  
23 Manitoba Hydro first round 56 A through C and the  
24 correction occurs to page 5 of 11. The gross total  
25 peak net of DSM.

1                   And while I can attempt to explain that  
2 to you, I don't think -- I don't think you want to  
3 hear it from me and I'd probably don't want to hear it  
4 now, but we just wanted to get that on the record  
5 ahead of time so that when we get there, that's a  
6 document that can be referred to.

7                   And so that would be Manitoba Hydro  
8 Exhibit 70.

9

10 --- EXHIBIT NO. MH-69:       Written notes from Mr.  
11                               Riley's presentation that  
12                               was requested as an  
13                               undertaking at transcript  
14                               page 484.

15

16 --- EXHIBIT NO. MH-70:       correction to PUB-  
17                               Manitoba Hydro first round  
18                               56 A through C and the  
19                               correction occurs to page  
20                               5 of 11. The gross total  
21                               peak net of DSM.

22

23                   THE CHAIRPERSON:   Thank you, Ms.  
24 Ramage. Mr. Peters, after that slight you -- you may  
25 continue.

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Well, I'll -- I'll  
3 continue on as best I can but I should start off, Mr.  
4 Chair and panel members with an apology to Ms.  
5 Stephen, whose name I have habitually made plural and  
6 -- and I do apologize. I asked if the transcript was  
7 going to reflect my error and it probably will, so I  
8 do apologize, Ms. Stephen. I'll try to do better.

9 MS. SUSAN STEPHEN: Apology accepted.  
10 I'm sure one (1) of me is enough.

11 MR. BOB PETERS: Thank you, ma'am.  
12 One of the other credit rating agency reports that has  
13 been made available this past week has come from the  
14 DBRS which may be the Dominion Bond Rating Service,  
15 ma'am.

16 MS. SUSAN STEPHEN: Yes.

17 MR. BOB PETERS: And Ms. Ramage, to  
18 show you there's no hard feelings, I just want to make  
19 sure that Manitoba Hydro is comfortable and feels it's  
20 able to put on the public record not only a copy of  
21 the DBRS November 2017/2018 Canadian provincial  
22 government outlook but can speak to the matters on the  
23 public record?

24 MS. PATTI RAMAGE: We can definitely  
25 speak to matters on the public record. At the break I

1 took a look at the consent and it looks like we're  
2 going to need to go back for clarification. They  
3 provided consent to provide this to our regulator.  
4 They didn't go the next step and say, and the  
5 regulator may post it or distribute it.

6                   And if I could maybe explain for --  
7 it's like going into Chapters to buy your latest John  
8 Grisham novel. You've gone in, you've paid your  
9 money, you take your home -- your book home and you  
10 read it. It's a -- it's a great book and all your  
11 friends say, I'd like to see that look too, and you  
12 run it through the photocopier. You can't do that.

13                   So while we've paid for it and if we  
14 went back to the publisher and said, you know, can I  
15 make one (1) copy they say, yes, but they -- so they  
16 have said, yes, you can share with your regulator, but  
17 they didn't take the next step -- and I'm not saying -  
18 - they may have just neglected to, but it doesn't say  
19 that we can distribute it and that's what we have to  
20 clarify with them.

21                   MS. SUSAN STEPHEN:    So and just to add  
22 on to that, I did send a note to DBRS requesting that  
23 we can share it with everyone. So, I'm just waiting  
24 to hear back.

25                   MR. BOB PETERS:    Thank you for that,

1 Ms. Stephen and Ms. Ramage.

2 Ms. Ramage, is it then your advice to  
3 this panel that the document not be displayed on the  
4 monitors in this room?

5 MS. PATTI RAMAGE: I would prefer it  
6 not be displayed on the monitors, but there is no  
7 issue with discussing it because like my Chapters'  
8 analogy, you can go in the store and read it. You  
9 just have -- we haven't got the permission to make the  
10 copies.

11 MR. BOB PETERS: All right. I'll --  
12 I'll indicate that I won't be calling it up on to the  
13 monitors to respect your request, Ms. Ramage, but I  
14 will, Ms. Stephen, with your assistance provide -- go  
15 to some extracts.

16 And, Ms. Ramage, you've just said, I  
17 believe, that there is no problem in providing a hard  
18 copy -- paper copy to the regulator being the Public  
19 Utilities Board?

20 MS. PATTI RAMAGE: That's correct.

21 MR. BOB PETERS: Mr. Chair, I -- I  
22 have one (1) and only one (1) paper copy and I'll pass  
23 it up to the -- to the panel. If the panel chooses to  
24 use it, it will not be put on the screen. It will  
25 just be available as a reference until Ms. Ramage gets

1 the permissions to publicly file it as an exhibit,  
2 which was an undertaking I requested of her this  
3 morning.

4 All right. So, Ms. Ram -- Ms. Stephen,  
5 Ms. Ramage and I have been talking about one (1)  
6 report and the report is called the 2018 Canadian  
7 Provincial Government Outlook and that's the report  
8 that you're familiar with, ma'am?

9 MS. SUSAN STEPHEN: Yes.

10 MR. BOB PETERS: No sooner than I said  
11 one (1) report, Ms. Stephen, that I am reminded by the  
12 Board's associate secretary that there was a data  
13 supplement to that report.

14 Is that considered part and parcel of  
15 the same report or is that considered by you to be a  
16 separate report?

17 MS. SUSAN STEPHEN: I would consider  
18 to be a separate report and I do not have that report  
19 with me.

20 MR. BOB PETERS: Okay. And so, Ms.  
21 Ramage will clarify which of the two (2) documents can  
22 be marked as a public exhibit with the requisite  
23 consents. And I'd ask her to go so far as to include  
24 the data supplement in it.

25 Are you -- did you have a chance to

1 look at the data supplement at all?

2 MS. SUSAN STEPHEN: No, I have not.

3 MR. BOB PETERS: All right. It  
4 probably wouldn't surprise you that it's just replete  
5 with tables of numbers, and that's generally what the  
6 data supplement to support the report consists of?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: All right. And  
9 looking at the -- at the DBRS report -- first of all,  
10 Ms. Stephen, can you assist the Board and -- and  
11 explaining what this industry study is about and --  
12 and perhaps even why it's done.

13 MS. SUSAN STEPHEN: Okay. DBRS does  
14 produce several different reports, research reports,  
15 that are available for a fee on their website.

16 This particular report is an outlook  
17 for -- of 2018 Canadian Provincial Government Outlook  
18 and in this report, they will discuss different items  
19 such as the credit outlook for the different  
20 provinces. They'll cover topics such as who is at  
21 risk in the next recession. They'll look at  
22 provincial politics. They'll look at top issues in  
23 public finance. They'll do a review of public  
24 finances in 2017.

25 They talk also about the economic

1 structure of the provinces. Economic diversification  
2 and volatility; income and wealth of the economy;  
3 export diversification; demographics; labour market.  
4 And they also have a section on fiscal management  
5 where they -- they go in depth on all of the  
6 provincial revenues, taxes, resource revenue,  
7 government business enterprises, which is what  
8 Manitoba Hydro is, other -- other owned source revenue  
9 and federal transfers.

10                   And they have a section on expenditures  
11 where they go into detail on health, education, social  
12 serv -- social service, excuse me, other program  
13 expense; capital investment; and debt servicing costs.

14                   And they also have a section on  
15 financial management where they talk about debt and  
16 unfunded pension liabilities. And finally a section  
17 on intergovernmental relations.

18                   MR. BOB PETERS: And they do that all  
19 on approximately a hundred (100) pages?

20                   MS. SUSAN STEPHEN: Correct.

21                   MR. BOB PETERS: And by page 20, Ms.  
22 Stephen, DBRS refers to Hydro investment projects and  
23 self-supported debt.

24                   Have you had an opportunity to review  
25 that aspect of the report?

1 MS. SUSAN STEPHEN: Yes, I have.

2 MR. BOB PETERS: And what -- what  
3 they're saying in this -- if I'm understanding it  
4 correctly -- is that in recent years a number of the  
5 provincial Crown corporations have borrowed heavily to  
6 support major capital projects and that includes  
7 Manitoba Hydro, along with other hydro-generating  
8 provinces such as BC Hydro, Hydro-Quebec and Nalcor.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: Your answer was you -  
13 - you understand that to be the case?

14 MS. SUSAN STEPHEN: I understand that  
15 to be the case, yes, thank you.

16 MR. BOB PETERS: Thank you, ma'am.  
17 And is it correct that DBRS continues to treat these  
18 entities, such as Manitoba Hydro, as self supported?

19 MS. SUSAN STEPHEN: Yes, DBRS does  
20 continue to treat them as self-supporting.

21 MR. BOB PETERS: But DBRS also  
22 indicates that it could reclassify some of the debt as  
23 taxpayer-supported debt if DBRS believed that  
24 taxpayers would ultimately be responsible for  
25 servicing the debt?

1 MS. SUSAN STEPHEN: That's correct.

2 MR. BOB PETERS: But that's not the  
3 current situation, at least as it applies to Manitoba  
4 Hydro under the DBRS review?

5 MS. SUSAN STEPHEN: Under the current  
6 situation, that's correct but they also do take the  
7 perspective of outlook.

8 MR. BOB PETERS: Correct. And at this  
9 time DBRS is expecting Manitoba Hydro and other Crown  
10 corporations will recover their costs from their  
11 electricity rate base?

12 MS. SUSAN STEPHEN: That's correct.

13 MR. BOB PETERS: Now, DBRS also puts  
14 out a warning that there may be some uncertainty with  
15 respect to some of the provincial Crown corporations;  
16 correct?

17 MS. SUSAN STEPHEN: They do.

18 MR. BOB PETERS: And their concern at  
19 this point in time is whether some of the burden of  
20 Nalcor's debt will be borne by ratepayers?

21 MS. SUSAN STEPHEN: Yes, they have  
22 specifically identified Nalcor.

23 MR. BOB PETERS: And they identified  
24 Nalcor because the premier of Newfoundland and  
25 Labrador has committed to limiting electricity rate

1 increases which, therefore, may require a cross-  
2 subsidization within Nalcor?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: And is it also  
5 correct that if -- if the province of Newfoundland and  
6 Labrador provides a subsidy that could change,  
7 according to DBRS, the credit profile that DBRS  
8 provides for Nalcor?

9 MS. SUSAN STEPHEN: It could. So, my  
10 understanding is that DBRS will include any of the  
11 funds that are provided as an equity infusion into  
12 Nalcor in the -- the tax supported debt. So, that  
13 would impact the province of Newfoundland's figures.

14 MR. BOB PETERS: What -- what. Okay,  
15 maybe you need Mr. McCallum's help on this. Mr.  
16 McCallum, I hadn't thought of this until Ms. Stephens  
17 last ans -- Ms. Stephen's last answer that the --  
18 incorporations that are Crown corporations with  
19 provincial government support, if there is an equity  
20 infusion, does that really just amount to  
21 reclassifying debt or is there actually capital  
22 infused into the -- into the organization, or do you  
23 know?

24 MR. JAMES MCCALLUM: I think a range  
25 of options are -- are available. You could -- but it

1 would -- it would -- it would usually represent an  
2 infusion of cash or potentially, in the alternative,  
3 as you know, the province borrow -- if it were in the  
4 case Manitoba Hydro, the province borrows capital from  
5 the capital markets, and then advances it to us.

6 Presumably, if they wanted to limit the  
7 debt burden on our company they could advance it to us  
8 but not hang on to the IOU which they certainly do  
9 right now.

10 MR. BOB PETERS: All right. And so  
11 what -- what -- I think we've looked with Ms. Stephen  
12 at about three (3) pages of different debt issuances  
13 totaling \$18 billion.

14 And so one (1) way that the province of  
15 Manitoba, if it was inclined to provide what we've  
16 called an equity infusion, it could simply reclassify  
17 that debt and take it off of Manitoba Hydro's pages  
18 and keep it as its -- as its own debt; correct?

19 MR. JAMES MCCALLUM: I think, in  
20 simple terms, that's a -- a reasonable --

21 MS. SUSAN STEPHEN: Yeah, I think  
22 that's one (1) possibility.

23 MR. BOB PETERS: All right.

24 MS. SUSAN STEPHEN: But I did find the  
25 reference with respect to what I had indicated before

1 on page 94 of the document, towards the bottom. And  
2 I'll just read it.

3 "While DBRS excludes the debt issued  
4 and on lent to GBE's  
5 Business Enterprises] from the  
6 measure of tax supported debt, DBRS  
7 does include any debt required to  
8 fund provincial equity injections  
9 into the GBEs. Example -- examples  
10 of this are Newfoundland and  
11 Labrador's debt-financed equity  
12 injections in Nalcor."

13 MR. BOB PETERS: All right. You've  
14 read ahead and I'll -- I'll get us there. But what  
15 you've closed the loop on, Ms. Stephen, is DBRS does  
16 not consider -- and we'll bring it to Manitoba Hydro's  
17 example -- does not consider the debt that has been  
18 loaned to Manitoba Hydro as provincial government debt  
19 in their ratings of the provinces in this report?

20 MS. SUSAN STEPHEN: That's -- that's  
21 correct.

22 MR. BOB PETERS: But what it does say,  
23 and what you've just indicated is that if there have  
24 been equity in infusions or injections into the  
25 government business enterprise such as the electric

1 utility, those injections fall on the government side  
2 of the balance sheet, not on the Hydro side of the  
3 balance sheet?

4 MS. SUSAN STEPHEN: Yes. They fall on  
5 the government's side of the balance sheet as debt.

6 MR. BOB PETERS: All right.

7

8 (BRIEF PAUSE)

9

10 MR. BOB PETERS: Does it follow, Ms.  
11 Stephen, that if the Province in any of these  
12 jurisdictions, Manitoba, British Columbia, Quebec,  
13 Newfoundland, Labrador, was to inject equity, that  
14 then would cause the provincial credit rating to be  
15 re-examined, you would expect, by the rating agencies?

16 MS. SUSAN STEPHEN: I wou -- I imagine  
17 that the rating agencies would take a look at the  
18 impact of that, yes.

19 MR. BOB PETERS: All right. The --  
20 moving on with the DBRS report, Ms. Stephen, on page  
21 33, you had mentioned some of the critical factors  
22 that were considered, and one (1) of the critical  
23 factors that DBRS considers is the economy in its  
24 assessment of the provincial rating, correct?

25 MS. SUSAN STEPHEN: Correct.

1 MR. BOB PETERS: Can you confirm that  
2 Manitoba Hydro is given by DBRS the highest rating in  
3 Canada for the rating under the economic structure?

4 MS. SUSAN STEPHEN: Under the economic  
5 structure, DBRS has given Manitoba AA.

6 MR. BOB PETERS: And that's the  
7 highest rating of the Canadian provinces, tied with I  
8 think three (3) or four (4) others?

9 MS. SUSAN STEPHEN: Correct.

10 MR. BOB PETERS: And then under  
11 financial risk factors, the real gross domestic  
12 product growth rate is one (1) of the primary metrics  
13 used by DBRS to determine the financial risk of the  
14 provincial issuers, correct?

15 MS. SUSAN STEPHEN: Correct.

16 MR. BOB PETERS: And in this case, can  
17 you confirm that Manitoba, the Province of Manitoba,  
18 receives the second -- the second highest rating in  
19 Canada?

20 MS. SUSAN STEPHEN: Yes. The Province  
21 of Manitoba receives the double 'A' high rating --

22 MR. BOB PETERS: And that --

23 MS. SUSAN STEPHEN: -- second to BC.

24 MR. BOB PETERS: Thank you, ma'am.  
25 And that's ahead of the other provinces, correct?

1 MS. SUSAN STEPHEN: Correct.

2 MR. BOB PETERS: Now, I noted on page  
3 69 of the document, Ms. Stephen -- before I get there,  
4 I'll -- I'll just go to page 68. And the top of page  
5 68, DBRS comments -- and -- and when was the last time  
6 that Manitoba Hydro, to your knowledge, was in  
7 communication with DBRS about rating and Manitoba  
8 Hydro's circumstances?

9 MS. SUSAN STEPHEN: We not have our  
10 DBRS meeting or conference call for Manitoba Hydro  
11 this year. The last time I had any meetings with DBRS  
12 on ratings in the summer for the Province of  
13 Manitoba's meeting with them.

14 MR. BOB PETERS: The summer of 2017?

15 MS. SUSAN STEPHEN: Correct.

16 MR. BOB PETERS: And this report is  
17 based on the provincial government, correct?

18 MS. SUSAN STEPHEN: Yes, it's a  
19 provincial government report.

20 MR. BOB PETERS: And you were part of  
21 the presentation to -- to DBRS in the summer of 2017--

22 MS. SUSAN STEPHEN: Yes, in June --

23 MR. BOB PETERS: -- that have been the  
24 precursor to this report?

25 MS. SUSAN STEPHEN: -- in June of

1 2017, yes.

2 MR. BOB PETERS: Noted in the report  
3 on page 68, Ms. Stephen, is the -- the statement that  
4 the outlook for major hydroelectric projects in  
5 Newfoundland and Labrador and Manitoba are improving,  
6 which should ease pressure on their respective  
7 provincial credit profiles. Do you see the statement,  
8 first of all?

9 MS. SUSAN STEPHEN: I do.

10 MR. BOB PETERS: Is that what the  
11 Manitoba Hydro or the Province told DBRS, or is this  
12 something DBRS has gleaned from their own research?

13 MS. SUSAN STEPHEN: I think -- what  
14 came out in the meeting with DBRS in June, they were  
15 very pleased that we were taking initiatives at  
16 Manitoba Hydro in terms of cost reductions, in terms  
17 of asking for higher rate increases, in terms of  
18 looking for other cost efficiencies.

19 They saw that as a very positive  
20 measure, and while they -- they had a lot of questions  
21 about our capital in terms of the increase in  
22 expenditures and the delay in service, they did see us  
23 as enacting mitigants to try to ameliorate our  
24 situation.

25 MR. BOB PETERS: Thank you. And on

1 the next page, on page 69, so the transcript has the  
2 page for the panel to go back and review with their  
3 own copy, there is a discussion about power generation  
4 and utilities, correct?

5 MS. SUSAN STEPHEN: Yes.

6 MR. BOB PETERS: And here's where they  
7 -- they classify those power generation and utilities  
8 as GBEs, or government business enterprises, I think  
9 is what you've told the Board?

10 MS. SUSAN STEPHEN: Correct.

11 MR. BOB PETERS: And DBRS notes that:

12 "Most provinces have government  
13 business enterprise involved in  
14 power generation, and as examples,  
15 hydroelectric, thermal, or nuclear,  
16 transmission and distribution. And  
17 while utilities are subject to a  
18 regulatory body, the extent and  
19 robustness of the regulatory  
20 framework does vary. Some provinces  
21 experience greater political  
22 intervention, which has given rise  
23 to weakness in operating results in  
24 certain instances."

25 Do you see that statement?

1 MS. SUSAN STEPHEN: I do.

2 MR. BOB PETERS: Does that suggest, as  
3 you brought the Board's attention to page 94 earlier,  
4 that for Newfoundland and Labrador, or for Ontario,  
5 it's the actions of the -- of the Province that has  
6 caused concerns in the weakening of their results?

7

8 (BRIEF PAUSE)

9

10 MS. SUSAN STEPHEN: So that statement  
11 on page 94 was with respects to the equity injections.  
12 So this partic -- this particular sentence that you  
13 just read:

14 "Some provinces experience greater  
15 political intervention, which has  
16 given rise to weakness in operating  
17 results in certain instances."

18 MR. BOB PETERS: You're not able to  
19 provide a context from your understanding, then, at  
20 this time?

21 MS. SUSAN STEPHEN: Well, there's a  
22 difference between equity injection and also limiting  
23 capping rate increases as well. So, yes, I agree it  
24 would impact both Ontario and -- and Newfoundland.

25 MR. BOB PETERS: DBRS goes on to

1 indicate that:

2 "While utilities are large  
3 operations with extensive capital  
4 requirements, earnings tend to be  
5 lower because of regulatory bodies  
6 that limit expansion or rate  
7 increases within the prescribed  
8 regulatory framework."

9 Correct?

10 MS. SUSAN STEPHEN: I see the  
11 sentence.

12 MR. BOB PETERS: All right. And you  
13 can confirm that in terms of limiting expansion on  
14 capital projects, this Board has not asked to approve  
15 Manitoba Hydro's capital expenditures?

16 MS. SUSAN STEPHEN: Correct.

17 MR. BOB PETERS: Listed here are some  
18 examples of -- they go on to list some -- some capital  
19 expenditures putting pressure on the utilities'  
20 earnings and capital structures, and they acknowledge  
21 that Manitoba Hydro has those pressures through the  
22 Bipole III project, as well as the Keeyask project,  
23 and the Manitoba-Minnesota Transmission Line projects,  
24 correct?

25 MS. SUSAN STEPHEN: Correct.

1                   MR. BOB PETERS:    DBRS puts the cost of  
2 those at about 13 billion, but in these proceedings,  
3 that cost is higher, correct?

4                   MR. JAMES MCCALLUM:    That's correct.

5                   MR. BOB PETERS:    So turning to page  
6 94, which you've already referenced, Ms. Stephen, DBRS  
7 is telling their readers that they exclude a large  
8 portion of debt issued by or on behalf of the self-  
9 supporting government business enterprises from the  
10 calculation of taxpayer supported debt.

11                   And that's consistent what you've told  
12 the Board is your understanding?

13                   MS. SUSAN STEPHEN:    Yes.

14                   MR. BOB PETERS:    And then DBRS goes on  
15 in the page to indicate that:

16                                "In most provinces, power generation  
17                                and utilities account for the vast  
18                                majority of the self-supported  
19                                debt."

20                   And that applies to Manitoba Hydro?

21                   MS. SUSAN STEPHEN:    That does apply.

22                   MR. BOB PETERS:    And in most  
23 instances, the Province issues debt in their own name  
24 on behalf of their utilities, and that also applies  
25 for Manitoba Hydro?

1 MS. SUSAN STEPHEN: Yes, it does.

2 MR. BOB PETERS: And from where we are  
3 in terms of looking at this report, Ms. Stephen, DBRS  
4 provides a -- a chart on page 95, and it just  
5 indicates that Manitoba Hydro's self-supporting  
6 government business enterprise debt is 28.8 percent of  
7 the gross domestic product of the Province of  
8 Manitoba?

9 MS. SUSAN STEPHEN: Correct, and that  
10 would be the largest percentage of all the provinces.

11 MR. BOB PETERS: Yes, it is -- it is  
12 the largest percentage of the -- of -- of the --

13 MS. SUSAN STEPHEN: The utilities.

14 MR. BOB PETERS: Yes, thank you, of  
15 the utility. But in saying that, do you acknowledge,  
16 Ms. Stephen, that other provinces have equity  
17 injections by their provincial government which have -  
18 - would have reduced their share of the GDP?

19 MS. SUSAN STEPHEN: I acknowledge  
20 that.

21 MR. BOB PETERS: All right. So  
22 Manitoba -- the Province of Manitoba, to our  
23 understanding to date, has not injected equity like  
24 other provinces have into the electric utility?

25 MS. SUSAN STEPHEN: Correct, and as I

1 mentioned before, those equity injections would be  
2 counted in the Province's debt.

3 MR. BOB PETERS: Yes, it would -- but  
4 it would also be a lifting of the debt on the Manitoba  
5 Hydro balance sheet?

6 MS. SUSAN STEPHEN: Correct.

7 MR. BOB PETERS: A corresponding  
8 lifting?

9 MR. JAMES MCCALLUM: Mr. Peters, you  
10 used the term -- plural. I was just -- I'm -- for my  
11 own interest, unaware of other utilities besides  
12 Nalcor where the Province has -- has done something to  
13 inject equity. Did -- I'm --

14 MR. BOB PETERS: I think -- I think we  
15 were talking earlier, Mr. McCallum, where the Province  
16 of Ontario has -- has done some restructuring --

17 THE CHAIRPERSON: Mr. Peters, I think  
18 it's at the bottom of page 95. It's the last  
19 sentence.

20 "Ontario's annual debt-financed  
21 equity injections, 1.1 billion into  
22 Ontario Power generation as part of  
23 the Fair Hydro Plan."

24 MR. JAMES MCCALLUM: Thank you, sir.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: And so, Ms. Stephen,  
3 I suppose it is correct, Manitoba Hydro has not  
4 injected equity like other provinces, plural, because  
5 of the -- the Newfoundland and Labrador and the  
6 Ontario situations, correct?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: But the Province of  
9 Manitoba has continued to fund Manitoba Hydro's debt  
10 requests. That's correct?

11 MS. SUSAN STEPHEN: Correct --  
12 correct.

13 MR. BOB PETERS: And should this Board  
14 take from that that the Province of Manitoba has  
15 chosen a higher debt ratio for Manitoba Hydro than  
16 what it otherwise would be if the Province had chosen  
17 to do equity injections?

18 MS. SUSAN STEPHEN: I suppose you  
19 could conclude that.

20 MR. BOB PETERS: And would it also be  
21 appropriate to say that the Province of Manitoba  
22 provides the ultimate insolvency protection by way of  
23 the -- what we've called the provincial debt guarantee  
24 that's provided?

25 MS. SUSAN STEPHEN: Yes.

1                   MR. BOB PETERS:    And it's also correct  
2   that the Province of Manitoba knows full well of  
3   Manitoba Hydro's extensive capital program, and has  
4   approved it?

5                   MS. SUSAN STEPHEN:    Yes.  They are  
6   fully aware of it, and they have approved it.

7                   MR. BOB PETERS:    And they continue to  
8   finance it with debt?

9                   MS. SUSAN STEPHEN:    And they continue  
10   to finance it with debt.

11                  MR. BOB PETERS:    All right.  And on  
12   the last --

13                  MR. JAMES MCCALLUM:    Can you just --  
14   sorry to interrupt.  For -- for clarity, the -- the  
15   capital program, you know, a large capital project  
16   such as Keeyask are -- are approved by the Province of  
17   Manitoba, but our overall capital program is reviewed  
18   with the Province in the context of our annual loan  
19   act authority, but not specifically approved other  
20   than in so far as they do approve the loan act  
21   request.

22                  MR. BOB PETERS:    So let me see if the  
23   Board understands this correctly.  By my suggesting  
24   then, Mr. McCallum, that the only authority that  
25   approves Manitoba Hydro's base sustaining and business

1 operations capital is the Manitoba Hydro Electric  
2 Board?

3 MR. JAMES MCCALLUM: That's correct.

4 MR. BOB PETERS: On the last page of  
5 the DBRS report, Ms. Stephen, there just appears to be  
6 a history provided, which shows how the provinces have  
7 been rated by this rating agency over the years. Is  
8 that correct?

9 MS. SUSAN STEPHEN: Correct.

10 MR. BOB PETERS: And when the -- when  
11 the Board looks at the Manitoba column and sees what's  
12 happened with Manitoba, there's been approximately  
13 fourteen (14) years of continuous current rating?

14 MS. SUSAN STEPHEN: Correct.

15 MR. BOB PETERS: Ms. Stephen, I'm not  
16 sure how to word this question correctly, but we've  
17 talked about Moody's. We've talked about DBRS now,  
18 and I'll -- I'll take a few minutes on -- on the  
19 Standard & Poor's with you.

20 MS. SUSAN STEPHEN: Actually, before  
21 we leave the DBRS report, I just would like to touch  
22 on one (1) more item.

23 MR. BOB PETERS: Certainly.

24 MS. SUSAN STEPHEN: On page 92 of the  
25 report, under the debt section, the last paragraph,

1 where they talk about self-supporting -- I'll just  
2 read you the paragraph:

3 "Self-supported debt is that  
4 initiated by or on behalf of GBEs  
5 and serviced by the entity's  
6 commercial operations. Debt or  
7 long-term capital obligations are  
8 considered self-supporting, provided  
9 that the services are operated on a  
10 commercially sustainable basis and  
11 are highly unlikely to require  
12 government support. Self-supporting  
13 activities include electricity  
14 generation, and distribution, and  
15 transportation, transit  
16 infrastructure."

17 So it's that -- highly unlikely that --  
18 it kind of gets me a little bit because they talk  
19 about Nalcor, and given our -- our financial metrics  
20 are very poor in comparison to our peers, this  
21 concerns me. This along with what Moody's had  
22 indicated to me a week and a half ago concerns me very  
23 much.

24 MR. BOB PETERS: And -- and that  
25 concern is that at some point, the rating agency won't

1 consider your debt self-supporting?

2 MS. SUSAN STEPHEN: That's exactly it.

3 MR. BOB PETERS: I have your point.

4 They also acknowledge, Ms. -- Ms. Stephen, on page 93  
5 of the same report that:

6 "Manitoba's debt burden will  
7 continue to climb gradually with  
8 large deficits, but as efforts are  
9 introduced to slow expense growth  
10 and reduce the deficit, the debt  
11 burden should stabilize at around 45  
12 percent of GDP."

13 And there they're talking about the  
14 provincial outlook, correct?

15 MS. SUSAN STEPHEN: Correct, and for  
16 some reason, if DBRS, or Moody's, or both were to  
17 consider Manitoba Hydro to not be self-supporting, we  
18 would be adding our 28.8 percent of debt to GDP to  
19 ratio, which would total 73 percent of debt to GDP for  
20 Manitoba, which would eclipse any other Province.

21 MR. JAMES MCCALLUM: And -- and not to  
22 -- to belabour the point, but the 28.8 percent of GDP,  
23 that's based on current debt of \$19 billion, not the  
24 24 to \$25 billion we're building to. So I think Ms.  
25 Stephen's point is well made. We're approaching a --

1 a very high altitude compared to all the provincial  
2 peers on debt to GDP, if you combine both the Province  
3 and Manitoba Hydro.

4 MR. BOB PETERS: Ms. Stephen, are we -  
5 - are we talking all or nothing when we talk about  
6 self-supported debt? Are we saying that if -- and  
7 I'll -- I'll use a weak example, but if -- if Manitoba  
8 Hydro can't cover 1 percent of its debt, and that 1  
9 percent of its debt has to go over to the Province of  
10 Manitoba is it just the 1 percent that goes to the  
11 province, or is it the 100 percent of Manitoba Hydro's  
12 debt that goes over to the province?

13 MS. SUSAN STEPHEN: Well, it would  
14 depend on the rating agency. As we've seen with S&P,  
15 they opted to -- to move all of our -- all of our debt  
16 to tax supported debt. Judging by how DDS has written  
17 their reports it would sound to me like they would  
18 move a portion of the debt to tax supported. I don't  
19 know what Moody's would do.

20 MR. BOB PETERS: Regardless if that  
21 happens or not, Mr. McCallum, in terms of what happens  
22 with the self-supporting debt, Manitoba Hydro would  
23 still pay as much as it could on its debt obligations  
24 and not make them the provincial obligation.

25 Wouldn't that be correct?

1                   MR. JAMES MCCALLUM:    Yeah, I think  
2 that Manitoba Hydro would still be expected to fund  
3 the maximum extent of its obligations, including  
4 interest that was -- that it was capable of doing with  
5 the rate revenue available to it.

6                   MR. BOB PETERS:    All right. Thank  
7 you. I want to turn, if I could, to volume 3, page  
8 150. And let's cover off, Ms. Stephen, the third of  
9 the rating agencies. And that was -- reminds me of a  
10 question that I didn't get to ask. We've put on the  
11 record three (3) of the rating agencies.

12                                Would it be correct that they should  
13 all be seen as equal, or does Manitoba Hydro go on the  
14 record and say, one (1) of the three (3) is a better -  
15 - a better credit rater than the other two (2)?

16                   MS. SUSAN STEPHEN:    I don't think that  
17 we would put anything like that on the record.

18                   MR. BOB PETERS:    All right. Do we  
19 take from that that Manitoba Hydro sees them all then  
20 as -- as relative equals?

21                   MR. JAMES MCCALLUM:    I think Ms.  
22 Stephen could probably speak to Moody's and Standard &  
23 Poor's, or global credit rating agencies that are used  
24 by investors around the world. They're little bit  
25 more the -- I'm not sure what the right analogy is,

1 but, you know, as Kleenex is to -- to tissue, they're  
2 -- they're well-known and well recognized globally.  
3 And DBRS is typically used more -- more in the  
4 Canadian capital markets.

5                   So we -- we wouldn't -- they all have  
6 value. They all have opinions that are worth  
7 considering. We would certainly on Manitoba Hydro's  
8 behalf not try to rank them, but rather just point out  
9 they're used in different ways by different people.

10                   MR. BOB PETERS: Ms. Stephen, on the  
11 screen at the bottom of page 150 is the S&P global  
12 ratings, which I guess that's the acronym for Standard  
13 & Poor's.

14                   Would that be correct?

15                   MS. SUSAN STEPHEN: Correct.

16                   MR. BOB PETERS: And we can just  
17 scroll closer to the bottom of the page. There's an  
18 indication that:

19                   "Of the three (3) credit rating  
20 agencies Standard & Poor's raises  
21 the bar on risk and indicates that  
22 self-supporting entities generally  
23 have an investment grade standalone  
24 credit profile."

25                   Have I read that correctly?

1 MS. SUSAN STEPHEN: You have.

2 MR. BOB PETERS: And would it also be  
3 correct for this Board to understand that Manitoba  
4 Hydro never intends to have an investment grade  
5 standalone credit profile?

6 MS. SUSAN STEPHEN: Based on our  
7 equity ratio target, I would indicate that we do not  
8 at this point in time plan on having an investment  
9 grade stand alone credit rating.

10 MR. BOB PETERS: And if we can go to  
11 volume 2 of Board counsels' book of documents. That's  
12 exhibit 42-2 on page 238 at the top of the page. I  
13 think you've just told that to the Board, Ms. Stephen,  
14 but you didn't use the word "goal." Manitoba Hydro  
15 does not have the goal of achieving a debt equity  
16 capital structure consistent with that typically seen  
17 in a stand alone investor-owned utility.

18 And that's what you were trying to  
19 convey with your last answer?

20 MS. SUSAN STEPHEN: Correct.

21 MR. BOB PETERS: So it's not on the  
22 radar screen of Manitoba Hydro to get to a stand alone  
23 investor-owned utility capital structure?

24 MR. JAMES MCCALLUM: That -- that's  
25 correct. Our -- our goal for the capital structure,

1 as you know, is 75 percent debt to 25 percent equity.  
2 And at the present moment as we read and interpret the  
3 ratings methodologies of Standard & Poor's, and  
4 others, that level of equity, at least in the present  
5 moment, is not going to earn you an investment grade  
6 rating.

7                   So for the time being, given that it is  
8 possible that rating agencies change their  
9 methodologies, but were not striving for -- for an  
10 equity ratio that would kind of ring the bell for an  
11 investment grade rating.

12                   MR. BOB PETERS:    And I'm sorry if I  
13 missed the answer, but that investment grade equity  
14 level is at least 40 percent is what you're telling  
15 the Board in this -- in this report, or in this  
16 answer?

17                   MR. JAMES MCCALLUM:   Typically you see  
18 for investment grade rated utilities, for those that -  
19 - that are stand alone, meaning they don't benefit  
20 from a guarantee or other funding support from a  
21 government entity, you'll typically see equity ratios,  
22 you know, kind of 40 percent or well north.

23                   MR. BOB PETERS:    And even though  
24 Manitoba Hydro's integrated financial forecast 16 and  
25 the updates shows an equity ratio of greater than 40

1 percent after twenty (20) years, that's not Manitoba  
2 Hydro's long-term goal.

3 Is that correct?

4 MR. JAMES MCCALLUM: That's correct.  
5 That's been our evidence.

6 MR. BOB PETERS: And so -- and so if  
7 Manitoba Hydro has a goal of 25 percent equity, if we  
8 could go back to that to definition, please, on page  
9 150 of volume 3 of Board counsels' book of documents.  
10 By the -- by the words used by Standards and --  
11 Standard & Poor's, Manitoba Hydro will never be  
12 considered self-supporting under their measurements as  
13 we currently have them?

14 MS. SUSAN STEPHEN: It would appear  
15 unless we can generate sufficient funds from  
16 operations, their main credit metric is the funds from  
17 operations to debt ratio. That ratio is usually in  
18 line with a higher equity level, so we would have to  
19 do some testing on that.

20 MR. BOB PETERS: All right. So at  
21 this point in time, Manitoba Hydro acknowledges that  
22 the Standard & Poor's rating of being a self-  
23 supporting entity that has investment grade stand  
24 alone credit is not on the horizon, and isn't even  
25 part of Manitoba Hydro's goals?

1                   MR. JAMES MCCALLUM:    Yeah.  Our -- our  
2  goals, to be clear, Mr. Peters, aren't driven by the  
3  credit rating agencies and their nomenclature or  
4  preferred calculations and preferred terminology for  
5  things.

6                   Our goals are -- are driven by our own  
7  views of what the right capital structure is for  
8  Manitoba Hydro in order to lessen the risk and manage  
9  the risk of the business to certain levels -- to  
10 beneath certain levels.

11                  MR. BOB PETERS:    And I suppose, Mr.  
12 McCallum, what you're saying is Manitoba Hydro's going  
13 to go about its business and the credit rating  
14 agencies are going to go about their business.  And  
15 you're hoping that as your business strengthens they  
16 see it that way and that you're favourably regarded by  
17 them.

18                  MR. JAMES MCCALLUM:   That's right, and  
19 maintaining a positive disposition, if you will, on  
20 the part of credit rating agencies and ultimately bond  
21 investors, who are the ones that set the price of your  
22 bonds and set the price that you borrow money at,  
23 which we, as our single largest expense by far, we  
24 care about very much.  The credit rating, you know,  
25 support or -- or positive disposition is -- is really

1 a collateral benefit of doing the right thing for the  
2 business in managing its risks.

3 MR. BOB PETERS: Just following up on  
4 some thoughts and questions that I believe the  
5 Business Council had posed to you, Mr. McCallum, and  
6 I'd like the benefit of Ms. Stephens assistance, is  
7 that Manitoba Hydro has borrowed money after the  
8 provincial credit rating agencies -- agencies ratings  
9 were downgraded?

10 MS. SUSAN STEPHEN: Yes, we have.

11 MR. BOB PETERS: I'm not sure I asked  
12 that very well. I apologize. But like before the  
13 downgrade, Manitoba Hydro had to borrow money after  
14 the province was downgraded?

15 MS. SUSAN STEPHEN: We'd been  
16 borrowing money every month. So likely, yes, we have.

17 MR. BOB PETERS: Well, can you confirm  
18 to the panel that the interest rate on the borrowings  
19 after the downgrade have actually been lower than what  
20 they were before the downgrade?

21 MS. SUSAN STEPHEN: I would have to  
22 check, but I would likely say, yes, they likely would  
23 be. But that's due to a mult -- a multitude of  
24 factors. And --

25 MR. BOB PETERS: All right. And if

1 your answer changes on your checking you'll let us  
2 know. But let's -- we'll take that answer as -- as  
3 you've stated it, subject to your checking.

4                   We see at volume 3 of the book of  
5 documents at tab 31, page 144, an indication that  
6 underneath this chart, Manitoba Hydro has borrowed,  
7 but the last sentence, and it's one (1) of the few I  
8 didn't highlight, was the impact on Manitoba Hydro's  
9 borrowing costs immediately following the event was  
10 minimal.

11                   Do you see the words, Ms. Stephen?

12                   MS. SUSAN STEPHEN: Yes.

13                   MR. BOB PETERS: And the event was the  
14 provincial downgrade.

15                   MS. SUSAN STEPHEN: Actually, can we  
16 please just scroll up to the chart that's at the top  
17 of that page, please?

18                   MR. BOB PETERS: Certainly.

19 Certainly.

20                   MS. SUSAN STEPHEN: Thanks. So on  
21 this chart we actually identify the -- the downgrade  
22 activities. So the first one (1) would be the July  
23 10th, 2015, downgrade from Moody's. And you can see  
24 in this case that the credit spread, the relative  
25 credit spread to Ontario actually weakened prior to

1 the downgrade. And you can see that as well prior to  
2 the downgrade -- the first downgrade for S&P.

3 Now, there was some noise as we -- we  
4 discussed. There's several items that impact credit  
5 spreads and relative credit spreads. The oil prices  
6 that happened late 2015, early 2016 elevated credit  
7 spreads in general. And we have seen since that time,  
8 since it stabilized, we have seen credit spreads  
9 tighten in again.

10 So what you're seeing post the first  
11 S&P downgrade is risk coming down that's a large part  
12 of what you're seeing. You're not seeing that -- that  
13 it's being muddied. The impact of that downgrade is  
14 being muddied in -- with that risk sentiment coming  
15 down.

16 MR. BOB PETERS: And so at the first  
17 sentence of the second paragraph under the chart, if  
18 we'll scroll up to see that, what you're just telling  
19 the Board is that the actions by credit rating  
20 agencies are but one (1) contributor to the pricing in  
21 the financial markets for the Province of Manitoba's  
22 bonds?

23 MS. SUSAN STEPHEN: Correct.

24 MR. BOB PETERS: And I think it was --  
25 I think that's relatively what Mr. McCallum was -- was

1 saying previously, is that Manitoba Hydro cannot  
2 provide certainty as to if Manitoba Hydro does this,  
3 then this will be the result in the financial markets?

4 MS. SUSAN STEPHEN: Correct.

5 MR. JAMES MCCALLUM: That's absolutely  
6 the true -- true, and --

7 MR. BOB PETERS: Well, it was your  
8 evidence.

9 MR. JAMES MCCALLUM: if I -- if I --  
10 well, then it must be. If I could predict capital  
11 markets reactions or capital markets behaviour, I  
12 wouldn't be sitting here. I'd be taking advantage of  
13 that.

14 But I think the -- the point to be  
15 understood is that while you -- you have a hard time  
16 trying to isolate down to individual events and  
17 individual rating agency changes as to how spreads, as  
18 in between one (1) issuer and another are affected,  
19 what is true is that if you look at a broad basket of  
20 similarly rated bonds or issuers, as you move down the  
21 credit spectrum from AAA to AA to single A, to BBB, to  
22 BB and so on, the spread as an average of that group  
23 increases. In other words, issuers who are perceived  
24 to have a higher risk by virtue of a lower credit  
25 rating, as a basket on average and over time, have to

1 pay a premium to those that don't.

2 MR. BOB PETERS: Some of your words  
3 rang a bell for me, Mr. McCallum, and I'd ask if Ms.  
4 Shubert is able to pull up an Information Request that  
5 the Public Utilities Board advanced to Hydro in the  
6 1st Round. I think it was number 59. And I don't  
7 have that one (1) in the book of documents either.  
8 There wasn't room.

9 In the second sentence of the paragraph  
10 above the bullet points:

11 "The impact of a credit rating  
12 downgrade is impossible to know in  
13 isolation."

14 And that was the thrust of what you  
15 were telling the panel in your last answer, Mr.  
16 McCallum?

17 MR. JAMES MCCALLUM: That -- that's  
18 correct. And I would just sort of apply a bit of a  
19 temporal or timing, you know, basis to that in that --  
20 in that, you know, the -- the specific reaction within  
21 a week or two (2) weeks or a month or three (3) months  
22 is really hard to identify given all the other things  
23 that are going on in the global capital markets day-  
24 to-day.

25 So, you know, for example, if Manitoba

1 were to be upgraded on the same day that the Dow Jones  
2 industrial average lost three thousand (3,000) points  
3 I can't predict the reaction, but I can certainly say  
4 you would have to be really cautious trying to -- to  
5 explain what happened to Manitoba's spreads on that  
6 day.

7 MR. BOB PETERS: On those days that  
8 Mr. McCallum mentioned, Ms. Stephen, you would  
9 probably expect the advice of your syndicate members  
10 to tell you to hold off for a while.

11 MS. SUSAN STEPHEN: I would expect  
12 that, yes.

13 MR. BOB PETERS: Would the flip side  
14 of that also happen, Ms. Stephen, that there may be  
15 occasions where your syndicate members phone you up  
16 and say, You know what? It's looking good. If you  
17 want to go for some -- some debt, the market is ready.  
18 The yields are relatively low. You might want to go  
19 now and put some in trust with the province and  
20 prefund some things.

21 MS. SUSAN STEPHEN: We are in regular  
22 conversation with the members of our syndicate. We do  
23 not, at Manitoba Hydro, give them any indication as to  
24 when we want to come to market. The province handles  
25 any messaging with the syndicate. But the syndicate

1 is good about keeping us informed about -- about  
2 investor demand, market tone on a regular basis for  
3 information purposes. It's between the Province of  
4 Manitoba and Manitoba Hydro to make the decision as to  
5 when we're actually going to go. And the province  
6 messages that to the syndicate.

7 MR. BOB PETERS: Thank you. Mr.  
8 Chair, I'd like to move to a new topic on debt  
9 management specifically. And that will take me, I'm  
10 hoping, to no longer than the bottom of the hour, but  
11 I know we're encroaching on the lunch hour. So I'll  
12 be at your pleasure whether you would like me to  
13 continue or whether you would like me to stand down  
14 until after.

15 THE CHAIRPERSON: Well, I think we'll  
16 take a break now until one o'clock.

17 MR. BOB PETERS: Thank you.

18 THE CHAIRPERSON: Thank you.

19

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

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

22

23 THE CHAIRPERSON: Mr. Peters...?

24

25 CONTINUED BY MR. BOB PETERS:

1                   MR. BOB PETERS:    Thank you, Mr. Chair,  
2 and panel members, I'd like to start the afternoon  
3 with the discussion about debt management and make  
4 sure that we've hopefully captured on the record the  
5 information that will be of assistance to the panel.

6                   I didn't know where to start with this,  
7 Ms. Stephen, but would it be correct to say that  
8 Manitoba Hydro's debt management strategy prior to  
9 2016 was to match long-term assets with long-term  
10 debt?

11                   MS. SUSAN STEPHEN:   That was part of  
12 the strategy, yes.

13                   MR. BOB PETERS:    And so to the -- to  
14 the layperson who may be fortunate enough to be able  
15 to purchase a home, that would be akin to taking out a  
16 mortgage and trying to put the amortization period of  
17 the mortgage as -- as maybe twenty-five (25) years or  
18 whatever is available in the market for as long as  
19 they expect to live in the home?

20                   MS. SUSAN STEPHEN:    Correct.

21                   MR. BOB PETERS:    And would it be  
22 correct for the Board to understand from -- including  
23 your presentation this morning, that the debt  
24 management strategy has now been revised at Manitoba  
25 Hydro?

1 MS. SUSAN STEPHEN: It has been  
2 revised. Although not greatly revised. What we have  
3 done is we have -- given that we have new forecast  
4 assumptions in terms of cost reductions and in terms  
5 of greater rate increases, we have essentially taken  
6 what used to be phase 3 -- and still is phase 3 in the  
7 debt management strategy -- and moved it more into  
8 phase 2.

9 So we are -- what we call off-ramping,  
10 creating opportunities for debt retirement earlier  
11 than we had planned.

12 MR. BOB PETERS: Okay, I'm going to  
13 try to take some of that apart a little bit, but  
14 before we leave the -- the page 165 from Board  
15 counsels' third volume of book of documents, Exhibit  
16 42-3, the chart that's on this page, is that the same  
17 chart that you showed this morning, maybe with the  
18 exception of the pie chart?

19 MS. SUSAN STEPHEN: It's very close  
20 to, yes.

21 MR. BOB PETERS: All right, and we'll  
22 -- we'll come to that then. So if we do go to your  
23 presentation slides this morning in Manitoba Hydro  
24 Exhibit 68, and turn to page 59, what the Board will  
25 see here is that one (1) of the significant changes is

1 that Manitoba Hydro is wanting to take cash from cost  
2 reductions, as well as the cash from rate increases to  
3 permanently retire debt, not just refinance debt?

4 MS. SUSAN STEPHEN: Correct.

5 Although, in our last -- at our last General Rate  
6 Application, we had a debt management strategy which  
7 portrayed's debt retirement after Keeyask came in-  
8 service as a result of the additional cash flows not  
9 only from export but from the rate increases as well.

10 MR. BOB PETERS: You said a few  
11 minutes ago, you're moving the permanently retiring  
12 debt up from phase 3 into a phase 2 of the debt  
13 management strategy.

14 Did I understand that correctly?

15 MS. SUSAN STEPHEN: A portion of that  
16 debt, yes.

17 MR. BOB PETERS: All right. And so  
18 just maybe highlight for the -- for the Board panel,  
19 what is phase 1.

20 MS. SUSAN STEPHEN: Phase 1 was --  
21 which extended back a few years was -- I guess we  
22 should start back around just post the financial  
23 crisis. We were looking at an upcoming borrowing  
24 program based on, at the time, the expectation of  
25 borrowing for Keeyask, Bipole, and Conawapa.

1                   In preparation for that large capital  
2 expansion, we -- Treasury at Manitoba Hydro decided  
3 that that -- it would be prudent to take on long-  
4 dated debt, which we did. We extended the weighted  
5 average term to maturity of our debt portfolio by  
6 several years and leapfrogged -- was the terminology  
7 that we used -- over the expected new borrowings that  
8 we were going to be seeing as a result of the capital  
9 investment. So that --

10                   MR. BOB PETERS:     That was -- that was  
11 phase 1?

12                   MS. SUSAN STEPHEN:     That was phase 1.

13                   MR. BOB PETERS:     All right and phase  
14 2?

15                   MS. SUSAN STEPHEN:     Phase 2 -- in  
16 phase 2 we were looking at -- I guess in phase 2 which  
17 I'm just going to refer to the document itself at this  
18 point.

19                   MR. BOB PETERS:     If you'd like it  
20 brought up on the monitors, you'll ask for it --

21                   MS. SUSAN STEPHEN:     Actually, that  
22 would be helpful if you could. It's act -- the debt  
23 management strategy is actually in appendix C.5 in our  
24 application.

25                   MR. BOB PETERS:     I was looking at page

1 165 of Board counsels' book of documents wondering if  
2 --

3 MS. SUSAN STEPHEN: Okay, that's fine.

4 MR. BOB PETERS: -- the -- if the same  
5 source. What -- what page at tab 33 of Board  
6 counsels' third book of documents would you like on  
7 the screen?

8

9 (BRIEF PAUSE)

10

11 MS. SUSAN STEPHEN: That would be page  
12 181, please.

13 MR. BOB PETERS: Thank you.

14 MS. SUSAN STEPHEN: Okay, so this is  
15 phase 2 which we entitled Peak Shaving and Debt  
16 Smoothing. So currently we are going through the  
17 process we are -- where we are borrowing at the peak.  
18 So the year -- fiscal year 2018 and 2019 are really  
19 our peak years of new borrowing.

20 So what we're looking at doing is  
21 taking that borrowing and laying -- layering in to  
22 available maturity buckets where we can potentially  
23 retire debt at a later time and smoothing that debt  
24 maturity schedule.

25 MR. BOB PETERS: So when -- to explain

1 that further, you know that in 2018/19, those are your  
2 peak borrowing years, as I understand it, correct?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: And instead of taking  
5 debt on in -- in one tranche, you're spreading it out  
6 over a number of different periods?

7 MS. SUSAN STEPHEN: Correct. So --

8 MR. BOB PETERS: How do we see that on  
9 your chart?

10 MS. SUSAN STEPHEN: What we're showing  
11 the lines in light blue represent the potential  
12 turning for the years -- the peak years 2018 to 2020.

13 MR. BOB PETERS: So just to interrupt  
14 and if I interrupt too much I'm sure your counsel will  
15 let me know and you will too.

16 But those light blue bars are the  
17 potential terming of the debt that you need in 2018 to  
18 2020. Does that mean that you'll take on the debt for  
19 maybe four (4) or five (5) years?

20 MS. SUSAN STEPHEN: Correct. So as we  
21 referenced with our new weighted average term to  
22 maturity of -- on average twelve (12) years, we are  
23 looking at issuing debt not only in the thirty (30)  
24 plus bucket, not only in the ten (10) year bucket, but  
25 also looking at issuing more in the five-year sector,

1 and some in 3s and 7s.

2                   So this chart depicts that allocation  
3 based off of the new weighted average term of twelve  
4 (12) months --

5                   MR. BOB PETERS:    So the light blue --

6                   MS. SUSAN STEPHEN:   -- twelve (12)  
7 years.

8                   MR. BOB PETERS:    Yes.  The light blue  
9 columns, Ms. Stephen, are showing the Board the cash  
10 borrowing -- or the borrowings that you need for  
11 primarily Keeyask and Conawapa?

12                   MS. SUSAN STEPHEN:   Well, we're not  
13 doing Conawapa.

14                   MR. BOB PETERS:    I'm sorry, I meant  
15 Bipole III.

16                   MS. SUSAN STEPHEN:   Correct.

17                   MR. BOB PETERS:    I apologize.

18                   MS. SUSAN STEPHEN:   That's okay.

19                   MR. BOB PETERS:    I think you said  
20 Conawapa earlier and you've put it back into my mind.  
21 You've caused Mr. Cormie some grief too --

22                   MS. SUSAN STEPHEN:   Good deal for  
23 Conawapa.

24                   With respect to the purple line that's  
25 on this graph that you see?

1 MR. BOB PETERS: The solid line, yes.

2 MS. SUSAN STEPHEN: The solid line,  
3 yes. This represents the surplus available cash of --  
4 and that becomes available in 2023 after Keeyask comes  
5 in-service.

6 So any of the debt that falls under  
7 that purple line could potentially be retired.

8 MR. BOB PETERS: And that line that's  
9 in purple is the surplus cash that comes as a result  
10 of the requested rate increases from this Board, and  
11 Manitoba Hydro's internal cost saving methods?

12 MS. SUSAN STEPHEN: Correct and it  
13 also -- it also would include that all the other  
14 forecast assumptions come to fruition as well. So we  
15 would not -- we could not have any delays in Keeyask,  
16 any further capital cost escalation. Our export  
17 forecast would have to be bang on. Domestic load  
18 would have to be as we forecast.

19 So any of those assumptions -- and  
20 there's a lot of different variables at play here.  
21 And so anything could change.

22 MR. JAMES MCCALLUM: And -- and maybe  
23 not to be left out, in that purple line of cash flow  
24 is the benefit of the savings on interest from having  
25 pursued this twelve (12) year debt strategy. So the -

1 - the arc of that purple line would in itself look  
2 different, if we taken it and lower -- if we'd taken  
3 the twenty (20) year approach.

4 MR. BOB PETERS: All right. So you've  
5 corrected me, Mr. McCallum, to tell the panel that  
6 that purple line shows the available cash to  
7 permanently retire debt and it comes from three (3)  
8 sources, not the two (2) I mentioned, and the three  
9 (3) are: cost reductions by Manitoba Hydro; rate  
10 increases as approved by the Public Utilities Board;  
11 and thirdly, the interest that is saved by not having  
12 to borrow for longer terms and more money?

13 MR. JAMES MCCALLUM: That's correct,  
14 sir.

15 MR. BOB PETERS: Now, Ms. Stephen,  
16 when I look at the purple line, I see that it's going  
17 to be until 2030 approximately, maybe 2031, before  
18 that purple line is going to be higher than the  
19 refinancing obligations that Manitoba Hydro has.

20 Have I -- have I read that correctly?

21 MS. SUSAN STEPHEN: You have read that  
22 correctly. But just to note that as we've discussed  
23 in -- in the days prior, we do expect to adjust our  
24 forecasts, if everything came to fruition after the  
25 year 2027. So that cash flow that we're seeing that's

1 available will likely not come to fruition.

2 MR. JAMES MCCALLUM: I'm sorry to keep  
3 jumping in, Mr. Peters, but I think it's important to  
4 delineate between that which is forecast to happen  
5 before 2027, and that which is to happen afterward.  
6 That continuation of the purple line reflects a  
7 financial model scenario that is exactly the same as  
8 the one that leads to 61 percent equity over the  
9 second decade of the forecast, which I think we've  
10 spent some time on in our evidence and today saying,  
11 that's not our intended path.

12 MR. BOB PETERS: Does that answer --  
13 Mr. McCallum suggest to the Board that -- that purple  
14 line is going to be not so steep, if I may, it's going  
15 to flatten out or perhaps go down?

16 MR. JAMES MCCALLUM: Well, of course,  
17 everything is -- is -- is sort of -- I think Mr.  
18 Shepherd was kind of alluding that it's very, very,  
19 very difficult to know what advice in terms of a  
20 recommended rate strategy we're -- we're -- we're  
21 going to have in ten (10) years. It's dependent on  
22 how the world looks in ten (10) years, of course, with  
23 a whole host of huge variables.

24 But if you looked to a -- this is a  
25 level of cash flow. You can see it's somewhere

1 between a billion and \$1.5 billion, that -- that is  
2 enabled by a -- you know, it's -- it's a financial  
3 modelling exercise, but it's showing a billion to a  
4 billion and a half dollars of net income.

5           That's not our intent. That's not our  
6 view that even -- even at that point Manitoba Hydro  
7 has \$30 billion of assets. We don't believe in this  
8 regulatory model that -- that on that size of business  
9 with a debt load now brought under control that we  
10 need anywhere near that level of income.

11           So to -- a long way of answering your  
12 question is that purple line would -- would -- after  
13 2007 (sic) reverse course dramatically. It wouldn't  
14 even be flat, it would kind of head back down to, you  
15 know, a level of a couple hundred million dollars a  
16 year so that we're making a constant progression on  
17 the debt would be how I would look at it. But again,  
18 it's ten (10) plus years away.

19           MR. BOB PETERS: You're saying 2027,  
20 and not 2007, if I heard you correctly?

21           MR. JAMES MCCALLUM: I -- I certainly  
22 meant 2027, yes. I'm sorry if I misspoke.

23           MR. BOB PETERS: Okay, I may have  
24 misheard. So what you're really asking the panel  
25 today is where that -- where that purple line reaches

1 its -- it arcs and then it drops down and looks like a  
2 hockey stick, in my mind, don't worry about the hockey  
3 stick portion of it, just focus on the first part of  
4 it up until 2026/27?

5 MR. JAMES MCCALLUM: I -- I think  
6 that's fairly put. I think the real focus of our --  
7 our argument here is -- is that focus on the next ten  
8 (10) years and coming to terms with -- with the debt  
9 balance and that's what -- what this represents -- our  
10 entire financial plan represents is generating  
11 sufficient income and cash flow such that we are kind  
12 of stepping ourselves back from the cliff on this debt  
13 balance.

14 MR. BOB PETERS: All right, Ms.  
15 Stephen, when we look at the first part of that purple  
16 line and we look to see what -- what is the higher  
17 than the purple line, and what is lower than the  
18 purple line, would the Board understand it correctly  
19 that even though if we look at the trajectory of the  
20 purple line, Manitoba Hydro is going to have potential  
21 debt that it is terming from 2018 to '20 that exceeds  
22 that purple line?

23 MS. SUSAN STEPHEN: That's correct.

24 MR. BOB PETERS: And that means to the  
25 Board that Manitoba Hydro won't have sufficient cash

1 to permanently retire that debt, so, you're going to  
2 have to have that as term debt on your sheets?

3 MS. SUSAN STEPHEN: We would have  
4 sufficient cash to permanently retire the debt that's  
5 under the purple line. The rest of the debt, in that  
6 time period, would be subject to refinancing risk.

7 MR. BOB PETERS: All right, I think we  
8 understand your point and thank you for it.

9 The -- this would be the first time,  
10 Ms. Stephen, that the Public Utilities Board is seeing  
11 this plan?

12 MS. SUSAN STEPHEN: I do believe that  
13 Mr. Schultz presented a similar debt management  
14 strategy at the last General Rate Application.

15 What this -- what this is showing is a  
16 more aggressive terming strategy as a result of the  
17 rate increases in cost savings.

18 MR. BOB PETERS: Maybe I'll try to  
19 describe it this way: We're looking at page 181 from  
20 Board counsels' book of documents, third volume,  
21 Exhibit 42-3. Mr. Schulz's previous presentation  
22 would have tried to take the debt from the peak years  
23 of 2018/19 and '20, and his strategy was to move those  
24 as far to the right-hand side of the chart as  
25 possible.

1                   Would you agree with me?

2                   MS. SUSAN STEPHEN:    No, I would not  
3 agree with that.  What Mr. Schultz's chart would've  
4 shown is it would have shown a distribution of -- 50  
5 percent of the debt would be in the years thirty (30)  
6 plus, so, 30 percent and the thirty-year; 20 percent  
7 in the forty (40) year; 20 percent in the ten (10)  
8 year, and -- no, sorry, 30 percent in the ten (10)  
9 year; and 20 percent in the five (5) year.

10                   So, you would have 50 percent of your  
11 debt in ten (10) year and under, as opposed to 80  
12 percent which we are suggesting.

13                   MR. BOB PETERS:    And if we turn to  
14 volume 3, tab 37, page 238, there is a -- there's a  
15 chart here of Manitoba Hydro debt.

16                   First of all, is this showing only  
17 Manitoba Hydro's debt from the province of Manitoba,  
18 or does it include some of Manitoba Hydro's \$149  
19 million of -- of other debt?

20                   MS. SUSAN STEPHEN:    This would include  
21 all Manitoba Hydro debt.

22                   MR. BOB PETERS:    And so where it says  
23 "floating-rate debt and -- is that related to the  
24 province of Manitoba borrowings?

25                   MS. SUSAN STEPHEN:    Pardon me, can I

1 just clarify my last comment?

2 MR. BOB PETERS: Please do.

3 MS. SUSAN STEPHEN: This allocation is  
4 with respect to new issuance.

5 MR. BOB PETERS: All right so this --  
6 this won't show -- this will show the implementation  
7 of the new strategy for debt management to the panel?

8 MS. SUSAN STEPHEN: Correct.

9 MR. BOB PETERS: Now, you had said a  
10 previous strategy was to have 50 percent of the debt  
11 being thirty (30) years or longer. This new strategy  
12 appears to have 20 percent of the -- of the debt being  
13 longer than thirty (30) years?

14 MS. SUSAN STEPHEN: Correct.

15 MR. BOB PETERS: And that's one (1) of  
16 the significant differences?

17 MS. SUSAN STEPHEN: Yes. As I  
18 mentioned in my presentation yesterday, we have  
19 shifted about 30 percent of that debt from thirty (30)  
20 year plus into the under ten (10) year bucket.

21 MR. BOB PETERS: I understand the  
22 bucket, so I thank you for that.

23 MS. SUSAN STEPHEN: It's a technical  
24 term.

25 MR. BOB PETERS: I appreciate that.

1 It's one I can relate to.

2                   What -- what's confusing, and I hope  
3 not for the panel, is the ten (10) year floating. Is  
4 -- is the word "floating" of any significance in that?

5                   MS. SUSAN STEPHEN:    So that would be  
6 floating-rate debt. So, that is debt which is reset  
7 at certain intervals. So we normally -- in our past  
8 forecasts, we have forecast 20 percent of our debt to  
9 be floating-rate debt and 80 percent to be fixed but  
10 we have assumed the similar -- the -- the same terms  
11 for that floating-rate debt, i.e., we had 50 percent  
12 of our floating-rate debt in the thirty (30) years or  
13 more.

14                   MR. BOB PETERS:    If I can turn to page  
15 63 of your presentation from yesterday and that was  
16 Manitoba Hydro Exhibit 68. Here we see that chart  
17 again, and that's ostensibly the same as the one that  
18 we were talking about a few minutes ago in Board  
19 counsels' book of documents?

20                   MS. SUSAN STEPHEN:    Similar.

21                   MR. BOB PETERS:    All right. The  
22 strategy on which Manitoba Hydro has embarked for  
23 refinancing is not without its own inherent risks.

24                   Would you agree with that?

25                   MS. SUSAN STEPHEN:    Yes, I would.

1                   MR. BOB PETERS:    And would you agree  
2 that the -- the greatest risk for Manitoba Hydro by  
3 going to this new debt management strategy is the  
4 refinancing risk that may crop up?

5                   MS. SUSAN STEPHEN:    The greatest risk  
6 moving to this strategy is the refinancing risk should  
7 the cash flows not be available to retire the debt  
8 that we have moved into that shorter bucket.

9

10                                   (BRIEF PAUSE)

11

12                   MR. BOB PETERS:    If we could go back  
13 to Board counsels' book of documents.  It's not that I  
14 like that chart better than yours -- your new one, Ms.  
15 Stephen, but at page 165 of Board counsels' volume 3,  
16 Exhibit 42-3, this one contains that purple line and  
17 I understood your last answer to tell the panel that  
18 the risk that Manitoba Hydro has exposed itself to  
19 with this new strategy is that all of the bars above  
20 that purple line will have to be renegotiated earlier  
21 than what Manitoba Hydro was previously planning?

22                   MS. SUSAN STEPHEN:    Can you repeat the  
23 question, please?

24                   MR. BOB PETERS:    You've -- you've  
25 agreed that, and told the panel, that Manitoba Hydro's

1 greatest risk is the refinancing risk if Manitoba  
2 Hydro doesn't have the cash available to permanently  
3 retire the debt?

4 MS. SUSAN STEPHEN: Correct.

5 MR. BOB PETERS: And if we look at  
6 this chart on page 165 of Board counsels' book of  
7 documents, that refinancing risk is particularly acute  
8 and exposes the Corporation to that risk for  
9 everything above the purple line between now and 2027?

10 MS. SUSAN STEPHEN: Correct.

11 MR. BOB PETERS: Because between now  
12 and 2027 everything above that purple line, if  
13 Manitoba Hydro's plans go according to forecast, will  
14 need to be refinanced?

15 MS. SUSAN STEPHEN: Correct.

16 MR. BOB PETERS: And at this point in  
17 time, you don't know what the financing rate is going  
18 to be?

19 MS. SUSAN STEPHEN: No, we don't.

20 MR. BOB PETERS: So it's not a  
21 question that you could retire all of the debt that  
22 you are terming to do the peak shaving, because you  
23 know you're going to have the cash on hand, you're  
24 deliberately exposing some of that debt to refinancing  
25 risk?

1 MR. JAMES MCCALLUM: If -- if I may,  
2 whether we use a -- the -- the 20 year plan or the  
3 twelve (12) year plan, we are going to have somewhere  
4 in the neighbourhood of \$9 billion to refinance in  
5 this -- in the -- what I'd call the second half of the  
6 ten (10) year period.

7 So from 2023 to 2027, the Keeyask  
8 generating station is complete or basically complete  
9 and operating. We're through the bulk of our huge  
10 borrowing program and now we're into roughly \$9  
11 billion of debt maturities over the next five (5)  
12 years.

13 And under the twelve (12) year terming  
14 plan and -- and, you know, we would have the full \$9  
15 billion to -- to refinance, but we were -- we've done  
16 this under the anticipation of about \$3 billion of  
17 cash flows so we'd have a net kind of \$6 billion that  
18 -- that we're still exposed to refinancing risk on.  
19 So, I -- I wouldn't want to leave the Board the point  
20 of view that Manitoba Hydro is immunized in any way.

21 In fact, the -- you know, two-thirds of  
22 the debt is still going to be exposed to refinancing  
23 risk. It's -- if we take the -- the twenty (20) year  
24 plan, we're -- we're just lessening the amount of --  
25 of debt that's in that window, and exposed. And it's

1 about \$3 billion.

2 MR. BOB PETERS: All right, so we'll  
3 come to that, Mr. McCallum, but I think you were  
4 agreeing with my question that the Corporation is  
5 exposing itself to refinancing risk on the potential  
6 terming -- those are the light blue bars that are  
7 above the purple line -- and it's doing that  
8 deliberately.

9 MR. JAMES MCCALLUM: I -- yes, we're -  
10 - we're -- we're -- regardless of twenty (20) years  
11 versus twelve (12) years, we're going to have a  
12 significant portion of debt that we would not  
13 anticipating having cash to repay.

14 MR. BOB PETERS: All right. And then  
15 let's -- let's move to those -- those -- when it comes  
16 to -- when it comes to refinancing, those light blue  
17 bars between now and 2027, and everything above that  
18 purple line, Manitoba Hydro will have to decide if  
19 it's going to term it out to twenty (20) years or  
20 longer?

21 MS. SUSAN STEPHEN: I think we would  
22 make the decision at the time, depending on the  
23 interest rate environment at the time, depending on  
24 our business situation at the time.

25 I just wanted to note, though, going --

1 taking a step back. Should we not pursue this twelve  
2 (12) year terming, should we not receive the rate  
3 increases in order to have the cash flow to pay down  
4 the debt, we would likely revert to a twenty (20) year  
5 weighted average term to maturity.

6 If we were to have a 3.95 rate path at  
7 that point, we would still have in excess of a billion  
8 dollars in each of those years to refinance.

9 MR. BOB PETERS: I have your point and  
10 I think it's a continuation of Mr. McCallum's point.  
11 But you introduced a new -- a new portion that I want  
12 to talk to you about. Maybe now is as good a time as  
13 any.

14 But you're saying if the indication  
15 from this Board is that the rate increase plan of  
16 Manitoba Hydro is not endorsed, at least for the test  
17 year, that would be a signal to the Treasury branch of  
18 Manitoba Hydro that instead of potentially terming the  
19 peak years, as planned on this chart, Manitoba Hydro  
20 would seek to a twenty (20) year average term to  
21 maturity?

22 MR. JAMES MCCALLUM: Let -- I'm sorry,  
23 I'll -- I'll jump in. I think it certainly -- while  
24 we are obviously here to talk about, you know, in  
25 essence, one -- one (1) rate increase and a plan. I -

1 - I think that we certainly would welcome at the end  
2 of this direction from the Board as to long-term  
3 targets.

4                   Our point of view -- this was -- I'll -  
5 - I'll tell you when we -- before we came forward with  
6 our financial plan and rate application, we obviously  
7 scratched our heads and looked under, you know, kind  
8 of every rock we could find to look at ways to  
9 mitigate, in a responsible way, mitigate rate impacts.

10                   So the rate proposal was -- was really  
11 the -- the last input to the model after we -- we'd  
12 gone through and thought about our cost-cutting and  
13 other initiatives -- supply chain initiatives, and so  
14 on to -- to manage our situation.

15                   And -- so this is a -- an opportunity  
16 that was surfaced that I would say our Board of  
17 Directors had significant pause on, but we worked  
18 through that with them to kind of talk about -- and in  
19 finance this is sort of risk and return go together  
20 and -- and -- and Manitoba Hydro came to the decision,  
21 endorsed by its Board, that -- that taking this level  
22 of risk -- and it is more risk when you take \$3  
23 billion and position it into your near term, you know,  
24 next ten (10) years refinancing need when you're most  
25 vulnerable is risk.

1                   And that it was a savings opportunity  
2 worth pursuing but it was a sav -- it was -- the risk  
3 was manageable because of the expectation under the  
4 financial plan with the rate increases assumed in it  
5 and cost-cutting assumed in that, and everything else,  
6 that the cash flow would be there to manage that risk.

7                   So if we were to find ourselves on a  
8 path to addressing our debt load that didn't include  
9 the expectation of meaningful cash flow, I think that  
10 we'd have to revisit all of this, but we revisit  
11 everything every day dynamically, right. This is a --  
12 a savings opportunity that is -- and you're going to  
13 hear me say this a bunch of times, it's in the  
14 financial model.

15                   It's based on a set of assumptions --  
16 included in here a set of assumptions around the  
17 relationship between shorter-term interest rates and  
18 longer-term interest rates. As those relationships  
19 change, we dynamically make different decisions. So  
20 think of this more as a -- as, you know, a guidepost  
21 as opposed to a -- a contract of what we're going to  
22 do.

23                   But if we didn't think we were going to  
24 have cash flow, we would -- we would think that the  
25 right choice for our ratepayer was to -- to limit the

1 risk they face that comes from near-term refinancing,  
2 and so we would bias ourselves to longer-term debt  
3 moving these pale blue bars on the screens in front of  
4 us to the right. Ultimately, this will come by form  
5 of Ms. Stephen and I going to our Board of Directors  
6 with a proposal but I can certainly tell you --  
7 because I'm the accountable person, I won't be going  
8 to my Board of Directors to recommend this borrowing  
9 plan if there -- we don't have a reasonable  
10 expectation of cash flow.

11 MR. BOB PETERS: Thank you, Mr.  
12 McCallum.

13 On top of that answer, Ms. Stephen, I  
14 had understood one (1) of your previous answers to  
15 this panel to be telling them that if Mr. McCallum  
16 doesn't get the signal that he's looking for, Manitoba  
17 Hydro has options in terms of how to refinance this  
18 debt, and they would look to a longer term to  
19 maturity?

20 MS. SUSAN STEPHEN: That's correct.

21 MR. BOB PETERS: And if I could, on  
22 page 232 of Board counsels' book of documents, Volume  
23 III, Exhibit 42-3, at the top of the page, you're  
24 answering an information request, and I think you're  
25 saying the same thing that Mr. McCallum just

1 eloquently put on the record, and that was:

2                   If Manitoba Hydro's annual rate  
3 increases were in that 3.95 percent range as opposed  
4 to the 7. -- the 3.95 percent range as opposed to the  
5 7.9 range, Manitoba Hydro would have to revise its  
6 debt management strategy because you wouldn't want to  
7 put the Corporation to the risk of having that much  
8 debt come due as early as -- as it would otherwise  
9 come due?

10                   MS. SUSAN STEPHEN:   That's correct.

11                   MR. BOB PETERS:   Is that the word --  
12 is that where the word 'offramping' comes, Ms.  
13 Stephen? Is that the -- the term in the industry that  
14 you can take an offramp if you -- if you see that your  
15 forecast isn't going to be maintained?

16                   MS. SUSAN STEPHEN:   I believe the word  
17 'offramping', the first time that I heard it, was  
18 crafted by Mr. Schulz, the former treasurer, and it  
19 really had more to do with the fact that we were going  
20 to create opportunities for debt retirement where we  
21 had surplus cash available to pay down that debt.

22

23   (BRIEF PAUSE)

24

25                   MR. BOB PETERS:   Ms. Stephen, I'm not

1 sure which one I will look at, but I'll start with --  
2 with Board counsel book of document page 232, and I  
3 want to key in on the words -- I think Mr. McCallum  
4 may have used them, and that was the savings  
5 opportunity.

6                   And on page 232 of Board counsels' book  
7 of documents, at the bottom is a chart. And this  
8 chart -- can this chart be used to show the panel  
9 where the savings opportunity is in Manitoba Hydro's  
10 plan to compare to the other plan, or do I have to go  
11 to your slides from yesterday?

12                   MS. SUSAN STEPHEN: I think it's --  
13 might be easier to see from the slides from yesterday.

14                   MR. BOB PETERS: I'm not surprised you  
15 wanted your own work, there. That's Manitoba Hydro  
16 Exhibit 68, please, if we could, and page 62, I think  
17 is what -- is what you're looking for. Is this the  
18 slide?

19                   MS. SUSAN STEPHEN: Yes, thank you.

20                   MR. BOB PETERS: And so let's -- let's  
21 follow that further. Part of the debt management  
22 strategy that Manitoba Hydro is embarking on is to  
23 take advantage of a savings opportunity that would  
24 present itself.

25                   And in my words, because Manitoba Hydro

1 would be saving on the payment of interest, it could  
2 use that cash surplus to permanently retire debt?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: That's an  
5 encapsulation of your plan?

6 MS. SUSAN STEPHEN: Yes.

7 MR. BOB PETERS: All right. So on  
8 what's in front of the Board now, out of Manitoba  
9 Hydro's Exhibit 68, is your quantification for the  
10 panel as to how much is that savings opportunity,  
11 correct?

12 MS. SUSAN STEPHEN: Correct.

13 MR. BOB PETERS: So on the right-hand  
14 side of the -- the chart, or the box, you're showing  
15 this Board what would be the situation if the rate  
16 increase trajectory was at 3.95, and there was a  
17 twelve (12) year weighted average term to maturity on  
18 Manitoba Hydro's debt?

19 MS. SUSAN STEPHEN: Yeah. And so just  
20 to correct, I may have misheard you, but these are  
21 actually borrowing debt levels.

22 MR. BOB PETERS: All right. And on  
23 the right-hand side, if we follow the row, 2018 to  
24 2022, under the 3.95 percent rate trajectory, with  
25 twelve (12) year weighted average term to maturity,

1 Manitoba Hydro sees itself having to borrow \$14.1  
2 billion?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: If we follow that  
5 same row but stop at the first part of the -- the box  
6 under the 7.9 percent rate trajectory, still with the  
7 twelve (12) year weighted average term to maturity,  
8 the borrowings would be -- last, they'd be \$13.5  
9 billion?

10 MS. SUSAN STEPHEN: Correct --

11 MR. BOB PETERS: And --

12 MS. SUSAN STEPHEN: -- because it --  
13 the additional rate increases are contributing to not  
14 having to have as much of a borrowing requirement.

15 MR. BOB PETERS: And so the -- the  
16 money from the extra rate increase reduces the 14  
17 billion down to thirteen point five (13.5)?

18 MS. SUSAN STEPHEN: Correct.

19 MR. BOB PETERS: All right. And then  
20 you -- we do the same exercise, and I won't, but for  
21 years twenty-three (23) to twenty-seven (27), and we  
22 see, then, as a result of those, there's been a  
23 surplus available for debt retirement.

24 And this is the \$3 billion that Mr.  
25 McCallum may have referenced, or you may referenced

1 earlier?

2 MS. SUSAN STEPHEN: Correct.

3 MR. BOB PETERS: So you're telling  
4 this Board that under Manitoba Hydro's new debt  
5 management strategy, if the assumptions come to  
6 fruition, Manitoba Hydro sees itself in a position  
7 that it could retire permanently \$3.1 billion of debt  
8 compared to only 400 million under the other scenario?

9 MS. SUSAN STEPHEN: Correct. And in  
10 addition, we would have 1 billion less on the balance  
11 sheet as a result of the differential in the borrowing  
12 in the twenty-three (23) to twenty-seven (27) time  
13 frame, nine point seven (9.7) less the eight point  
14 eight (8.8).

15 MR. BOB PETERS: And while there would  
16 be -- while there would be \$3 billion cash surplus  
17 available for debt retirement, that \$3 billion is  
18 coming mostly from the ratepayer?

19 MS. SUSAN STEPHEN: Correct, and from  
20 cost savings as well.

21 MR. BOB PETERS: Yes, thank you.  
22 Well, and --

23 MS. SUSAN STEPHEN: And the interest --

24 MR. BOB PETERS: -- let's not lose  
25 sight of Mr. McCallum's third factor --

1 MS. SUSAN STEPHEN: Yes, the interest  
2 --

3 MR. BOB PETERS: -- that the -- the --  
4 the foregone interest payments that you don't have to  
5 make, you can apply that to -- to this payment as  
6 well?

7 MR. JAMES MCCALLUM: Correct. And --  
8 and the overall reduction in interest cost that comes  
9 from borrowing shorter-term debt, which in the model,  
10 has a lower interest rate than longer-term debt, in  
11 the model.

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: Ms. Stephen, if we  
16 turn to page 65 of the Manitoba Hydro Exhibit 68,  
17 which was your presentation of yesterday, there was a  
18 statement made that I would like to have reconciled  
19 for the panel. And at the bottom of the page, each 1  
20 percent move upward in interest rate could cost  
21 Manitoba Hydro upwards of \$200 million per year by  
22 2027. You see that?

23 MS. SUSAN STEPHEN: Yes, I do.

24 MR. BOB PETERS: When I look at, yes,  
25 Volume IV of Board counsels' book of documents, Tab

1 58, page 134, I remember the Corporation provided this  
2 Board with a series of sensitivity analysis related to  
3 your financial forecast. Are you familiar with this,  
4 ma'am?

5 MS. SUSAN STEPHEN: Yes.

6 MR. BOB PETERS: And so when I look at  
7 -- down the left-hand side, a 1 percent -- a positive  
8 -- a plus 1 percent interest, that's to -- that's to  
9 do a sensitivity, or to test what happens with respect  
10 to Manitoba Hydro's retained earnings if that event  
11 came to pass, correct?

12 MS. SUSAN STEPHEN: Correct.

13 MR. BOB PETERS: So when I look at  
14 that line -- that row called plus 1 percent interest,  
15 and I follow it across, I'll stop in 2029/'20.

16 What you're telling the Board there is,  
17 If the interest rates go negative on us, or increase  
18 by 1 percent, they -- they turn against the consumer  
19 by 1 percentage point, Manitoba Hydro would expect its  
20 retained earnings to suffer by \$31 million.

21 Have I read that correctly?

22 MS. SUSAN STEPHEN: Yes.

23 MR. BOB PETERS: All right. So then  
24 without doing the math, because you've done it for us,  
25 each of these years accumulates the years before it in

1 the calculation, as I understand, what's been  
2 prepared?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: So if we roll over to  
5 the 2027/'28 year, I see that a 1 percent change in  
6 the interest rate would result in \$885 million less in  
7 retained earnings than would otherwise be the case?

8 MS. SUSAN STEPHEN: And that would be  
9 for that timeframe. The calculation that was provided  
10 on the slide that I prepared had to do with the fact  
11 that we are, on average, borrowing 20 billion of debt  
12 in the next decade. If that 20 billion of debt, if  
13 the actual rates that we secured for that were 1  
14 percent higher than what we forecast, you would be  
15 paying an additional 200 million in borrowings --

16 MR. BOB PETERS: Okay --

17 MS. SUSAN STEPHEN: -- or in interest.

18 MR. BOB PETERS: -- you -- you are  
19 doing lawyer's math as opposed to accountant's math on  
20 that? You were taking that -- the high level --

21 MS. SUSAN STEPHEN: Yes.

22 MR. BOB PETERS: -- calculation for  
23 your --

24 MS. SUSAN STEPHEN: -- very high-level  
25 calculation.

1                   MR. BOB PETERS:    So if I get down to  
2 the accountant's math on this sheet in front of the  
3 Board, the indication on page 134 is that -- that \$800  
4 million over the ten (10) years, or 885 million over  
5 the ten (10) years, and I divide that by the ten (10),  
6 I'm getting \$88 million a year of reduced net income,  
7 but that's a refinement on -- on what you were  
8 thinking it was?

9                   MS. SUSAN STEPHEN:    And that's --  
10 that's during that timeframe.  So as I mentioned, if  
11 we -- this is looking at the period 2027.  If we had a  
12 1 percent exposure on all the debt we borrowed, it  
13 would be an additional twenty (20) -- 200 million, and  
14 that would carry forward to the next year.

15                  MR. BOB PETERS:    All right.  I have  
16 your -- I have your calculation.  Thank you.

17                  MS. SUSAN STEPHEN:    Thanks.

18                  MR. BOB PETERS:    I want to turn to  
19 something else that I needed to understand better.

20

21                                       (BRIEF PAUSE)

22

23                  MR. BOB PETERS:    When we first heard  
24 about the debt refinancing from your witnesses -- and  
25 Mr. McCallum, it may have been you and your president

1 to that -- that first mentioned it in your evidence,  
2 but there was an indication that the benefit of the  
3 new debt management strategy was going to be that the  
4 finance expense would be reduced by about \$500  
5 million. Do you recall words to that effect?

6 MR. JAMES MCCALLUM: In relation to  
7 the debt management strategy, yes, that's -- that's  
8 our -- the assumption embedded in our financial  
9 forecast.

10 MR. BOB PETERS: And while that's an  
11 assumption that's embedded in your financial forecast,  
12 Mr. McCallum, I'm understanding that that full five  
13 hundred (500) doll -- sorry. That's -- that's the  
14 world I travel in. That \$500 million savings has --  
15 has decreased to \$250 million, Ms. Stephen, from what  
16 you updated the Board on yesterday?

17 MS. SUSAN STEPHEN: Slightly under 250  
18 million.

19 MR. BOB PETERS: Let's round it to  
20 two-fifty (250). Can you explain to the panel how  
21 that came to be and what changed in Manitoba Hydro's  
22 debt management plan and the assumptions in that plan?

23 MS. SUSAN STEPHEN: Sure. So as  
24 you're aware, when we put together our interest rate  
25 forecast, we actually forecasted the terms -- a five

1 (5) year term, a ten (10) year term, a thirty (30)  
2 year term. We did also the floating-rate terms,  
3 weighted them accordingly, as we've talked about.

4           And at the time, when we put our  
5 forecast together in the spring, we had an upward  
6 sloping yield curve. So, say, the five (5) year cost  
7 of borrowing was one point three (1.3), and thirty  
8 (30) year cost of borrowing was three (3), and ten  
9 (10) year cost of borrowing was two and a half (2  
10 1/2). We call that an upward sloping yield curve.

11           So when we put together our all-in  
12 rate, which we came to use in our forecast, it was  
13 predicated on that upward sloping yield curve. What's  
14 happened over the course of the last few months, which  
15 I showed in my presentation yesterday, is we've had  
16 five (5) year rates move up significantly, and we've  
17 had thirty (30) year rates actually come down  
18 slightly, so that differential between the five (5)  
19 year and the thirty (30) year rates has diminished.  
20 So if we issue more five (5) year debt instead of  
21 thirty (30) year debt, we're not going to get the same  
22 savings that we forecasted in the spring.

23           Is that a little more clear?

24           MR. BOB PETERS: It's -- it's getting  
25 there.

1 MS. SUSAN STEPHEN: Okay.

2 MR. BOB PETERS: As a result of -- of  
3 your recent actions, the savings that you mentioned  
4 now of -- of just below 250 million are savings  
5 relative to what was initially put in Manitoba Hydro's  
6 plan, not savings from the market itself?

7 MS. SUSAN STEPHEN: Correct. If it  
8 helps, I can give a ver -- a much simpler example.

9 MR. BOB PETERS: You know who you're  
10 talking to. Please do.

11 MS. SUSAN STEPHEN: Okay. Say you  
12 have -- you have \$10 million to borrow. You have the  
13 option of borrowing at a thirty (30) year rate, which  
14 you would say -- we'll say is 3 percent, or you could  
15 borrow that \$10 million at a five (5) year rate, which  
16 we'll say, for simplicity, is 1 percent. You have a  
17 savings differential there of 2 percent on your -- on  
18 your \$10 million.

19 So depending on who you are, you may  
20 choose the cheaper route, if you want to bear the  
21 refinancing risk, and -- and borrow at 1 percent. So  
22 that's the -- the 2 percent savings is what you're  
23 saving, and that's what we were calculating when we  
24 were calculating our weighted average rate.

25 So what's happened since then is that -

1 - that five (5) year rate has gone up to 2 percent, so  
2 you're only saving 1 percent from moving from thirty  
3 (30) year rates to five (5) year rates, so half of  
4 your savings is gone. And that's kind of the simpler  
5 version of what I was trying to indicate.

6 MR. BOB PETERS: No, I -- I think I --  
7 that's helpful, and it's helpful now, and will be  
8 helpful on the record, as well, Ms. Stephen.

9 MS. SUSAN STEPHEN: Thank you.

10 MR. BOB PETERS: Do I -- do -- does  
11 the Board now conclude that as a result of your debt  
12 management strategy, as you're sitting here today,  
13 you've quantified the potential benefit not at 500  
14 million, but closer to just under 250 million?

15 MR. JAMES MCCALLUM: Just to be sure,  
16 Mr. Peters, I believe your question was: Does the  
17 Board now conclude? Is -- you -- you --

18 MR. BOB PETERS: I'm sorry if I --

19 MR. JAMES MCCALLUM: I definitely  
20 won't -- won't speak --

21 MR. BOB PETERS: Let me --

22 MR. JAMES MCCALLUM: -- for the Board.

23 MR. BOB PETERS: No, no. Well, thank  
24 you. Let me rephrase the question. Is it Manitoba  
25 Hydro's position that at the time it embarked on its

1 debt management plan that it put into this rate case,  
2 there was a potential \$500 million savings under the  
3 debt management strategy as a result of the changes  
4 made by Manitoba Hydro?

5 MR. JAMES MCCALLUM: As a result of --  
6 if we were to follow and continue following the --  
7 what I'd call the more aggressive debt management  
8 plan, we saw that translate into a \$500 million  
9 savings opportunity which is included in the financial  
10 plan.

11 I think what Mr. Stephen and I are  
12 saying today is that at the present moment, and this  
13 is not -- may be different than at the present moment,  
14 we're seeing export prices that are beneath what are  
15 in our plan. At the present moment, we're seeing  
16 shorter-term five (5) year interest rates that are  
17 above what we had in our plan.

18 The issue with the plan, you know,  
19 you're looking out ten (10) years, and things change  
20 every day. So at the present moment, the term  
21 structure of interest rates, i.e., this -- this spread  
22 between 1 and 3 percent that Ms. Stephen described in  
23 in -- in her analogy, has compressed, and therefore  
24 our plan would be effectively overstated in terms of  
25 net income being higher, to the tune of \$250 million.

1                   But again, tomorrow we could wake up  
2 and -- and things have reversed course. We manage the  
3 business in real time, and -- and in fact, I believe  
4 Ms. Stephen mentioned this yesterday. As we've seen  
5 this change in the -- in the interest rate environment  
6 and the term structure of interest rate, we've started  
7 -- nothing to do with any expectation around rate  
8 increases or cash flows, but the -- the risk/return  
9 relationship has started moving away from us, and  
10 therefore, we've started to -- to, you know, signal to  
11 -- to our syndicate and the Province that we're  
12 starting to tilt towards the longer term now, because  
13 there's just not that same benefit to going shorter.

14                   MR. BOB PETERS: Thank you. If we  
15 could go back to Board counsels' third Volume, Exhibit  
16 42-3, page 165. I -- I come back to this, and I want  
17 to just make sure that I have your point, Ms. Stephen  
18 and Mr. McCallum.

19                   The point that I'm understanding you to  
20 be making is that while Manitoba Hydro, initially  
21 under its plan, could foresee a \$500 million savings,  
22 as a result of real world events, that savings is now  
23 closer to \$250 million in the plan?

24                   MS. SUSAN STEPHEN: The savings is  
25 closer to \$250 million, but it's not necessarily in

1 the plan. If we were to re-work it through the plan,  
2 that's what we would get to.

3 MR. BOB PETERS: All right. I -- I  
4 perhaps -- I'm not saying it's embedded in the plan.  
5 What was embedded in the plan was going to be the \$500  
6 million savings?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: And as world events  
9 have turned out there, it's closer to 250 million,  
10 measured against Hydro's initial plan?

11 MS. SUSAN STEPHEN: Correct.

12 MR. BOB PETERS: So the point I want  
13 to get to, and I think maybe the last ones on this is  
14 as a result of what's happened, has the refinancing  
15 risk for Manitoba Hydro increased, or decreased, or  
16 stayed the same as a result of what's happened to the  
17 potential benefits of Manitoba Hydro's plan?

18 MS. SUSAN STEPHEN: Well, as I  
19 mentioned in our objective, we have the flexibility to  
20 adapt to changing circumstances, and I would really  
21 consider this to be a changing circumstance. So as I  
22 mentioned, I have opted now to move to the longer end  
23 of issuance. Our last two (2) issues have been thirty  
24 (30) year issues.

25 So given that we did not receive -- we

1 only received a 3.36 percent rate increase in the  
2 interim, given that the advantage of the -- the term  
3 structure has diminished to two hundred (200) and --  
4 the cost savings have diminished to 250 million, we  
5 are moving away from that weighted average turning  
6 strategy.

7 MR. BOB PETERS: And the last point  
8 that you've led us into, though, is -- and we saw the  
9 charts where the strategy had a weighted average term  
10 to maturity of twelve (12) years under the initial  
11 Manitoba Hydro plan? Have I got that right? I'm  
12 sorry.

13 MS. SUSAN STEPHEN: I'm sorry, can you  
14 repeat the question?

15 MR. BOB PETERS: Would the -- would it  
16 be correct that under Manitoba Hydro's new debt  
17 management strategy, the average term to maturity of  
18 the portfolio has dropped down to twelve (12) years  
19 for the debt that's been issued in the last year?

20 MS. SUSAN STEPHEN: So it would just  
21 be for the new debt that has been issued.

22 MR. BOB PETERS: For the -- for the  
23 last year?

24 MS. SUSAN STEPHEN: As I'd mentioned,  
25 we didn't start the strategy until 2017/'18, so while

1 we started the -- we -- we did about a billion dollars  
2 of five (5) year debt issuance at the beginning of the  
3 year. So we have locked that in at very low rates.  
4 We did lock it in prior to the move in the -- the five  
5 (5) year rate.

6 But since then, and we working -- we  
7 were working towards, until recently, the weighted  
8 average term to maturity of twelve (12) years. But  
9 with recent events, we have opted to -- especially the  
10 flattening of the curve -- to move away from that  
11 strategy.

12 MR. BOB PETERS: And so the weighted  
13 average term to maturity in 2017/'18 started off with  
14 a plan to achieve a twelve (12) year average term to  
15 maturity, correct?

16 MS. SUSAN STEPHEN: It did.

17 MR. BOB PETERS: And as a result of  
18 recent events and the decisions that have been made by  
19 Manitoba Hydro, what is now the weighted average term  
20 to maturity of the debt issued in 2017/'18?

21 MS. SUSAN STEPHEN: It is currently  
22 eighteen (18) years.

23 MR. BOB PETERS: Does that in any way  
24 increase or decrease the refinancing risk of the  
25 Corporation?

1 MS. SUSAN STEPHEN: It will decrease  
2 the refinancing risk.

3 MR. BOB PETERS: And it'll decrease  
4 because you moved out the debt further than what you  
5 had initially planned?

6 MS. SUSAN STEPHEN: Correct.

7 MR. BOB PETERS: But you still don't  
8 know what it's going to cost to renew that debt when  
9 it does come due?

10 MS. SUSAN STEPHEN: No, I don't.

11 MR. JAMES MCCALLUM: And -- and again  
12 were -- were doing this in sort of real time every --  
13 literally every -- certainly every week it feels like  
14 Ms. Stephen comes to me seeking an approval to go to  
15 the market and issue debt. We're issuing a lot of  
16 debt.

17 This is kind of part of management and  
18 managing risk as things change. In order to come up  
19 with a financial model to support a rate application,  
20 you need to make some assumptions about what you're  
21 going to do. But what you do every day is -- is  
22 really a matter of what's kind of happening that day.

23 And so the model would reflect a -- a  
24 bias towards shorter-term debt issuance on the premise  
25 of expectation of cash flow to manage the risk of that

1 shorter-term, and on the premise of savings and the  
2 savings being the spread between long term rate and a  
3 short-term rate. If either of those change it changes  
4 your bias and -- and that's what we kind of do in --  
5 in real time every day, every time we talk about all  
6 this stuff.

7 MR. BOB PETERS: Ms. Stephen, last  
8 question for you on this topic. The chart that you  
9 see on the monitors that is in Board counsel book of  
10 documents 165.

11 And I try to compare that quickly to  
12 what is in Manitoba Hydro's Exhibit 68, slide 63, that  
13 you presented yesterday and I'm wondering, does your  
14 slide reflect the change in the weighted average term  
15 to maturity that you spoke about? Or would we not see  
16 it in this chart at this point in time?

17 MS. SUSAN STEPHEN: You will see it in  
18 this chart. The main difference between the former  
19 chart and this one is this updated to June 30th with  
20 actuals. So you will see the five (5) year issuance  
21 that we transacted in April and May in the year 2023.

22 MR. BOB PETERS: That was the thirty  
23 (30) year debt on -- on those issuances?

24 MS. SUSAN STEPHEN: That was a five  
25 (5) year debt -- in -- the five (5) debt that we

1 transacted earlier in the year.

2 MR. BOB PETERS: Okay, I'm sorry.

3 Yes.

4 MS. SUSAN STEPHEN: Yes.

5 MR. BOB PETERS: All right, thank you  
6 for that. I want to turn to a -- a new topic, at  
7 least in my book, and that deals with finance expense.  
8 And I hope not to be long on this, but we'll see how  
9 Ms. Bauerlein does with me.

10 MS. SUSAN STEPHEN: I think that's me  
11 too.

12 MR. BOB PETERS: Is it still you?

13 MS. SUSAN STEPHEN: Are you tired of  
14 hearing from me?

15 MR. BOB PETERS: I'm not allowed to  
16 answer questions.

17 MR. JAMES MCCALLUM: Susan's --  
18 Susan's the cash -- or sorry, Ms. Stephen is the cash  
19 and Ms. Bauerlein's the accounting. So we'll see  
20 where you go.

21 MR. BOB PETERS: Okay. What I'd like  
22 to do with the panel is turn to page 283 of Board  
23 counsels' volume 3. And, as we put that on the  
24 monitors and blow that up as much as we can. Maybe --  
25 that's great.

1                   Would I be correct, Ms. Stephen, that  
2 this minimum filing requirement 55 and the response to  
3 the Coalition is you've set out here in -- in a  
4 snapshot what the finance expense is of Manitoba Hydro  
5 that supported the integrated financial forecast 16  
6 Updated?

7                   MS. SUSAN STEPHEN:    Update with  
8 interim?   Yes.

9                   MR. BOB PETERS:    All right.  It  
10 included update with interim?

11

12   (BRIEF PAUSE)

13

14                   MR. BOB PETERS:    On this sheet, what  
15 you're telling the Board is that on the line item of  
16 the integrated financial forecast, that is the finance  
17 expense, it includes all of the items listed down the  
18 left-hand column up at the top of the page; correct?

19                   MS. SUSAN STEPHEN:    Correct.

20                   MR. BOB PETERS:    And that includes the  
21 provincial guarantee fee?

22                   MS. SUSAN STEPHEN:    Correct.

23                   MR. BOB PETERS:    And just so that  
24 we're oriented, if we look to forecast 2018 column, we  
25 will see that the provincial guarantee fee is forecast

1 to be \$154 million?

2 MS. SUSAN STEPHEN: Correct.

3 MR. BOB PETERS: And, that's a one (1)  
4 time a year calculated based on the balance  
5 outstanding of the debt at Manitoba Hydro's year end?

6 MS. SUSAN STEPHEN: Correct.

7 MR. BOB PETERS: And then we see that  
8 the total interest on short- and long-term debt is  
9 \$906 million? You're with me?

10 MS. SUSAN STEPHEN: Yes.

11 MR. BOB PETERS: And then of that  
12 amount some of that interest is then apital -- I'm  
13 sorry, is capitalized over to construction?

14 MS. SUSAN STEPHEN: Yes.

15 MR. BOB PETERS: And, would that  
16 mostly be the Keeyask and Bipole III projects?

17 MS. SUSAN STEPHEN: I would imagine  
18 so.

19 MR. BOB PETERS: And, so the total  
20 finance expense that the Board would expect to find on  
21 its -- on the integrated financial forecast would be  
22 the \$587 million that -- that comes out at the bottom?

23 MS. SUSAN STEPHEN: Correct.

24 MR. BOB PETERS: And as we look at  
25 that interest allocated to construction, the Board

1 will see that the interest allocated to construction  
2 line, it's after 2018, it starts to decline; correct?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: And, can you explain  
5 why that's the case?

6 MS. SUSAN STEPHEN: From my  
7 recollection the fiscal year 2018 and, Ms Carriere  
8 might be able to assist in this as well, has the  
9 largest work-in-progress balance.

10 Another reason for a discrepancy --  
11 discrepancy between interest and the interest cap rate  
12 is that new debt, that we're borrowing, is coming on  
13 at lower rates, whereas our interest capitalized rate  
14 is actually -- actually utilizes the weighted average  
15 interest rate of our whole debt portfolio.

16 So, if we're borrowing new debt at 1  
17 percent, our interest capitalized rate is much higher  
18 than that.

19 MR. JAMES MCCALLUM: I thi -- I thi --  
20 and that's absolutely true. There's quite a bit going  
21 on here. And I don't want to overwhelm the panel too  
22 much.

23 But I think specifically to your  
24 question, Mr. Peters, if I understood it was, why does  
25 the interest allocated to construction or capitalized

1 interest start declining a little bit in 2019? It's  
2 really because Bipole has come into service. And  
3 we're no longer, after August of 2018, which falls in  
4 that 2019 fiscal year, we're -- we're no longer  
5 capitalizing interest to -- to Bipole.

6 On the other hand, we've continued to  
7 layer on more and more debt for Keeyask, which is  
8 pushing it up the other way.

9 MR. BOB PETERS: And the Bipole III  
10 capitalized interest stops because Bipole III's  
11 interest costs then get added to the finance expense  
12 on the integrated financial forecast?

13 MR. JAMES MCCALLUM: Yep, that's  
14 right. I mean, the way the model works is really the  
15 other way. If you start working down from the top of  
16 the page you see that, you know, there's total  
17 interest on short and long-term debt. You can think  
18 about that as pretty close to our -- our cash, kind  
19 of, out the door to fund all of our debt.

20 So you see that it's steadily climbing  
21 historically and -- and if you keep going to the right  
22 on this page, you see that, you know, for the forecast  
23 year, and if I could ask that we move to right a bit--

24 MR. BOB PETERS: All right.

25 MR. JAMES MCCALLUM: You know, we --

1 we kind of -- we keep going here -- \$906 million in  
2 2018 building to a little over \$1.1 billion in 2024.  
3 And, I think I'll just, you know, draw everybody's  
4 attention to that number versus down into the shading  
5 in blue at the bottom is what shows up on the income  
6 statement.

7                   And so after Keeyask and Bipole are  
8 both fully in-service, you really see almost  
9 negligible difference between these two (2) lines.  
10 But in between, you can see some fairly material  
11 differences because of the way the accounting rules  
12 work around capitalized interest.

13                   The top number there, in -- in green is  
14 -- is the -- what we look to as our -- you know,  
15 that's the cash we need to -- to have either through  
16 rates or borrowing to -- to keep going on these  
17 projects and run the business.

18                   I hope I didn't lose everybody in that,  
19 but I welcome any questions.

20                   MR. BOB PETERS: Well, you've covered  
21 off a number of areas that I was going to get into and  
22 I'm -- maybe we can conclude this way, Mr. McCallum.

23                   You draw the -- you drew the Board's  
24 attention to the shaded blue line, shaded blue row  
25 across the page and you went out to forecast 2024.

1 And you see the \$1.140 billion. You see that, Sir?

2 MR. JAMES MCCALLUM: Yes, I do.

3 MR. BOB PETERS: That will be the  
4 finance expense that will be included in the rates  
5 that Manitoba Hydro charges?

6 MR. JAMES MCCALLUM: Well, that will  
7 be the finance expense that is included in our 2024  
8 statement of income.

9 MR. BOB PETERS: And, it will be --  
10 you -- you'll determine from including that whether  
11 there's a revenue deficiency or sufficiency?

12 MR. JAMES MCCALLUM: That's correct.  
13 That would determine whether -- the rates in place at  
14 the time would determine whether we were net income  
15 positive or negative along with all four hundred (400)  
16 other assumptions that go into that.

17 MR. BOB PETERS: All right. I -- I'm  
18 not -- I don't have further questions. I think  
19 that'll be sufficient for my purposes, Mr. McCallum  
20 and Ms. Stephen. I will move on, though, to a new  
21 matter. And I believe Ms. Morrison would be front and  
22 centre on the load forecasting matters.

23 So, Mr. Chair, if we could request  
24 maybe a five (5) minute recess just to reposition some  
25 witnesses or -- if that's Ms. Ramage's intent?

1 MS PATTI RAMAGE: Yes, my mother would  
2 love that.

3 THE CHAIRPERSON: We'll resume at  
4 2:15.

5  
6 --- Upon recessing at 2:06 p.m.

7 --- Upon resuming 2:21 p.m.

8

9 THE CHAIRPERSON: Okay, Mr. Peters...?

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Thank you, Mr. Chair.  
13 Sorry, if I raised expectations inappropriately. The  
14 load forecast is going to be on hold for just a few  
15 minutes, sir.

16 I would like to go back and ask Ms.  
17 Stephen and also Mr. McCallum a couple of points to  
18 make sure that I've adequately have them on the  
19 record. And I think the probably the best way to look  
20 at this would be to start in Manitoba Hydro's Exhibit  
21 68 and, particularly, page 63, which we understand is  
22 the updated view of Manitoba Hydro on the borrowings  
23 and the maturity schedule in -- in their debt  
24 management strategy.

25 Although, I believe this doesn't

1 include two (2) of the borrowings, if I recall, Ms.  
2 Stephen?

3 MS. SUSAN STEPHEN: Correct.

4 MR. BOB PETERS: And -- and the two  
5 (2) that it doesn't include were -- were they five (5)  
6 year -- were they five (5) years or were they -- were  
7 they longer?

8 MS. SUSAN STEPHEN: The two (2) --  
9 well, actually there's a couple -- a few more that it  
10 doesn't include but the two (2) that I mentioned, the  
11 thirty (30) year debt issues --

12 MR. BOB PETERS: There was two (2)  
13 thirty (30) year debt issues. Sorry to interrupt.

14 MS. SUSAN STEPHEN: Yes, mature in  
15 September of 2028.

16 MR. BOB PETERS: September of 2048.  
17 Sorry. So those -- and can you put the yield or the  
18 percent --

19 MS. SUSAN STEPHEN: Sure.

20 MR. BOB PETERS: -- that it's costing  
21 Manitoba Hydro?

22 MS. SUSAN STEPHEN: Sure. So the  
23 first issue that we did was for 300 million, and that  
24 was done on October 2nd of 2017 and the yield on that  
25 one was 3.495 percent.

1                   The second debt issue that we did, a  
2 long issue that we did, was for another 300 million  
3 and that was done on November 23rd of 2017. And at  
4 that point, the yield had come down to 3.19 percent.

5                   MR. BOB PETERS: All right, thank you  
6 for that. One (1) other thing before we come back to  
7 this chart on the screen is in one (1) of the answers  
8 that I believe you provided to the panel, you  
9 indicated that Manitoba Hydro was borrowing not just  
10 in North America but, essentially, all over the world.

11                   Did I hear that correctly?

12                   MS. SUSAN STEPHEN: Yes, we do -- we  
13 do issue debt internationally. Our largest issuances  
14 are obviously in the United States. We do global  
15 issues in the United States.

16                   We have also started doing kind of one-  
17 off deals in Australia and in Europe. We've done a  
18 Stirling issue. And what we find in those particular  
19 issues is we do get cost savings versus our domestic  
20 issuance.

21                   So, I do have some figures on the  
22 savings if you're interested. I know by -- offhand in  
23 the 2015/'16 and '16/'17 fiscal year we saved 2.4  
24 million versus domestic in issuing in the off-shore  
25 markets.

1                   For this year, I think we also have  
2 savings and I'll just pull the figure for you.

3

4                   (BRIEF PAUSE)

5

6                   MS. SUSAN STEPHEN:    So for this year  
7 we have actually saved \$1.3 million by issuing in the  
8 US market and the Euro market as well.

9                   MR. BOB PETERS:    Does that that  
10 savings, Ms. Stephen, take into consideration foreign-  
11 exchange risk?

12                   MS. SUSAN STEPHEN:    We actually bring  
13 the -- the foreign debt back to Canada, so, it's  
14 swapped back to Canada so it's sitting on our books in  
15 Canadian dollars.

16                   MR. BOB PETERS:    And so your exposure  
17 has been capped.

18                   MS. SUSAN STEPHEN:    Eliminated.

19                   MR. BOB PETERS:    All right.

20                   MR. JAMES MCCALLUM:    Yeah, there's a  
21 bunch in there that we can go as deep as -- as -- as  
22 you'd like, Mr. Peters, but as we issue new debt --  
23 for the most part, as we issue new debt in -- in -- in  
24 other currencies, unless it is part of our actual US  
25 dollar affects management plan -- affects to enter

1 foreign-exchange, pardon me, we will immediately -- so  
2 the Australian dollar issuance that Ms. Stephen spoke  
3 to, we immediately executed a derivative contract  
4 alongside it -- or the province did it on our behalf  
5 to bring those Australian dollars into Canadian  
6 dollars.

7                   So we have no remaining go-forward  
8 exposure to fluctuations in the Australian dollar.

9                   MR. BOB PETERS:    And so then does it  
10 become -- and -- and I think maybe Ms. Stephen and  
11 you, Mr. McCallum, might be guilty of what I do is  
12 when you say that "we issue the debt," what you really  
13 are telling the panel is that the province of Manitoba  
14 issues the debt and then you get a piece of it from  
15 the province of Manitoba.

16                   Would that be more accurate?

17                   MS. SUSAN STEPHEN:    Correct.  The  
18 province of Manitoba would -- would lead enter into  
19 the transaction and advance the funds to Manitoba  
20 Hydro.

21                   MR. BOB PETERS:    All right.

22                   MR. JAMES MCCALLUM:    On the same  
23 terms.

24                   MR. BOB PETERS:    Well, on the same  
25 terms plus a markup for the -- for the guarantee fee

1 as we call it on the --

2 MR. JAMES MCCALLUM: Plus the 1  
3 percent, correct.

4 MR. BOB PETERS: I wanted to go back  
5 to this chart and see if I understood it correctly.  
6 And I didn't put up the one with the purple line. I  
7 don't think we need it but, Ms. Stephen, would it be  
8 correct that as we look at this chart on page 63 from  
9 Manitoba Hydro's presentation in Exhibit 60 --  
10 Manitoba Hydro 68, you're showing the panel that those  
11 light blue bars in the relative near term, that is,  
12 before 2031, those are borrowings that are being done  
13 to shave the peak off of the years in which Manitoba  
14 Hydro needs a lot of -- a lot of borrowings?

15 MS. SUSAN STEPHEN: So what those  
16 light blue bars are is that's the allocation of the  
17 debt issuance from the years 2018 to 2020.

18 MR. BOB PETERS: And it's a forecast?

19 MS. SUSAN STEPHEN: It is a forecast.  
20 It's what we plan to do according to our -- our new  
21 terming strategy.

22 I would like to point out, though, that  
23 in the integrated financial forecast due to terming --  
24 there's a terming assumption that we use a twelve (12)  
25 year term. So what we've represented here in this

1 graph is what we actually would like to do but the IFF  
2 itself actually uses a twelve (12) year terming  
3 simplifying assumption.

4 MR. BOB PETERS: And if Manitoba Hydro  
5 follow through with this plan, what would be the  
6 average term to maturity?

7 MS. SUSAN STEPHEN: With this plan it  
8 would be twelve (12) years.

9 MR. JAMES MCCALLUM: Be twelve (12)  
10 years -- I think if I'm understanding your question,  
11 Mr. Peters, well, I'll try -- and correct me if I miss  
12 the mark. But, if you looked at the 2018/2019 and  
13 2020 column, and added those up -- and I'm just trying  
14 to do it visually because I don't have the figures in  
15 front of me -- but you would come to the order of, you  
16 know, looks like about \$11 billion of borrowing.

17 Would that be more or less right,  
18 Susan? Ms. Stephen?

19 MS. SUSAN STEPHEN: Yes.

20 MR. JAMES MCCALLUM: And then if you  
21 added up these -- these pale blue bars that you see  
22 more into the future, they would equal to, basically,  
23 the same amounts.

24 We're taking the debt -- what you're  
25 seeing in these blue bars, pale blue bars, is we're

1 taking new issuance or new borrowing in 2018, '19 and  
2 '20, that \$11 billion and we're putting it into  
3 buckets, buckets of refinancing by year.

4 MR. BOB PETERS: And -- and I thank  
5 you and -- and as we see where those pale blue bars  
6 end up some of it is in the -- maybe it's the three  
7 (3) year bucket the five (5) year bucket, the seven  
8 (7) year bucket, the ten (10) year bucket, correct?

9 MR. JAMES MCCALLUM: And the thirty  
10 (30) and longer bucket, yes

11 MR. BOB PETERS: All right. Well,  
12 let's focus on -- on the shorter term before 2031,  
13 would the sum of those grey bars be approximately \$9  
14 billion that we had talked about earlier, Mr.  
15 McCallum?

16 MR. JAMES MCCALLUM: Subject to check,  
17 that would be mostly -- that would be pretty close.

18 MR. BOB PETERS: So I'm trying to  
19 understand that Manitoba Hydro's plan is that by  
20 exposing that \$9 billion to shorter terms, Manitoba  
21 Hydro gets the benefit of a lower interest rate on  
22 that \$9 billion. Am I correct?

23 MR. JAMES MCCALLUM: That -- that is  
24 correct. I would -- that -- that -- that is correct.  
25 I would just the -- yes, that's correct. I'll stop

1 there and wait for your next question.

2 But for the record, that's correct.

3 MR. BOB PETERS: And the benefit of  
4 Manitoba Hydro exposing that \$9 billion to short terms  
5 at lower interest rates was calculated at the time of  
6 the plan to be a benefit of \$500 million?

7 MR. JAMES MCCALLUM: No, and this is  
8 where I started to go and decided to stop.

9 The savings of \$500 million is really  
10 tied to -- instead of putting 9 -- instead of putting  
11 \$6 billion into that -- that window we were speaking  
12 of there, putting 9 billion into it. So it's really  
13 the savings on that \$3 billion increment.

14 If we were to follow that twenty (20)  
15 year weighted average plan, we would still have in the  
16 order of \$6 billion, you know, in that window and --  
17 and, therefore, generating savings vis-a-vis having  
18 borrowed the money -- all of the money, kind of, on  
19 thirty (30) year terms. I'm not even sure we could  
20 borrow the money on thirty (30) year terms, all of it.

21 MR. BOB PETERS: Well, you're --  
22 you're going to where I wanted to go and the -- and  
23 the disconnect that we're having, Mr. McCallum, is  
24 that you're telling the panel that while there is \$9  
25 billion approximately in the next ten (10) years,

1 eleven (11) years that would be potentially termed  
2 out, and it's shown by the light blue bars.

3 Of that 9 billion Manitoba Hydro even  
4 under its old plan would expose 6 billion to the  
5 refinancing risk in the early terms?

6 MR. JAMES MCCALLUM: Yeah, that's  
7 right. If we -- if we restated this chart using the  
8 twenty (20) year, you would see lower amounts of -- of  
9 the -- you would see lower towers of baby blue colour  
10 there, but they would add up to about 6 billion. I'm  
11 being approximate.

12 MR. BOB PETERS: And so then the  
13 question that follows is: In light of what Ms.  
14 Stephen has told us about what the market just  
15 afforded to Manitoba Hydro on some thirty (30) year  
16 issuances, why wouldn't Manitoba Hydro go long on that  
17 \$9 billion as opposed to going shorter?

18 MR. JAMES MCCALLUM: Well, we -- we  
19 certainly could. I'll let Ms. Stephen who's a little  
20 closer to it speak to kind of market dynamics. I  
21 mean, I have had a lot of experience in the capital  
22 markets, and they -- they -- some of these things come  
23 down to that first course in economics around supply  
24 and demand.

25 So our actual ability to -- one -- one

1 (1) of the reasons that we've started seeking US  
2 dollar in global and Australian issuances, we're able  
3 to find better pricing that way, as opposed to staying  
4 in the Canada market where there's just been --  
5 Manitoba's been coming to the market so much. Between  
6 Manitoba Hydro and funding the province's own deficits  
7 that there's probably a little bit of -- from the  
8 Canadian pension fund community and life insurance  
9 community who buy a lot of this stuff, a bit of, oh,  
10 you again, right.

11                   And I've just got -- I've got my -- my  
12 tummy is full of Manitoba bonds, I'm not interested or  
13 I'm not interested at the same price. So, we look  
14 around for other pools of investors to keep the --  
15 keep the price down.

16                   But returning to your -- your question,  
17 and I apologize for rambling, but the reason not to --  
18 this is a balancing act between the risk. We can  
19 diminish the refinancing risk over the next ten (10),  
20 fifteen (15), twenty (20) years or longer by borrowing  
21 longer term and in fact, on a relative basis, that's  
22 what our previous debt management strategy did, but  
23 there's a cost to it.

24                   And, you know, if you're -- if you're  
25 going to borrow longer term, you're going to generally

1 in almost all environments I can remember, you're  
2 generally going to pay more for the same dollar of  
3 debt. So, we're trying to find a balance between  
4 managing risk and managing interest costs. You can't  
5 -- there's -- as they say, no free lunch. You have to  
6 make some choices.

7 MR. BOB PETERS: But I'm -- I'm  
8 hearing from Manitoba Hydro's lips that we're in an  
9 era where we have record low interest rates, and  
10 that's how we've called them in these proceedings,  
11 correct?

12 MS. SUSAN STEPHEN: Correct.

13 MR. BOB PETERS: And if they're record  
14 low rates, doesn't that seem to wet the appetite of  
15 Manitoba Hydro to look long and to -- to lock in as  
16 far out into the future as possible, whether it's in  
17 North America or Australia?

18 MR. JAMES MCCALLUM: Well, I -- I  
19 think it does, Mr. Peters, except that, you know, Ms.  
20 Stephen -- we -- we've got \$19 billion of debt going  
21 to -- going to 25 billion, just to pick a number.

22 So in so -- we will have to pay more to  
23 go longer term and insofar as we -- we tilt the  
24 balance towards longer term debt, we might drive up  
25 our overall interest expense by -- there's a --

1 there's a, you know, a spread between that short-term  
2 and long-term. So we would be driving up the overall  
3 interest expense, you know, if -- if it went up 1  
4 percent that would be -- and -- and that's not with  
5 the actual interest rates going up. That's just  
6 assuming that -- that -- that the interest rates stay  
7 where they are, we're adding 1 percent over time on 20  
8 or \$25 billion. We're -- we're -- we'd be layering  
9 another 200 or \$250 million a year on our -- you know,  
10 on our ratepayers.

11 MR. BOB PETERS: Where does that 1  
12 percent come from if it's not interest rate?

13 MR. JAMES MCCALLUM: Well, it's -- by  
14 your -- your -- it -- it is a change in your weighted  
15 average interest rate. So if we move to a thirty (30)  
16 year weighted average, say, by kind of from here  
17 forward, let's, if we could, let's do nothing but  
18 thirty (30) year bonds. And let's not plan to take  
19 refinancing risk in the next, you know, over the next  
20 thirty (30) years.

21 I hope I'm not a customer in the 31st  
22 year. But if -- we would have a significantly higher  
23 cost to doing that. We would be ratcheting up the  
24 weighted average interest rate. I'd have to go do  
25 some math to figure it out so I was just cuffing it at

1 -- if it was 1 percent but Ms. Stephen can speak to  
2 the difference between short and long-term rates right  
3 now.

4 MS. SUSAN STEPHEN: Just with respect  
5 to the -- the spread right now between we'll say five  
6 (5) year and -- and thirty (30) year debt, as of this  
7 morning it's actually contracted further and there's  
8 only .8 percent differential between the five (5) year  
9 borrowing cost and the thirty (30) year borrowing  
10 cost.

11 MR. BOB PETERS: Does -- does that  
12 suggest then, Ms. Stephen, that it would make sense to  
13 -- to go long, to go thirty (30), as opposed to the  
14 five (5)?

15 MS. SUSAN STEPHEN: Yes, for me it  
16 would.

17 MR. BOB PETERS: Okay.

18 MS. SUSAN STEPHEN: Right now there's  
19 good demand in the thirty (30) year sector from  
20 investors. The rates are quite attractive. The rates  
21 have actually come down. We're sitting at around 3.05  
22 this morning for a thirty (30) year.

23 So when I see the demand, the rates,  
24 you know, the flattening of the yield curve, for me,  
25 I'm wanting to lock in thirty (30) year debt now.

1                   MR. JAMES MCCALLUM:    But just to be  
2 clear again, we're -- we're in the midst in the next  
3 five (5) years of a \$13 billion borrowing program.  If  
4 -- if we were to move to doing all of that borrowing  
5 in the thirty (30) year term, our financial model  
6 assumes we're doing this on a twelve (12) year  
7 weighted average, leading to a weighted average  
8 interest rate.  If we instead said, let's do this all  
9 in thirty (30) year money, it wouldn't be weighted  
10 average anymore.  It would just be a thirty (30) year  
11 -- you know, we would -- we would now be moving the  
12 interest rate up.  It wouldn't be the full .8 percent  
13 that Ms. Stephen spoke to, it would be whatever change  
14 was caused by no longer doing the five (5) year and  
15 ten (10) year borrowing which weighs down the weighted  
16 average interest rate and instead, you know, weighting  
17 it the other way.

18                   But if it was call it .4 percent or --  
19 you know, of a -- of a differential on \$13 billion of  
20 borrowing, we're -- we're -- we're talking about a  
21 really significant increase in our annual borrowing  
22 costs.

23                   MS. SUSAN STEPHEN:    And just to add on  
24 to what Mr. McCallum indicated, we would not be doing  
25 all of our boring in the thirty (30) year sector.  We

1 work in conjunction with the province of Manitoba and  
2 there is an expectation on both our parts to maintain  
3 liquid provincial benchmarks in 5s, 10s and 30s.

4                   So, we will always issue throughout the  
5 yield curve.

6                   MR. BOB PETERS: I suppose if I look  
7 at the chart that's on the screen, Ms. Stephen, from  
8 page 63 of Manitoba Hydro's Exhibit 68, we'd start  
9 seeing skyscrapers in light blue, some thirty (30)  
10 years out, and they'd be side-by-side according to --  
11 according to what would happen.

12                   MS. SUSAN STEPHEN: Are you referring  
13 to the year 2046 and '47?

14                   MR. BOB PETERS: We could pick that  
15 year as an example but if -- if some of your shorter  
16 terms were put out to thirty (30) years, Manitoba  
17 Hydro would be concentrating its refinancing risk into  
18 a certain -- into a certain decade, or maybe less than  
19 a decade?

20                   MS. SUSAN STEPHEN: Yes, and so that's  
21 something we manage with our interest rate risk  
22 guidelines as well.

23                   So, as I mentioned the other day, we  
24 have a guideline which indicates we will not have more  
25 than 15 percent of our total debt portfolio maturing

1 within a twelve (12) month period.

2                   So whenever we -- we go to do debt  
3 issues, we ensure that on a go-forward basis we will  
4 not be preaching that guideline.

5                   MR. BOB PETERS:    And that guideline is  
6 set by Manitoba Hydro?

7                   MS. SUSAN STEPHEN:    Yes.  It was  
8 approved by our former CFO.

9                   MR. BOB PETERS:    Has Manitoba Hydro  
10 modelled the financial consequences of going long on  
11 all of its debt as like going thirty (30) years and  
12 seeing what -- whether that -- that internal policy  
13 should be changed?

14                   MS. SUSAN STEPHEN:    We have not  
15 modelled doing all of our debt in the long end just  
16 because we know from a feasibility perspective that  
17 would never happen.  And we would -- we would be  
18 tripping.

19                   At this point, when we're in the peak  
20 of our borrowing, we would be tripping their  
21 guideline.

22                   MR. BOB PETERS:    And the guideline you  
23 speak of is the -- having 15 percent of your debt  
24 mature within twelve (12) calendar months of it?

25                   MS. SUSAN STEPHEN:    Correct.

1                   MR. BOB PETERS:    So while we talk  
2 about numbers and, Ms. Stephen, your -- you're an  
3 encyclopedia about what's available in the -- in the  
4 marketplace, it sounds like the 3.05 that exists today  
5 is even cheaper than what you got in November 23rd for  
6 your money?

7                   MS. SUSAN STEPHEN:    Correct.

8                   MR. BOB PETERS:    But that still isn't  
9 enticing enough for Manitoba Hydro to -- to go longer  
10 on some of this debt rather than as shown in the -- in  
11 the new debt management plan to go -- to go as short  
12 as they're planning to go.

13                   MS. SUSAN STEPHEN:    I'm sorry, I don't  
14 know that I understand your question. Can you please  
15 rephrase.

16                   MR. BOB PETERS:    All right. The --  
17 when Manitoba Hydro has to decide whether to  
18 concentrate some near term debt, that is, the \$9  
19 billion that Mr. McCallum and I guessed or estimated,  
20 I should say, would be covered before 2030, by putting  
21 that \$9 million in those early years, the potential  
22 benefit is that it can be paid off if there's  
23 sufficient cash flow, but the downside risk is the  
24 refinancing risk; if I've understood your evidence so  
25 far?

1 MS. SUSAN STEPHEN: Correct.

2 MR. BOB PETERS: The benefit of  
3 putting that \$9 billion in the nearer terms is at the  
4 time -- at one point in time was a \$500 million  
5 benefit that could be calculated based on the -- on  
6 the interest rates?

7 MS. SUSAN STEPHEN: Correct.

8 MR. BOB PETERS: Does the fact that  
9 that \$500 million benefit is -- is now cut in half  
10 caused Manitoba Hydro to reconsider whether putting so  
11 much of its debt in the near term is still the right  
12 strategy?

13 MS. SUSAN STEPHEN: Yes, it has been  
14 one (1) of the factors along with lower rate  
15 increases.

16 MR. JAMES MCCALLUM: And -- but --  
17 that's -- that's absolutely true, and again I fear  
18 losing the plot a little bit here.

19 But we -- we, you know, regardless of  
20 the rate differentials, we would still want to -- I  
21 mean, our rate case is obviously predicated on what we  
22 regard as a critical need to start tackling the  
23 overall debt level of Manitoba Hydro.

24 And so to do that efficiently, we need  
25 to make sure -- and we've got -- these are these dark

1 blue bars now, we've got a bunch of debt maturing in -  
2 - in, you know, this 2023 through 2027 time frame.

3                   So we want to look at our -- our -- our  
4 expectation of cash flow. It's a -- it's a -- the  
5 term, not to add a new one, but you want to -- to try  
6 to avoid at what you call a negative carry situation  
7 where you've got the cash but you don't have a debt  
8 maturity to feed it into to repay. To -- to go into  
9 the public markets to buy back your bonds is  
10 unbelievably expensive and inefficient.

11                   So you want to and -- if you've got  
12 that expectation of cash flow, even away from all of  
13 this mathematics and modelling around interest rate  
14 spreads, and weighted terming, you just want to have a  
15 -- a debt maturity that's coming due that you can feed  
16 your cash into. The offramping term that Mr. Schultz  
17 used.

18                   And after a career in financial markets  
19 and stuff, I can admit that was a new one for me. So  
20 we maybe didn't appreciate what an innovator Mr.  
21 Schultz was.

22                   MR. BOB PETERS:    On that note, Mr.  
23 Chair, I -- I am going to conclude my questions and I  
24 will thank Ms. Stephen for being available and if  
25 there's any further questions, I'll work through Ms.

1 Ramage to -- to see if you'll come back and visit us  
2 and you'll certainly be back for My Friends opposite  
3 when -- when they have questions.

4 MS. SUSAN STEPHEN: All right, thank  
5 you.

6 MR. BOB PETERS: All right, thank you,  
7 Mr. Chair.

8 I will then turn to the -- my questions  
9 of Ms. Morrison and I would certainly excuse Ms.  
10 Stephen from the hearing room if that was her  
11 pleasure.

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: Ms. Morrison, if I  
16 may begin with you and thank you for your attendance.  
17 You are responsible for matters related to Manitoba  
18 Hydro's load forecast?

19 MS. LOIS MORRISON: That is correct.

20 MR. BOB PETERS: And, Ms. Morrison,  
21 Manitoba Hydro's load forecasts is important in this  
22 proceeding because it is based on that load forecast  
23 that Manitoba Hydro calculates on its integrated  
24 financial forecast, the revenues it expects to receive  
25 from domestic Manitoba customers?

1 MS. LOIS MORRISON: Yes.

2 MR. BOB PETERS: And Manitoba Hydro  
3 develops its load forecast based on a number of  
4 inputs; would that be correct?

5 MS. LOIS MORRISON: That is correct.

6 MR. BOB PETERS: And it's such things,  
7 Ms. Morrison, as the population forecast, the GDP  
8 forecast, natural gas forecast, electricity price  
9 forecasts. All of those go into the coming up with  
10 Manitoba Hydro's load forecast?

11 MS. LOIS MORRISON: That is correct.

12 MR. BOB PETERS: Would also be correct  
13 for the Board to understand that compared to prior  
14 load forecasts, the 2017 load forecast has changes in  
15 methodology?

16 MS. LOIS MORRISON: Yes. Compared to  
17 the 2014 forecast there are some changes in  
18 methodology. The most notable one is the one that we  
19 made to the forecast for top consumers.

20 MR. BOB PETERS: All right. We'll  
21 come to each of those individually, but from a -- from  
22 a -- standing a bit further back, Manitoba Hydro's  
23 current load forecast shows lower consumption than in  
24 prior years, correct?

25 MS. LOIS MORRISON: Than prior

1 forecasts, yes.

2 MR. BOB PETERS: Than -- yes, than  
3 prior forecasts. Thank you.

4 And following that through to the  
5 integrate financial forecast would result in lower  
6 revenues forecast from domestic customers; correct?

7 MS. LOIS MORRISON: That is correct.

8 MR. BOB PETERS: And then lower  
9 revenues from domestic customers contribute to  
10 Manitoba Hydro's request for higher rate increases to  
11 get the same amount of domestic revenue as forecast in  
12 previous years?

13 MS. LOIS MORRISON: They're one (1)  
14 component of that contribution. There's other  
15 revenues that would be included in that overall rate  
16 ask.

17 MR. BOB PETERS: But if Manitoba Hydro  
18 has less revenue coming from domestic customers, it  
19 means that it needs to have higher revenues from other  
20 sources?

21 MS. LOIS MORRISON: Holding all other  
22 things constant, yes.

23 MR. BOB PETERS: And if all other  
24 things were held constant and the load forecast had  
25 decreased, the only way to increase that top line in

1 the integrated financial forecast is through rate  
2 increases?

3 MS. LOIS MORRISON: That is correct.

4 MR. BOB PETERS: Now, Manitoba Hydro's  
5 load forecast, as I understand it, Ms. Morrison, does  
6 not in and of itself include incentive-based demand-  
7 side management savings; is that also correct?

8 MS. LOIS MORRISON: That is correct.  
9 Those are presented within our DSM plan.

10 MR. BOB PETERS: And -- and that's  
11 calculated separately in the Power Smart Plan is what  
12 you're telling the Board?

13 MS. LOIS MORRISON: Yes.

14 MR. BOB PETERS: And then it's  
15 combined with the load forecast?

16 MS. LOIS MORRISON: Yes, it is  
17 combined with the load forecast to present a net  
18 forecast.

19 MR. BOB PETERS: So if we call up to  
20 the screen, the monitors, out of PUB exhibit 42-4,  
21 page 9, what we're showing the Board here, Ms.  
22 Morrison, is that the gross energy needed by Manitoba  
23 Hydro not -- or net of its demand-side management is  
24 approximately 20,000 -- 26,000 gigawatt hours a year  
25 for 2017/18?

1 MS. LOIS MORRISON: I don't have the  
2 specific numbers in front of me but that's in the  
3 ballpark.

4 MR. BOB PETERS: That's close enough  
5 for now. And what we're looking at on the sheet that  
6 you handed out through your counsel, and marked as an  
7 exhibit today, is a revised calculation of the gross  
8 total peak net of demand-side management?

9 MS. LOIS MORRISON: Yes, that is  
10 correct.

11 MR. BOB PETERS: And -- and while  
12 we'll go to page 10 on the -- on the monitors, page 10  
13 of the Board counsels' book of documents, what  
14 Manitoba Hydro has presented -- and I didn't queue  
15 this up -- was a revision. And I'm not sure.

16 Ms. Ramage, we haven't marked that I  
17 don't believe as a separate exhibit, unless I missed  
18 it. We're just replacing the PUB Information Request  
19 first round 56(a) with what's been handed out?

20 MS. PATTI RAMAGE: Yes, the entire IR.

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: All right. So, Ms.  
24 Morrison, Ms. Ramage wanted to but didn't speak to  
25 this because she wanted to not spoil your thunder.

1                   So what we're you showing the Board  
2 with this revised calculation of the gross peak energy  
3 requirements of Manitoba Hydro?

4                   MS. LOIS MORRISON:   Essentially, it  
5 was a administrative error in terms of the data being  
6 pulled over.  What's presented in the book of  
7 documents at page 10 for the 2015 forecast, net  
8 forecast, did not include all of the DSM planned  
9 savings through the program-based initiatives.

10                   And so if you look at the corrected  
11 version, you'll see that it mimics very similar  
12 relationship between the '15/'16 and '17 forecasts as  
13 is presented on page 9 of Mr. Peter's book of  
14 documents.

15                   So the differential -- there's not that  
16 large differential between the 2015 and 2016 forecast.

17                   MR. BOB PETERS:   All right, thank you  
18 for your correction, and let's move to specific  
19 sectors on page 11 of the Board counsel book of  
20 documents.

21                   And what we see on this sheet, Ms.  
22 Morrison, is that in terms of residential customers --  
23 and we'll go down to 2017/'18 year, Manitoba Hydro was  
24 telling the Board that they have approximately 486,318  
25 customers?

1 MS. LOIS MORRISON: What we're  
2 presenting there is our forecast for the '17/'18 year  
3 that we'll have as an average over that year 486,318  
4 customers.

5 MR. BOB PETERS: And so when you say  
6 "an average," that takes into account some people  
7 coming, some people going?

8 MS. LOIS MORRISON: That is correct.

9 MR. BOB PETERS: And then next to it  
10 we see in the -- in the column called Mass Market  
11 68,166 customers?

12 MS. LOIS MORRISON: That is correct.

13 MR. BOB PETERS: What's a mass-market  
14 customer? Can you just give me a couple of examples?

15 MS. LOIS MORRISON: Our general  
16 service mass-market customers include all of our  
17 commercial and industrial accounts. So, it includes  
18 everything from the Tim Hortons in Neepawa to the --  
19 to the office buildings, to schools, insti -- health  
20 institutions. It includes small manufacturing.  
21 Anyone other than our top ten (10) largest customers.

22 MR. BOB PETERS: When you said -- did  
23 you say top ten (10) or top twenty-six (26)?

24 MS. LOIS MORRISON: Top ten (10)  
25 largest customers, they represent twenty-six (26)

1 accounts. So it would be twenty-six (26) accounts.  
2 So in our -- in our -- what we present here when we  
3 call -- talk about customers are actually accounts.

4 And so one (1) customer may represent  
5 more than one (1) account, in a sense that their  
6 facility may have more than one (1) account added or  
7 we may be grouping numbers of facilities to one (1)  
8 customer. They may have multiple sites.

9 So, it's difficult for us to say the  
10 number of customers, but we can report on the number  
11 of accounts.

12 MR. BOB PETERS: And would -- without  
13 giving out any description of who those are, those top  
14 ten (10) customers are the customers that consume the  
15 most energy on the Manitoba Hydro system?

16 MS. LOIS MORRISON: Yes.

17 MR. BOB PETERS: And it wouldn't be  
18 unreasonable to conclude that some of those could be  
19 included in the Manitoba Industrial Power Users Group  
20 category?

21 MS. LOIS MORRISON: That would be a  
22 fair assumption.

23 MR. BOB PETERS: When we look on page  
24 19 of the book of documents, we see the residential  
25 sector, correct?

1 MS. LOIS MORRISON: That is correct.

2 MR. BOB PETERS: And what you -- what  
3 Manitoba Hydro has now done is it's broken down in the  
4 load forecast -- taken the residential customers --  
5 and I probably won't get the terminology correct now,  
6 Ms. Morrison, but your 486,318 accounts, and you don't  
7 know how many customers, how many individual customers  
8 that represents, do you?

9 MS. LOIS MORRISON: It's very close to  
10 that number. We only have -- there's -- there's --  
11 there may be a few customers out there still that have  
12 two (2) metres in their house but most customers only  
13 have one (1).

14 MR. BOB PETERS: All right. So on  
15 page 19, what you're showing the Board is that there's  
16 been a one (1) year increase, and then a decrease in  
17 the residential consumption?

18 MS. LOIS MORRISON: In terms of what  
19 years are you referring to?

20 MR. BOB PETERS: I'm looking to the  
21 current time, 2017/18, and I'm seeing that the -- I'm  
22 looking at a purple coloured line on page 19 of Board  
23 counsels' volume 4, where the ra -- the load increase  
24 -- the load for the domestic residential customer  
25 increases, and then it starts to decline.

1 MS. LOIS MORRISON: Yes, compared to  
2 the prior year's forecast of 2016 there is a small  
3 increase from the '16/'17 year to -- sorry, yes, to  
4 the '17/18 year.

5 MR. BOB PETERS: Can you tell the  
6 Board what Manitoba Hydro concludes as the reason for  
7 that slight increase?

8

9 (BRIEF PAUSE)

10

11 MS. LOIS MORRISON: Okay. So the blue  
12 line represents our actual energy consumption as  
13 opposed to our weather adjusted actual energy  
14 consumption. And we've just come off of two (2) warm  
15 years, warm weather years. And so, therefore, part of  
16 that will most likely be as a result of the fact that  
17 we're coming -- we're comparing with our forecast to a  
18 weather normalized year.

19 MR. BOB PETERS: The 2016 load  
20 forecast, that's graphed on page 19 of Board counsels'  
21 book of documents, Ms. Morrison, does not include the  
22 impact of a 7.9 percent rate increase going forward?

23 MS. LOIS MORRISON: No, the 2016  
24 forecast was prepared using the prior projections of  
25 3.95 percent per year for a total of twelve (12)

1 years.

2 MR. BOB PETERS: And then when we see  
3 starting in approximately 2017, we see that -- I'll  
4 call it the purple line, it starts to decline.

5 Do you see that also?

6 MS. LOIS MORRISON: Yes.

7 MR. BOB PETERS: And is that as a  
8 result of Manitoba Hydro's forecasting what's going to  
9 be the impact of a 7.9 percent rate increase on  
10 domestic consumption?

11 MS. LOIS MORRISON: Yes, that is, as I  
12 presented yesterday, we are seeing in the early years  
13 of the forecast a decrease and then ramping back.

14 And what it's reflecting is the  
15 depression due to the increased rate projection in the  
16 early years and then returning to rates at the rate of  
17 inflation in the later years.

18 MR. BOB PETERS: So what you're  
19 telling the Board is that by increasing the rates  
20 you're reducing Manitoba Hydro's consumption without  
21 demand-side management?

22 MS. LOIS MORRISON: Yes, there will be  
23 a natural price effect for our customers that they  
24 will respond to, and that we are anticipating that  
25 they'll respond to

1 MR. BOB PETERS: And you've indicated  
2 that near the end of the forecast at least maybe out  
3 to 2035, all three (3) forecasts that are shown on  
4 this graph are approximately equal?

5 MS. LOIS MORRISON: Sorry, could you  
6 repeat the question.

7 MR. BOB PETERS: I was looking at the  
8 end of -- on -- what's on the screen in front of you,  
9 looking out to 2034/35, and all of the forecasts are  
10 converging at that time and they're relatively close  
11 together in terms of what the expected load will be  
12 from residential customers?

13 MS. LOIS MORRISON: Yes. There's a  
14 number of puts and takes as I discussed yesterday. We  
15 have a -- in the last few years of the forecasts, we  
16 aren't representing any additional DSM savings because  
17 we haven't updated our DSM forecasts.

18 So, we're looking at the 2017 forecast  
19 as a fourteen (14) year period as opposed to the '16  
20 forecast having a fifteen (15) year period. We also  
21 have different projections going forward, as I noted  
22 yesterday, in terms of the population forecasts is at  
23 1 percent -- 1.1 percent per year.

24 So there's a number of puts and takes  
25 that ultimately, at the end of the day, we are coming

1 close to having the same projection at the years '35 -  
2 - '34/'35.

3 MR. BOB PETERS: To prepare this  
4 forecast, Ms. Morrison, Manitoba Hydro uses a  
5 regression analysis as a tool to help forecast; would  
6 that be correct?

7 MS. LOIS MORRISON: That's correct.

8 MR. BOB PETERS: And that's for the  
9 residential customers, you -- you do that certainly?

10 MS. LOIS MORRISON: We use an  
11 econometric model for all three (3) sectors.

12 MR. BOB PETERS: All right. It's a  
13 different model, though, for --

14 MS. LOIS MORRISON: Yes.

15 MR. BOB PETERS: -- the other sectors?

16 MS. LOIS MORRISON: Yes.

17 MR. BOB PETERS: All right. So,  
18 staying with the residential customers, would it be  
19 correct that price elasticity is an input into the  
20 model?

21 MS. LOIS MORRISON: Price is a  
22 component of the mode; that's one (1) of the  
23 independent variables.

24 MR. BOB PETERS: And price elasticity  
25 is the concept that the higher the price, the lower

1 the consumption?

2 MS. LOIS MORRISON: Yes.

3

4 (BRIEF PAUSE)

5

6 MR. BOB PETERS: I'm looking at page  
7 57 -- I'm sorry, I'm looking at page 15 of Board  
8 counsels' book of documents, and I'm looking at a  
9 chart where Manitoba Hydro provides the Board with  
10 some price elasticity information.

11 Are you there, Ms. Morrison?

12 MS. LOIS MORRISON: Yes, thank you.

13 MR. BOB PETERS: And what you're  
14 telling the Board is that for the residential basic  
15 customer, if there's a 1 percent increase in the price  
16 of a les -- of electricity, there is a negative .28  
17 percent response in terms of load?

18 MS. LOIS MORRISON: That is correct.

19 MR. BOB PETERS: One of the comments  
20 made by Daymark Energy Advisors in their report that's  
21 been filed and it's found -- there's an extract on  
22 page 16 of Board counsels' book of documents.

23 And we see at the top of the page, Ms.  
24 Morrison, Manitoba Hydro's price elasticity set out --  
25 I think they're the same as what was in the Manitoba

1 Hydro evidence?

2 MS. LOIS MORRISON: That is correct.

3 MR. BOB PETERS: And then if we scroll  
4 to the bottom, and particularly to the highlighted  
5 portion, Daymark is estimating that the residential  
6 price elasticity will be negative .34 percent.

7 Do you see their calculation or their -  
8 - their statement?

9 MS. LOIS MORRISON: Yes.

10 MR. BOB PETERS: Have you had an  
11 opportunity to consider that position from Daymark?

12 MS. LOIS MORRISON: Could you define  
13 "consider"?

14 MR. BOB PETERS: Well --

15 MS. LOIS MORRISON: Have we reviewed  
16 the report? Yes.

17 MR. BOB PETERS: Okay. And your  
18 rebuttal evidence to this report isn't due, I'm going  
19 to say, the 15th? I might be wrong on that. Ms.  
20 Ramage will know better than I.

21 But you haven't filed your rebuttal  
22 evidence to this report yet?

23 MS. LOIS MORRISON: No, we haven't.

24 MR. BOB PETERS: All right. Can you  
25 give the Board a sneak preview of -- of what your

1 rebuttal is going to say in response to this concern  
2 that's -- that's mentioned by Daymark?

3 MS. LOIS MORRISON: Fundamentally our  
4 elasticities that we present in our report are based  
5 upon our historical data and we are quite comfortable  
6 with them.

7 If we were to pursue the higher price  
8 response that Daymark is presenting, we would, as you  
9 mentioned earlier, you would see a further da --  
10 dampening of customers demand for electricity.

11 We are not stating that the .34 is  
12 outside of the realm of reasonableness as Dr. Yatchew  
13 mentioned in his literature, there is a number of --  
14 there's a wide range of what possible acceptable price  
15 elasticity values there are.

16 And Manitoba Hydro's elasticity values  
17 that we present in our -- in our analysis are within  
18 those ranges. And so, we are quite confident with the  
19 ones that we are using.

20 MR. BOB PETERS: In terms of what  
21 Daymark's concern was, they wanted to know whether or  
22 not Manitoba Hydro had considered the -- what they  
23 called the multicollinearity being removed from the  
24 equations that you use.

25 Can you explain to the panel what you

1 understand Daymark to be suggesting Manitoba Hydro do  
2 and then tell the Board how Manitoba Hydro does it?

3 MS. LOIS MORRISON: So --

4

5 (BRIEF PAUSE)

6 MS. PATTI RAMAGE: Mr. Peters or Mr.  
7 Chairman, I should say, as Mr. Peters alluded to, our  
8 rebuttal is not due until December 15th and, in fact,  
9 we're -- I think we've just today got the IR responses  
10 in. So, I'd like to put on the record that Ms.  
11 Morrison will go as far as she's comfortable with but  
12 this needs to be analysed by our -- our staff to  
13 understand the full information.

14 THE CHAIRPERSON: Yes, that's fine. I  
15 mean, I think, Mr. Peters asked the question, she can  
16 go as far as she can and if -- and if the evidence  
17 changes after, you know, further consideration of  
18 Daymark, certainly that will be put on the record  
19 later on.

20 I'm -- I'm just wondering if, Ms.  
21 Morrison, if you could explain what the word  
22 "multicollinearity" means because I don't have a clue  
23 what it means.

24 MS. LOIS MORRISON: I -- I may not be  
25 quite as adept at this as Mr. Grant would be, but,

1 multicollinearity occurs when there are high  
2 correlations between two (2) or more of the predictor  
3 independent variables within a econometric formula.

4                   So, in other words, the one (1)  
5 predictor variable could be used to predict the other.  
6 And usually you see it in cases such as, if you are  
7 doing an econometric equation and you include things  
8 like. year of education and income.

9                   So what happens is, essentially, the  
10 years of education of an individual could be used to  
11 predict what, you know, reasonably predict what their  
12 income is. So, if you use both of those variables in  
13 an econometric equation, what happens is they end up  
14 being correlated themselves.

15                   And so Daymark's concern is that, well,  
16 really, if you put a coefficient of education, and you  
17 put the coefficient on the years of income, is it  
18 right? Because each of them are interfering with each  
19 other, essentially, is what they're saying because you  
20 could take years of education to predict income.

21                   So -- but you can also in -- in an  
22 econometric equation end up with what you would call  
23 spurious correlation and -- and that's where you may  
24 see that they are aligned -- where -- where it looks  
25 like they're aligned but when you look intuitively at

1 the variables, it's really just random.

2                   So, in -- in the case that they're  
3 suggesting, when we were looking at their concern,  
4 their concern was -- and -- and -- and I should put on  
5 the record that although we agree with the fact that  
6 the presence of multicollinearity is -- is not ideal,  
7 in -- in the independent variables, the presence of  
8 multicollinearity in and of itself does not reduce the  
9 reliability of the model as a whole.

10                   And Daymark themselves in their report  
11 state that -- at page 33 that:

12                   "Multicollinearity doesn't affect  
13                   the overall fit of the model or  
14                   result in bad forecasts of the  
15                   dependent variable."

16                   So although we are interested and --  
17 and do you agree that multi -- the presence of  
18 multicollinearity isn't ideal, what we're looking at  
19 is that the multicollinearity isn't presenting on the  
20 price elasticity coefficient or the independent  
21 variable of price, it's presenting on the independent  
22 variables of income and fuel share, and then the trend  
23 variable.

24                   So when we started doing our  
25 econometric models, we -- we obviously -- we found --

1 we included price and income and then we introduced  
2 fuel share and fuel share is repre -- is the -- is the  
3 future penetration of electric heat. And the reason  
4 we included the fuel share is that, generally, if you  
5 have electric heat, you're energy consumption is  
6 higher. So we felt that that was an important  
7 variable to include.

8                   But what's surprising is to see that  
9 we're getting a high correlation between income and  
10 electric heat and they're posit -- they're -- they're  
11 directly proportional. So you would sit there and  
12 say, well, that doesn't nec -- that's not your years  
13 of education and income example because you are not  
14 going to say, well, if my income goes up I'm more  
15 likely to put in electric heat. Or, you are not going  
16 to say, well, if I have electric heat my income is  
17 more likely to be higher.

18                   So it's not the same type of  
19 relationship and so the fact that there is correlation  
20 between the two (2), it goes -- it gives pause but it  
21 doesn't invalidate the overall model, and I don't  
22 believe it invalidates our price elasticity  
23 coefficients.

24                   So -- so -- so those -- that's why when  
25 we were looking at building the econometric model we

1 looked at those components, and what would influence  
2 the energy use. And so -- I don't know if I'm  
3 rambling now but that -- that -- that's really what we  
4 were looking at. And so the fact that there is  
5 multicollinearity present is something that we'll look  
6 into but we don't see it as invalidating the model  
7 necessarily.

8 BOARD MEMBER GRANT: So I was just  
9 checking to see the viewership on the live streaming  
10 and it's been falling throughout much of the day but  
11 it had a recent spike.

12 I -- I just wanted warn that I'm on the  
13 poetic side of economics discipline so don't worry,  
14 you can bluff me all you like but I do take your  
15 point. I think the argument is that multicollinearity  
16 you -- you may -- you may not have a biased estimator,  
17 but it depends on how you correct for it.

18 MS. LOIS MORRISON: M-hm.

19 BOARD MEMBER GRANT: Now, if I can  
20 just jump in. The one (1) thing I'm curious about  
21 with these price elasticity measures is that the time  
22 horizon that becomes really important, so, it's a  
23 short-term or a long-term price elasticity, right.

24 So, in other words, I can't -- there  
25 may be nothing I can do tomorrow to really deal with a

1 higher price but maybe in a year or two, I replace my  
2 appliance or something like that. So, do you lag the  
3 price effects in this model? So --- this -- so, in  
4 other words, my consumption today is partly a  
5 reflection of the price a year ago and two (2) years  
6 ago and so on.

7 MS. LOIS MORRISON: There's a two and  
8 a half year lag in the residential model --

9 BOARD MEMBER GRANT: Okay.

10 MS. LOIS MORRISON: -- on price.

11 BOARD MEMBER GRANT: And adjusted two  
12 and a half year lag. You don't do a --

13 MS. LOIS MORRISON: We don't do a  
14 short-term/long-term elasticity impact analysis, no.

15 BOARD MEMBER GRANT: Can I continue  
16 because I may be taking you down a different tangent  
17 here, and this is -- you know, this is a really high  
18 level question.

19 If -- if you went back to that -- I  
20 think it was on page 19, book 4. It was the long term  
21 -- I guess not. Anyway, econometrics is -- is  
22 inherently an -- is a very conservative technique. In  
23 a sense you're taking the state of the world today and  
24 you're estimating relationships that exist today and  
25 then you go out and project them into the future.

1                   So it's got that sort of if everything  
2 else stays the same, my model's predicting this. I  
3 just worry about going out that far, right. So you're  
4 going to estimate -- estimate the load twenty (20)  
5 years from today, how do you deal with things like  
6 disruptive technology?

7                   So do you put in something about --  
8 like, how do we know what the price of solar panels is  
9 going to be in two (2) or three (3) or four (4) or ten  
10 (10) years or what's going to happen with fuel cells  
11 or storage? I mean, all that sort of disruptive stuff  
12 which I presume comes outside of an econometric model?

13                   MS. LOIS MORRISON: Yes, you're  
14 correct. It's very difficult to try to incorporate  
15 something that would be so disruptive or be that full  
16 game changer. And an example of that and -- and how  
17 we're attempting to deal with it is there's -- so I'll  
18 start with LED lighting. And we've actually  
19 incorporated it into our residential forecast and ex -  
20 - ex -- a projection of LED lighting that's different  
21 than -- that's not included in the econometric model.  
22 We've further make adjustments that represent that.

23                   And the reason for that is it's uptake  
24 is so much different than what we would have  
25 anticipated to have happened or what would have been

1 reflected in past history.

2                   The best example I have for a  
3 comparator is, the CFL light bulbs. I know that  
4 everybody's a fan, we heard numerous times, but the  
5 uptake -- or -- or the market adoption curve of CFL  
6 light bulbs was much more gradual and it was much more  
7 representative of your typical market adoption curve.

8                   And so that would have been captured in  
9 our past history as it was growing through our market.  
10 And so as we did our econometric models that would  
11 have been picked up. But the difference that we're  
12 seeing with LED lighting is that it's making a  
13 substantive change. Its market adoption curve is very  
14 steep.

15                   And so our econometric models are not  
16 capturing that and so we've looked outside of the  
17 econometric model specifically looking at what the DOE  
18 is anticipating to be uptake in LED lighting in the  
19 future, and we've layered on that into our forecast  
20 recognizing that's coming.

21                   Outside of that, when we start to talk  
22 about solar, we had in our forecast -- because this is  
23 our net forecast that's being presented at page 19, we  
24 have in our demand-side management plan projections of  
25 uptake of solar. It's starting in year 2020, and it

1 represents about -- it's about 276 or 200 -- well,  
2 we'll round it up, 280 gigawatt hour of energy  
3 reduction by the end of 2035/'36 that would be  
4 incorporated into this net forecast that's seen as  
5 solar as being the result of the reduction on our  
6 system due to solar, installation of solar.

7 BOARD MEMBER GRANT: So just for  
8 clarification, when you look at DSM, are you assuming  
9 that all solar adoption will be through -- would be  
10 credited to a Hydro DSM program, or there's no --  
11 you're going to take credit for all solar adoption in  
12 the province, or how does -- how does that work?

13 MS. LOIS MORRISON: No, what we are  
14 including in the DSM plan is an acknowledgment that as  
15 -- I'll pass the paton shortly -- Efficiency Manitoba  
16 begins to pursue addition -- additional initiatives to  
17 achieve the targets they've been identified to achieve  
18 or have been mandated.

19 But they'll look at different options  
20 and different technologies. One (1) of the  
21 technologies that they will likely -- that will be  
22 available for them to pursue is solar. And so we had  
23 previously identified that in our long-term plan as  
24 one (1) of the technologies that could be pursued in  
25 the -- in the future when the pricing became more

1 attractive in Manitoba to encourage customers to  
2 reduce their electricity consumption, as part of that  
3 direction.

4                   So we weren't including all of them,  
5 but you're correct, we don't know how big it is going  
6 to be. So, we have it -- we have a factor of it  
7 included in our net forecast, but we also look at --  
8 in our load forecast, we look at the -- the  
9 sensitivity or the scenario of, well, how big would it  
10 look like if we did have a certain number of housing  
11 units install, you know, 2 kilowatts of solar on their  
12 house? Like, what would -- what would it look like  
13 from the Manitoba Hydro perspective?

14                   It is a standalone off-the-side  
15 analysis to say, well, what does that look like? And  
16 it's not incorporated into our base forecast.

17                   BOARD MEMBER GRANT: On the flipside,  
18 you make some guesstimate about electric cars, for  
19 example, 'cause I -- I mean you look at -- I think by  
20 the 2030, most places -- you know, there's some really  
21 radical estimates about the number of electric cars.  
22 You got forecasts for things like that in --

23                   MS. LOIS MORRISON: Yes.

24                   BOARD MEMBER GRANT: -- some sort of  
25 guesstimates?

1 MS. LOIS MORRISON: We have in our  
2 base forecast an estimate of electric vehicles that  
3 would be much more conservative likely than some of  
4 those people that you're referring to. But it is so  
5 far tracking very closely to what we're seeing  
6 occurring in the marketplace.

7 There's a lot of things that come into  
8 play on electric vehicles. There has to be  
9 improvements in the battery technology; we're seen  
10 that coming, no question. There also has to be a  
11 price point drop, and that's coming with some of the  
12 units; some of the -- some of the manufacturers are  
13 starting to go in that direction. But we also need to  
14 see -- and also see -- need to see a wider selection  
15 of available vehicles.

16 So all these things have to come into  
17 play for that market to take off. But even with that  
18 -- so in our load forecast, again, is one (1) of the  
19 scenarios. We've looked at what well, what if all the  
20 cars, as they turnover or as they're -- all new car  
21 purchases from today forward are electric vehicles,  
22 how big it is?

23 And so we do look at those things to  
24 see what the impact might be, but we wouldn't  
25 incorporate that in our base forecast, because we have

1 to assume a normal or -- or an average in order to  
2 provide a base.

3 BOARD MEMBER GRANT: Thanks. This --  
4 this had to help over the financial debt discussion,  
5 but anyway I just -- I won't say anymore.

6 MS. LOIS MORRISON: While -- while I'm  
7 told regularly that electric vehicles are sexy so --  
8 everybody wants to talk about them.

9 THE CHAIRPERSON: Mr. Peters...?  
10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Ms. Morrison, does  
13 Manitoba Hydro acknowledge that it consistently  
14 understates the population? I'll turn to page 20 on  
15 the Board counsels' book of documents.

16 Maybe -- maybe put another way, I took  
17 the Daymark report to be telling this Board that they  
18 identify a consistent understating by Manitoba Hydro  
19 of Manitoba Hydro's forecast customers?

20 MS. LOIS MORRISON: Yes. And one (1)  
21 of the things that we should put into context about  
22 the table that was provided, and it was provided by  
23 Manitoba Hydro to Daymark, is that in our subsequent  
24 analysis of this report, they -- some of this error  
25 range that may be presented is the fact that the

1 forecasts that bring provide -- that we're being  
2 compared to were forecasts prepared prior to the  
3 Provincial Nominee Program that was launched by the  
4 province.

5           And if you -- similar to how we look at  
6 our demand-side management, and we compare the  
7 accuracy of our forecasts with demand-side management,  
8 we add back in the demand-side management, or we  
9 adjust our forecast to represent that our demand-side  
10 management programs were supposed to achieve a certain  
11 amount of activity.

12           The forecasters who would have been  
13 preparing their forecast prior to the launch of the  
14 Provincial Nominee Program would not have known about  
15 intervention. And so, of course, that intervention  
16 would not be noted in their forecast, and therefore  
17 that a lot of that deviation would be a result of  
18 that.

19           If you go and look to Daymark's  
20 response to Coalition IEC Daymark Load 7B, you'll note  
21 that they acknowledged that the later forecasts are  
22 actually not under-forecast, that they are actually  
23 over-forecast. So it's -- what's represented here  
24 really isn't necessarily a true picture, and that what  
25 -- what it is excluding is the impact of the

1 Provincial Nominee Program.

2 MR. BOB PETERS: I can understand that  
3 -- that answer, Ms. Morrison, but I'm wondering if the  
4 residential customer account is also a number that  
5 Manitoba Hydro has a fairly large error percentage in  
6 forecasting?

7 MS. LOIS MORRISON: The residential  
8 customer account is derived from the population  
9 forecast.

10 MR. BOB PETERS: And that -- is  
11 Manitoba Hydro making an assumption as to how many --  
12 how many people reside in a facility where there is  
13 one (1) -- considered one (1) customer?

14 MS. LOIS MORRISON: Yes. It's the  
15 people per cust -- per residential account, yes.

16 MR. BOB PETERS: Has Manitoba Hydro  
17 changed that in light of any of the matters you've  
18 recognized, including the Provincial Nominee Program,  
19 or other changes in society that Manitoba Hydro has  
20 monitored?

21 MS. LOIS MORRISON: That number of  
22 that people per house has changed over time. It used  
23 to be quite a bit higher -- or not quite a higher. It  
24 used to be -- let me got to my....

25

1 (BRIEF PAUSE)

2  
3 MS. LOIS MORRISON: This was explored  
4 during the Needs For And Alternatives To hearing in  
5 the rebuttal. And during that period of time, they  
6 noted that the highest value of people per household  
7 was three point zero two (3.02) and 1983, and that has  
8 consistently dropped, until the lowest value of per  
9 peop -- of people per -- people per household, to --  
10 which was two point seven six (2.76) witnessed in  
11 2008.

12 Now that value has fluctuated. And  
13 this is based on actual data, where we've looked at  
14 the number of -- the population in Manitoba, compared  
15 to our number of customer account. And so we've --  
16 we've monitored that over the years -- and I believe  
17 Mr. Grant this was your question yesterday -- and it  
18 really has fluctuated in the last few years to be  
19 really -- it's gone from two point seven four (2.74)  
20 to two point seven two (2.72), to two point seven  
21 three (2.73), and so it really is now sitting very  
22 much and has sat at that level for quite a few years.

23 MR. BOB PETERS: Would the Board be  
24 correct in understanding from Manitoba Hydro, that if  
25 Manitoba Hydro understates its forecast of customers,

1 that has an effect of also understating the general  
2 service mass-market load?

3 MS. LOIS MORRISON: That is correct.

4 But --

5 MR. BOB PETERS: And that's --

6 MS. LOIS MORRISON: Sorry.

7 MR. BOB PETERS: And that's because  
8 the mass-market load that you talked about also serves  
9 residential customers?

10 MS. LOIS MORRISON: That is correct.

11 But I would note again that in the current -- in the -  
12 - in the more recent forecast, that has not -- Daymark  
13 noted that that has not been evidenced.

14 MR. BOB PETERS: And so the number --  
15 the number of residential customers is an input into  
16 the mass-market?

17 MS. LOIS MORRISON: That is correct.

18 MR. BOB PETERS: Ms. Morrison, is fuel  
19 switching included in that model that you spoke to the  
20 panel about?

21 MS. LOIS MORRISON: Which model, the  
22 residential basic?

23 MR. BOB PETERS: Yes. Only with  
24 residential, please. Yeah.

25 MS. LOIS MORRISON: Yes, the

1 independent variable fuel share represents our  
2 projection for customers uptaking electrical heat  
3 versus increasing -- sorry, the independent variable  
4 fuel share represents our estimation of the number of  
5 customers that will be choosing electric heat based  
6 upon a ratio of the pri -- the price of natural gas to  
7 the price of electric -- electricity. We also layer  
8 on top of that an additional adjustment to reflect  
9 what we are anticipating to see as the number of  
10 people choosing natural gas as a result of our heating  
11 education campaign.

12 MR. BOB PETERS: So Manitoba Hydro  
13 does include a component in its model for fuel  
14 switching under the fuel share variable?

15 MS. LOIS MORRISON: That is correct.

16 MR. BOB PETERS: And is that dealt  
17 with for old customers the same as new customers?

18 MS. LOIS MORRISON: In terms of our  
19 existing customer base?

20 MR. BOB PETERS: Yes.

21 MS. LOIS MORRISON: That existing  
22 customer base is adjusted, as I mentioned, through the  
23 heating education campaign. Those -- those numbers  
24 reflect some of that.

25 There's -- there's more -- there's less

1 likelihood of an existing customer converting from  
2 electric heat to natural gas heat, only because of the  
3 upfront costs and the -- different priorities for  
4 their capital dollars and such. But we do have a  
5 factor within our projections under the heating  
6 education campaign for cust -- existing customers to  
7 be converting to natural gas.

8 MR. BOB PETERS: On page 21 of Board  
9 counsels' book of documents is the home heating chart  
10 comparison off of Manitoba Hydro's website.

11 You've seen that before, Ms. Morrison?

12 MS. LOIS MORRISON: Oh, yes.

13 MR. BOB PETERS: Maybe you -- you  
14 prepared it?

15 MS. LOIS MORRISON: Personally, no.  
16 But I have staff that work on that, yes.

17 MR. BOB PETERS: All right. And --  
18 and so in -- and following up also on Dr. Grant's  
19 question, that if a customer looks at this chart and  
20 they see that if they're heating their home with  
21 electricity, and their home is considered an average  
22 single-family residence, they're paying about thirteen  
23 hundred and sixty-one (\$1,361) dollars a year,  
24 correct?

25 MS. LOIS MORRISON: That is correct.

1 MR. BOB PETERS: And what -- what is  
2 an average single-family residence? Is that -- is it  
3 statistically an average, or have you mocked up what -  
4 - how many square feet in insulation would be an  
5 average home?

6 MS. LOIS MORRISON: We've -- we -- we  
7 deem it to be approximately a 1,200 square-foot home.  
8 But what we're actually basing it upon is a home you -  
9 - requiring 60 gigajoules of heating. And then what  
10 we do, is we take that 60 gigajoules of heating and we  
11 equate across the different fuel sources.

12 So -- although when we talk to our  
13 customers, we're talking generally in terms of, well,  
14 it's your average 1,200 square-foot house, recognizing  
15 though that there is no average 1,200 square-foot  
16 house; it depends on the age of the house, depends on  
17 the type of construction, there's a number of factors  
18 that we'll fill into that.

19 But in order to speak to our customers  
20 in a way that's reasonable, we talk about it 1,200  
21 square-foot house. But the actual calculations of  
22 this are based upon a house requiring 60 gigajoules of  
23 heat.

24 MR. BOB PETERS: All right. Thank  
25 you. And what you're showing on this page 21, in your

1 -- on your material, is that to heat your home with  
2 natural gas using a high-efficiency furnace, you're  
3 going to pay five hundred and sixty-eight (\$568)  
4 dollars, or probably in the area of 42 percent of what  
5 you would if you heated electrically.

6 MS. LOIS MORRISON: Yes.

7 MR. BOB PETERS: And this is part of  
8 the home -- that's, sorry, the heating education  
9 campaign that you're talking about?

10 MS. LOIS MORRISON: This brochure and  
11 this information is part of that campaign. It's  
12 housed on our -- on our website. We have other  
13 components such as a heating it -- heating fuel cal --  
14 heating calculator, where you can plug-in information  
15 about your house and find out what your savings might  
16 be by converting from electric to natural gas or by  
17 choosing natural gas ver -- choosing electric over  
18 natural gas. It provides customers with information.  
19 But, yes, it's one (1) component of it.

20 MR. BOB PETERS: When we turn, Ms.  
21 Morrison, to page 41 of Board counsels' book of  
22 documents, we're going to be talking about the general  
23 service -- I'm sorry, I'm going to be on the top  
24 consumers' sector, starting on page 41 of Board  
25 counsels' book of documents.

1 MS. LOIS MORRISON: Yes.

2 MR. BOB PETERS: What the Board will  
3 see, is that from 2015 to 2017 there's a volume  
4 decrease.

5 Do you note that?

6 MS. LOIS MORRISON: Yes, there is a  
7 change between the '15 forecast and the '16 forecast,  
8 where we moved the seven (7) smallest top consumers to  
9 the general service mass-market sector. And so 400  
10 gigawatt hours of that would be related to the move of  
11 those customers.

12 MR. BOB PETERS: In addition to that,  
13 Ms. Morrison, Manitoba Hydro has removed the potential  
14 large industrial load in years 4 and 5 of the  
15 forecast?

16 MS. LOIS MORRISON: Yes, as part of  
17 the methodology change that we spoke to earlier for  
18 the top consumer sector, we've extended the short-term  
19 time-frame to be up to five (5) years.

20 MR. BOB PETERS: Sorry, what -- what  
21 you've extended is Manitoba Hydro's own forecast of  
22 what that will be without plugging in a constant  
23 variable of the pub -- the potential large industrial  
24 load?

25 MS. LOIS MORRISON: Yes. What we're

1 doing is we're now incorporating the full plans for  
2 all customers in that sector for the five (5) years.

3 MR. BOB PETERS: And so the potential  
4 large industrial load that I mentioned, it starts in  
5 year 6 of the forecast?

6 MS. LOIS MORRISON: That is correct.

7 MR. BOB PETERS: And in years past  
8 that used to be a hundred gigawatt hour a year  
9 placeholder?

10 MS. LOIS MORRISON: Prior to 2014 we  
11 used a trend methodology. And so the average -- and --  
12 and generally we would look at what the average growth  
13 over the twenty (20) years proceeding were. And then,  
14 on average, it was about a hundred gigawatt hours.

15 So we used that as the variable to  
16 represent potential large industrial load growth.

17 MR. BOB PETERS: And so if we're  
18 looking on page 41 with -- Ms. Morrison, the -- the  
19 purple line that decreases in or about 2017/'18, that  
20 decrease reflects the removal or reclassification of  
21 seven (7) of your customers?

22

23 (BRIEF PAUSE)

24

25 MS. LOIS MORRISON: The -- it might be

1 more appropriate to look at the difference between the  
2 red line and the green line in 2016.

3 MR. BOB PETERS: And that's where we  
4 see the -- the difference at the best?

5 MS. LOIS MORRISON: Yeah.

6 MR. BOB PETERS: And then the  
7 increase, starting out in 2021, between -- let's take  
8 the purple line on the red line -- the increase in  
9 both just reflects that there is a potential large  
10 industrial load edition, at least on the 2017  
11 forecast?

12 MS. LOIS MORRISON: That is correct.

13 MR. BOB PETERS: And in terms of the  
14 source of the information that Manitoba Hydro relies  
15 on for this information, that's based on across the  
16 table interviews with your ten (10) customers that  
17 have twenty-six (26) accounts?

18 MS. LOIS MORRISON: Are -- we have key  
19 account representatives who serve those customers, and  
20 they have interviews with and -- and inquire with  
21 their customers to see what their planned -- what  
22 their plans are in the next five (5) years. And this  
23 will include things such as are they having a short-  
24 term maintenance shutdown, are they having -- doing  
25 any planned expansions, what are their operational

1 changes going to be that may affect their energy  
2 requirements over the next five years.

3 MR. BOB PETERS: And we can see on  
4 page 42 of Board counsels' book of documents, that the  
5 chart at the bottom of the page will show the Board  
6 that the first five (5) years of the forecast on the  
7 right-hand side shows the individual accumulated  
8 consumptions of these top twenty-six (26) accounts?

9 MS. LOIS MORRISON: That is correct.

10 MR. BOB PETERS: And after the first  
11 five (5) years, their consumption is held constant,  
12 correct?

13 MS. LOIS MORRISON: That is correct.

14 MR. BOB PETERS: But what isn't held  
15 constant is that there is a potential large industrial  
16 load that starts to be layered on top of that?

17 MS. LOIS MORRISON: That is correct.

18 MR. BOB PETERS: And we can see that  
19 in the graph at the top of the page as well, that in  
20 the first -- call it in the short term, in terms of  
21 the forecast, the -- the red line with the diamonds,  
22 we see a decline that would be reflective of the seven  
23 (7) customers having been reclassified, to some  
24 extent, as well as the personal interviews from these  
25 customers?

1 MS. LOIS MORRISON: From the history  
2 to the -- yes.

3 MR. BOB PETERS: And then if this --  
4 if we look at the -- the red line going forward, in  
5 terms of what your forecasting, you're telling the  
6 Board that red line includes the potential large  
7 industrial load and that's why it's inclining or going  
8 up?

9 MS. LOIS MORRISON: That is correct.

10 MR. BOB PETERS: And without that  
11 you're holding that forecast flat?

12 MS. LOIS MORRISON: Yes.

13 MR. BOB PETERS: Is the holding of  
14 that forecast flat based on information from the  
15 customer, or is that an assumption made for the  
16 purposes of the forecast?

17 MS. LOIS MORRISON: That's an  
18 assumption made for the purposes of the forecast.

19 MR. BOB PETERS: And, Ms. Morrison,  
20 did Manitoba Hydro and their key account  
21 representatives tell these top consumers that Manitoba  
22 Hydro was embarking on a campaign to increase rates by  
23 7.9 percent for at least five (5) years when this  
24 forecast was being prepared?

25 MS. LOIS MORRISON: No, we did not

1 have that information at that time. And when we  
2 collected the information it was based upon the prior  
3 projection of 3.95 percent over twelve (12) years. So  
4 that was the information that was known in the  
5 marketplace.

6

7

(BRIEF PAUSE)

8

9 MR. BOB PETERS: Ms. Morrison, when  
10 did Manitoba Hydro collect the data from its top  
11 consumers to provide in the updated forecast?

12 MS. LOIS MORRISON: I just have to  
13 date -- check that date.

14 So we would have -- this is -- this  
15 would published in June of 2017, the 2017 forecast.  
16 Generally, we will approach our large customers in the  
17 early part of that year. We start the -- the actual  
18 physical running the models begins as soon as -- about  
19 mid-April.

20 And so we like to have as much  
21 information in advance as possible because we have a  
22 very tight time-frame to get the forecast out. So we  
23 would have been having these discussions with our top  
24 consumers in the February/March period of 2017.

25 MR. BOB PETERS: And help me on the

1 time-line if you can, Mr. McCallum. But by February  
2 or March of 2017, Manitoba Hydro's chairman of the  
3 board had already made public pronouncements on future  
4 price increases, had he not?

5 MR. JAMES MCCALLUM: Well, you know,  
6 subject to check of various news media reports and so  
7 on, I guess I would start with what I believe was  
8 September the 21st, only recalled because it's my  
9 stepmother's birthday, when the BCG report was  
10 released --

11 MR. BOB PETERS: And that's -- sorry  
12 to interrupt, but twenty (20) -- September 21 --

13 MR. JAMES MCCALLUM: Right. 2016.

14 MR. BOB PETERS: -- 2016. Yeah,  
15 thank you, sir.

16 MR. JAMES MCCALLUM: So following that  
17 there would've been, you know, a number of -- of  
18 points I think where there was media coverage and  
19 discussion with Mr. Riley.

20 MR. BOB PETERS: And at the time, the  
21 Manitoba Hydro Board of Directors' chair was talking  
22 of rate increases, perhaps even of double digit  
23 increases.

24 Am I -- have I got that right, Mr.  
25 McCallum?

1                   MR. JAMES MCCALLUM:   Well, I think,  
2 initially Mr. Riley was focusing on the urgency of  
3 coming to terms with Manitoba Hydro's debt situation,  
4 inclusive of a range of options including, you know,  
5 much more significant rate increases than had been  
6 called for the past.  And yes, I couldn't speak to the  
7 exact date without check, but there was -- was a point  
8 where he spoke to double-digit rate increases.

9                   MR. BOB PETERS:   Ms. Morrison, even if  
10 those top consumers didn't know of -- of the actual  
11 plan of Manitoba Hydro, would it be correct that  
12 Manitoba Hydro wouldn't be concerned because if those  
13 large top consumers didn't need Manitoba Hydro's  
14 energy, Manitoba Hydro would sell that on the export  
15 market?

16                   MR. JAMES MCCALLUM:   Per -- perhaps,  
17 you can just restate your question if you could, Mr.  
18 Peters.

19                   MR. BOB PETERS:   Certainly.  I'm  
20 wondering if the this Board can take comfort in that  
21 any error in the forecast of the top consumers would  
22 be mitigated by the fact that Manitoba Hydro would  
23 sell the energy on the export market  if Manitoba  
24 Hydro under-forecast -- sorry, if Manitoba Hydro over-  
25 forecast the consumption of the top consumers?

1 MR. JAMES MCCALLUM: Yeah. Yeah.  
2 Yes, with -- with respect to really any forecast error  
3 where actual load comes in at a lower level than is in  
4 our forecast, we do, you know, have the offset of  
5 being able to sell that energy in the short term on  
6 the opportunity market, which helps to, on a financial  
7 basis anyway, cushion, you know, some of the lost  
8 revenue. And so the -- the -- but I -- you know, I  
9 wouldn't -- the word 'comfort' I wouldn't use. That's  
10 obviously not our objective.

11 But -- and so the financial damage, if  
12 you will, done by -- by forecast error is really, you  
13 know, down to the -- the spread between what we  
14 achieve on the opportunity export market and what we  
15 would have achieved selling it to a domestic customer,  
16 and on the industrial side that's a pretty small  
17 spread of the present moment.

18 MR. BOB PETERS: Okay. On page 44 of  
19 the book of documents, Volume IV, we'll see that --  
20 just a chart prepared, not by Hydro, but of  
21 extrapolation of general service large rates under  
22 various rate increases proposed in Manitoba Hydro's  
23 Integrated Financial Forecast 16 with interim. You're  
24 telling the Board, Mr. McCallum, that where Manitoba  
25 Hydro would expect three point three four two (3.342)

1 cents a kilowatt hour from one of its top consumers,  
2 it wouldn't expect that much on the export market for  
3 that energy?

4

5 (BRIEF PAUSE)

6

7 MR. JAMES MCCALLUM: Sorry, you know,  
8 subject to -- subject to check, sir, I believe what we  
9 have here is the energy component of our rate, and so  
10 there's a demand component as well, that that would be  
11 correct, that --

12 MR. BOB PETERS: Yeah, you are  
13 correct.

14 MR. JAMES MCCALLUM: Yes.

15 MR. BOB PETERS: This is only the  
16 energy costs. So your -- your answer, your second  
17 last answer, was to the effect that Manitoba Hydro  
18 wouldn't necessarily be kept whole on the export  
19 market, and this seems to suggest that the energy plus  
20 the demand charge would make the export price lower  
21 than this?

22 MR. JAMES MCCALLUM: Mr. Cormie may --  
23 may wish to -- to also weigh in. But my -- certainly  
24 for the energy portion, you know, you'd have to look  
25 at the blending of on-peak and off-peak pricing and --

1 and the -- the rest of it.

2 But I think a fairer kind of  
3 directional estimate would be around, in Canadian  
4 dollar terms, about two point five/two point six  
5 (2.5/2.6) cents at the present moment. So, you know,  
6 vis-a-vis the energy component, we would be, you know,  
7 a little under.

8 MR. BOB PETERS: All right. Let's --  
9 let's leave that and turn, I believe, to page 52.  
10 Sorry, page 46, at Tab -- at Tab 52.

11 I don't spend much time on this, but  
12 this is a matter that you raised earlier in the  
13 evidence, Mr. McCallum. This is one (1) of the  
14 petroleum sector views of Manitoba Hydro's load  
15 forecast.

16 Have I got that right?

17 MS. LOIS MORRISON: Yes, this is the  
18 pet -- petrol, oil, and natural gas sector.

19 MR. BOB PETERS: And if we go down to  
20 the 2021/'22 year and just march cross on that -- on  
21 that line, we see that there was a forecast provided  
22 in 2013 of about 1,385, this would be gigawatt hours a  
23 year?

24 MS. LOIS MORRISON: In 2013?

25 MR. BOB PETERS: Yes.

1 MS. LOIS MORRISON: Yes.

2 MR. BOB PETERS: And -- and that  
3 would have been the forecast that would've been  
4 provided at the Board's Needs For And Alternatives To  
5 review?

6 MS. LOIS MORRISON: Yes.

7 MR. BOB PETERS: And then following  
8 that across, there appears in the 2013 forecast to be  
9 an increase.

10 And do you recall what that was in  
11 relation to, in general terms, without identifying any  
12 specific customers if you're able?

13 MS. LOIS MORRISON: There was --  
14 during -- between the prep -- the time of the  
15 preparation of the 2013 forecast and while we were  
16 entering into the in NFAT hearings, we -- or during  
17 the interrogatory stage, there was quite a bit of  
18 discussion about possible new pipeline expansions by  
19 more than one (1) of the providers in Canada. And  
20 both of those would have been -- sorry, they would  
21 have been undertaking large expansions that would have  
22 impacted Manitoba Hydro's -- their energy requirements  
23 in Manitoba.

24 We were asked to, as part of a -- a  
25 MIPUG interrogatory, to look at a scenario where we

1 advanced what was all of essentially the potential  
2 large industrial load projection, which was 1,709  
3 gigawatt hours to -- advanced it to occur in year 6 of  
4 the forecast, which would have been then, essentially,  
5 bringing 1,400 gigawatt hours forward to -- to  
6 beginning -- be online in that year.

7                   And so we then took a look at our  
8 forecasts as part of a scenario to say, Well, what  
9 would happen then if we had significant increase in  
10 our load requirements, as a result of these  
11 announcements?

12                   And based on the emerging information  
13 that we were getting from those customers at that  
14 time, in terms of what their energy requirements were,  
15 they were very much in line with what we were hearing  
16 and what we had seen in the my MIPUG interrogatory,  
17 which is what we incorporated into this forecast.

18                   MR. BOB PETERS:   And then moving  
19 across, we -- we see that for 2014 and even up to  
20 2017, the consumption has relatively levelled off?

21                   MS. LOIS MORRISON:   The projection did  
22 level off.  It was during the 2014 -- the preparation  
23 of the 2014 forecast that we sat down -- that our  
24 account representatives sat down with those customers  
25 and better defined what they were anticipating to see

1 in terms of actual energy requirements. And so what  
2 you see there is the outcome of those discussions in  
3 terms of both the volume of oil that was going to be  
4 moved, and therefore the ener -- the corresponding  
5 energy requirement, electricity requirement, and the  
6 timing of when those projects may come into service.

7           So what we saw, then, if you look at  
8 fifteen (15) and sixteen (16) is that there were some  
9 delays in a number of those projects. And if you go  
10 all the way to seventeen (17), you'll see that --  
11 looking at the '21/'22 year, there -- this is one (1)  
12 of the updates that I mentioned yesterday in my direct  
13 evidence, and I believe Mr. Shepherd referenced in his  
14 testimony that there has recently been in the annou --  
15 they recently announced a cancellation a very large  
16 project. And so some of this -- what the update for  
17 our 2018 forecast will reflect is a reduction in the  
18 '20/'21, year representing about 530 gigawatt hours.

19           MR. BOB PETERS: I believe Mr.  
20 McCallum may have also mentioned that Manitoba Hydro's  
21 load growth was going to -- from what had been  
22 forecast, was going to decline by -- let me see if I  
23 have this right, Mr. McCallum -- the next ten (10)  
24 years' load growth was going to decline by 20 percent  
25 as a result of recent events?

1 MR. JAMES MCCALLUM: Yes, thank you.  
2 I -- I -- what I was referencing is that if you looked  
3 overall to our gross growth in the load -- my children  
4 actually happen to be watching the live streaming, and  
5 mocked me for having bumbled that the other day.

6 Gross grow -- growth and load over the  
7 ten (10) year period, approximately 20 percent of that  
8 growth in -- in gigawatt hours you could tie to this  
9 project that's -- that Ms. Morrison speaks to that has  
10 now fallen to the wayside.

11 MR. BOB PETERS: In addition to that,  
12 Ms. Morrison, would you expect that the load forecast  
13 for these top consumers and -- or sorry, even in this  
14 sector would decline because of the proposed rate  
15 increases, if they are implemented?

16 MS. LOIS MORRISON: So for our top  
17 consumers, there's a number of factors that will come  
18 into play as to where -- whether they change their  
19 operations. The price of electricity is only one (1).  
20 There are other factors that many of them look at in  
21 terms of transportation costs, in -- other input  
22 costs, labour costs. All those factors come into play  
23 in terms of what their costs -- their unit costs of  
24 production is, and whether or not they need to make  
25 adjustments to their operations.

1                   In terms of the pipeline sector, we are  
2 not getting indications that they plan to reduce  
3 operations as a result of the electricity price  
4 increase. They would be more likely influenced by  
5 changes in their markets and the price of oil or any  
6 other -- price of oil, price of natural gas, price of  
7 -- as opposed to Manitoba Hydro's electricity prices  
8 alone.

9                   MR. BOB PETERS: I'd like to move  
10 ahead with a review of some additional comments from -  
11 - from Daymark, and particularly -- and I think I'm  
12 going to apologize. I don't think I've teed this up  
13 at all, but there's an exhibit in the record under  
14 Daymark Energy Advisors, or DEA number 2. And if we  
15 can ask that be brought up when it's available.

16                   That's quick. Page 72 of the PDF,  
17 please. And...

18

19                   (BRIEF PAUSE)

20

21                   MR. BOB PETERS: I think page 72 of  
22 the PDF was -- would work, if we put that through.  
23 Page 72 of 85 on the PDF document. Thank you.

24                   MS. LOIS MORRISON: No, 63.

25                   MR. BOB PETERS: And I'd like to just

1 -- quickly with you, Ms. Morrison, and again, I -- I -  
2 - I'll -- I'll acknowledge that I haven't forgotten  
3 Ms. Ramage's comment. And if we could enlarge that to  
4 -- to look at some of these points that we are going  
5 to talk about.

6                   The -- the second bullet talks about a  
7 stochastic risk assessment, where Manitoba Hydro would  
8 assign probabilities to different inputs. Do you see  
9 that concern, Ms. Morrison?

10                   MS. LOIS MORRISON:    Yes.

11                   MR. BOB PETERS:    And the suggestion  
12 that I distill from this Daymark report is to the  
13 effect that Manitoba Hydro should do some modelling  
14 for variables, and then include that -- and it -- an  
15 uncertainty analysis. Do you conclude the same at  
16 this point?

17                   MS. LOIS MORRISON:    We -- there is a  
18 follow-up response that Daymark provided in their  
19 interrogatory -- in -- in their interrogatories where  
20 they spoke to this in more detail. We haven't yet had  
21 a chance to fully explore what they were specifically  
22 recommending on.

23                   We had asked them if they were -- this  
24 -- in this one, I think I need to have more time with  
25 that IR in order to -- to fully respond to it.

1 MR. BOB PETERS: And -- and that's  
2 fair. I'll -- I'll maybe ask that we go to page 9 of  
3 the PDF and look to the last paragraph.

4

5 (BRIEF PAUSE)

6

7 MS. LOIS MORRISON: Which -- which  
8 page of the actual document is that?

9

10 (BRIEF PAUSE)

11

12 MS. LOIS MORRISON: Page 9. Okay.  
13 Okay.

14 MR. BOB PETERS: Ms. -- Ms. Morrison,  
15 I'm not sure I've given you the right reference, and I  
16 apologize for that. I -- I was getting -- I wasn't  
17 sure if it was page of the document or the PDF, and  
18 I've -- but let me -- let me approach it this way.

19 The Board should understand your load  
20 forecast to be what we call a P50 forecast. Would  
21 that be true?

22 MS. LOIS MORRISON: That's -- that is  
23 correct.

24 MR. BOB PETERS: And that's -- that's  
25 telling the Board that there is a equal likelihood

1 that it could be higher, or it could be lower?

2 MS. LOIS MORRISON: That is correct.

3 MR. BOB PETERS: And I've understood  
4 from the Daymark report that Manitoba Hydro could  
5 perhaps provide a forecast that would be, say, a P10  
6 forecast, as then 90 percent of the years would be  
7 better off than forecast?

8 MS. LOIS MORRISON: Actually, I  
9 believe one (1) of their IRs corrected that statement  
10 in this report. One (1) of their responses to the IRs  
11 corrected the statement and how they -- they --

12 MR. BOB PETERS: I think it's on page  
13 1 of the report, now that I --

14 MS. LOIS MORRISON: Yeah.

15 MR. BOB PETERS: -- go back, see if  
16 it's -- it's at the -- let's go to the last paragraph.

17

18 (BRIEF PAUSE)

19

20 MS. LOIS MORRISON: Okay. Okay. Mr.  
21 Peters...?

22 MR. BOB PETERS: Yes.

23 MS. LOIS MORRISON: In terms of this  
24 statement on page 1, Daymark did file an interrogatory  
25 responding to a question by Manitoba Hydro. I do know

1 they also responded to Coalition.

2 In their response to Manitoba Hydro,  
3 it's MH/Daymark load I-1. We had asked them to  
4 elaborate on it, and they said:

5 "As indicated in Coalition IEC  
6 Daymark load 5, the correct  
7 representation of the Manitoba Hydro  
8 forecast is that there is a chance  
9 of the forecast being 50 percent  
10 higher, 50 percent lower."

11 So they did correct their -- their  
12 representation in this response.

13 MR. BOB PETERS: Has Manitoba Hydro  
14 considered developing a forecast that has a -- a  
15 higher probability of an upside than -- than the  
16 current one.

17 MS. LOIS MORRISON: Well, it has a  
18 higher probability of an upside, meaning there's a  
19 higher probability of the load being higher than what  
20 we've forecasted, or higher probability that the load  
21 -- that the forecast would capture more possible  
22 occurrences?

23 MR. BOB PETERS: Well, I think Daymark  
24 was getting at the capturing of more possible  
25 occurrences, and that would result in a forecast that

1 would perhaps have financial upside in the event that  
2 Manitoba Hydro was in error.

3 MS. LOIS MORRISON: I don't think that  
4 was their interpretation. I think if -- this might be  
5 one (1) we take to the rebuttal.

6 MR. BOB PETERS: All right. Well,  
7 let's -- let's -- why don't we do that? Can you tell  
8 the Board -- back on page 72 of the PDF, in terms of  
9 the recommendation that -- the suggestion was that  
10 Manitoba Hydro should use more than two (2) years of  
11 history to determine the weather-dependent load. And  
12 that's the bullet that's at the bottom of the page on  
13 the monitor. Thank you. I'm sorry, the second from  
14 the bottom.

15 MS. LOIS MORRISON: Yes. This is one  
16 (1) of the items that we will be addressing in  
17 rebuttal. We did present and discuss this at the NFAT  
18 hearing, and we have done a significant amount of  
19 analysis that led to us using two (2) years of monthly  
20 data in order to determine the heating, cool --  
21 heating and cooling coefficients in our weather normal  
22 -- normalization model.

23 And it wasn't one (1) of the items that  
24 was explored during this analysis, but in our rebuttal  
25 to -- that was filed under the NFAT, we talked about

1 how the primary purpose of the weather adjustment that  
2 Manitoba Hydro is to maintain -- is to explain the  
3 monthly revenue variances between revenue forecast and  
4 actual, and that the majority of the variance being  
5 due to weather.

6           And the thing to remember is that this  
7 weather adjustment, these coefficients are used to  
8 adjust the first -- the one (1) year of weath -- of --  
9 of energy use. It's used to adjust the starting point  
10 in our forecast. So we believe that it's more  
11 appropriate to use the more recent data to better  
12 reflect how customers respond to weather changes then  
13 to use a longer period of time.

14           Yes, over a longer period of time, you  
15 get more consistency, and -- and a fit, but what we  
16 were seeing was that it wasn't truly reflecting the  
17 more recent changes in how people use energy as a  
18 result of, say, increase -- well, this is on the  
19 natural gas side, but increases to the efficiency of  
20 your -- your heating equipment.

21           There was a very substantive influence  
22 on the weather adjustment when you went to the more  
23 recent years of two (2) years as opposed to using ten  
24 (10) years, because you're -- you weren't reflecting  
25 in your analysis the change in how people were using

1 energy. You see that also in terms of the uptake of  
2 air conditioning. You see that in terms of even the  
3 changes in the -- the saturation of HRVs in -- in  
4 housing.

5                   So we felt, based on our analysis, and  
6 the -- and the advantages of our methodology, that it  
7 was more reflective of how people use energy, and how  
8 the weather affects the use of that energy. There  
9 were a number of other advantages to that methodology,  
10 and going to this methodology of using the two (2)  
11 years of monthly data.

12                   And we did look at using more years.  
13 We looked at a few more year -- we -- we looked at  
14 more than two (2), and we looked at less than two (2),  
15 and two (2) is where we felt we were getting the best  
16 representation of the energy use in that year.

17                   MR. BOB PETERS: Well, Ms. Morrison,  
18 you also told the panel, and I think it was an answer  
19 to Dr. Grant's question of you yesterday, that there  
20 was an anomaly year in 2016/'17, correct?

21                   MS. LOIS MORRISON: That is correct.

22                   MR. BOB PETERS: And so what is --  
23 what happens to the model for determining weather-  
24 dependent load if one (1) of those years that you're  
25 using is one (1) of these anomaly years?

1 MS. LOIS MORRISON: Well, it's not --  
2 it doesn't change our weather adjustment. What it's  
3 changing is it shows that there is an anomaly in the  
4 average use that year. And so what we were basically  
5 observing is, as -- as I'd mentioned yesterday, there  
6 is natural variation that's going to occur in how  
7 people use energy. And in that year -- I think it was  
8 the '14/'15 year -- what we observed was a higher use  
9 by individual customers than what we would have  
10 expected to have seen.

11 And the weather was very much the --  
12 almost a normal weather year. And so there would be  
13 very little weather adjustment that would be  
14 accounting for that increased usage. The interesting  
15 thing that we saw was that it happened on the natural  
16 gas side, too. We saw an increased usage per customer  
17 on the gas side. And -- even with the weather  
18 adjustment. And then we talked to our -- to our  
19 neighbours in other jurisdictions, and they also  
20 observed this blip in the energy use.

21 So what we were concluding is this  
22 wasn't a weather effect. This was just natural  
23 variation that will occur and -- over time. So,  
24 basically, as with any economic model, you wait for  
25 another year of data and you use that additional year

1 data to inform it.

2 MR. BOB PETERS: Thank you, Ms.  
3 Morrissey -- Morrison. In -- in terms of calculating  
4 weather -- weather normal years, Manitoba Hydro  
5 currently uses a twenty-five (25) year average  
6 methodology, correct?

7 MS. LOIS MORRISON: That is correct.

8 MR. BOB PETERS: And that came as a  
9 result of some analysis on the -- I guess on the gas  
10 side, when it were -- or before a gas GRA?

11 MS. LOIS MORRISON: Yes. There was  
12 quite a bit of analysis. We looked at a -- a total of  
13 six (6) different models or approaches for determining  
14 the -- the average -- the -- the nor -- the average  
15 normal.

16 MR. BOB PETERS: Determining what is  
17 weather normal?

18 MS. LOIS MORRISON: Yes.

19 MR. BOB PETERS: And would it be  
20 correct to say that by using fewer years, Hydro may --  
21 may gain some currency in terms of weather cycles, but  
22 it will give up the -- perhaps the smoothing of the  
23 adjustments that are needed from year to year?

24 MS. LOIS MORRISON: What we were --  
25 observing -- because we did have a ten (10) year model

1 prior to the -- moving to the twenty-five (25) year  
2 model and what we found was that the ten (10) year  
3 model was creating quite a bit of variability, and so  
4 that our revenue requirement year to year, depending  
5 on adding one (1) more year of data, we could see our  
6 revenue requirement increase or decrease simply  
7 because of the change in the -- in the weather normal  
8 methodology, not because of an increasing number of  
9 customers, not because of an increase in, say, new  
10 equipment, or new technologies coming in that people  
11 would use, natural gas, or elec -- it was -- it was  
12 coming specifically only because we changed the  
13 methodology.

14                   And that swing could be quite large.  
15 And so because we have some of the most volatile and  
16 varying weather in -- in -- compared to other  
17 jurisdictions, this wasn't acceptable to -- to us or  
18 to what we felt to be our ratepayers, because you  
19 could see our revenue requirement changing quite  
20 drastically one year to the next based on -- on simply  
21 changing -- adding another year of data to the weather  
22 normalization model.

23                   So what we -- when we undertook our  
24 analysis and looked at the different approaches, we --  
25 we looked at it to reduce the year to year variability

1 at -- while still minimizing the impact on the  
2 forecast accuracy. So when we looked at the twenty-  
3 five (25) year data, it provided the best balance of  
4 providing that minimization of the variability. But  
5 still providing accuracy to our forecast.

6 So -- and we'll be bringing that back  
7 forward again in our -- in our rebuttal.

8 MR. BOB PETERS: All right. We'll --  
9 we'll see it there.

10 Let's turn, if we can, to some demand-  
11 side management discussion for the balance of the time  
12 available this afternoon. And Mr. McCallum, we heard,  
13 I believe, from you and your president on that panel  
14 that Efficiency Manitoba will be taking over the  
15 demand-side management programs in Manitoba?

16 MS. LOIS MORRISON: He asked you.

17 MR. JAMES MCCALLUM: He did ask me.

18 Just don't ask me when. Yes, the provincial  
19 government has passed legislation enabling the  
20 creation of Efficiency Manitoba.

21 MR. BOB PETERS: Will the Board see  
22 any transition plans in Manitoba Hydro's filing for  
23 what will happen in those years?

24 MS. LOIS MORRISON: No.

25 MR. BOB PETERS: And does Manitoba

1 Hydro have a forecasted budget of how much it expects  
2 it may have to fund to Energy Efficiency Manitoba?

3 MS. LOIS MORRISON: We do not at this  
4 point in time.

5 MR. BOB PETERS: Does anything in this  
6 current General Rate Application include expenses on  
7 account of Efficiency Manitoba?

8 MS. LOIS MORRISON: No.

9 MR. BOB PETERS: So what I understand  
10 we have, Ms. Morrison, if we turn to page 65 of the  
11 Board counsels' fourth book of documents, and I'm  
12 mindful of the scope that the -- the Board has set for  
13 our discussions of demand-side management. It's  
14 Manitoba Hydro putting forward its 2016/'17 DSM plan.  
15 And this is a fifteen (15) year plan prepared last  
16 year?

17 MS. LOIS MORRISON: Yes.

18 MR. BOB PETERS: And on page 66, all  
19 we see is Manitoba Hydro's 2016 load forecast is  
20 slightly lower in terms of savings than it was  
21 forecasting in 2015. Would you agree with that?

22 MS. LOIS MORRISON: This chart  
23 presents our forecast energy savings for the --  
24 comparing both the 2016 plan to the 2015 plan. So  
25 yes, there was very little variation between the two

1 (2) plans that was -- that are presented.

2 MR. BOB PETERS: I apologize if I  
3 misspoke. In terms of the demand-side management and  
4 the energy savings, there's a chart at the bottom of  
5 this page, and what this tells the Board is where  
6 Manitoba Hydro considers the difference between the  
7 2015 plan and the 2016 plan?

8 MS. LOIS MORRISON: Yes. What it's  
9 comparing there is where the savings are anticipated,  
10 or the energy -- the electricity reductions are  
11 anticipated to be coming from in terms of whether it's  
12 the energy efficiency programs, targeting the  
13 residential and commercials -- or industrial sector,  
14 whether it's coming from our -- our Low Displacement  
15 and Alternate Energy Program, conservation rates, fuel  
16 choice, other emerging technologies, or other future  
17 opportunities is how we've characterized that one.  
18 And then from codes and standards.

19 MR. BOB PETERS: Just before we leave  
20 that -- that chart, can the Board understand that  
21 Manitoba Hydro is not proceeding with conservation  
22 rates now? I'm -- I'm looking --

23 MS. LOIS MORRISON: We don't have it  
24 in this rate application.

25 MR. BOB PETERS: And so you're --

1 you're telling the Board it's not -- it's not -- it's  
2 not off the stove, but it's not on the front burner?

3 MS. LOIS MORRISON: This might be  
4 better answered when we have our bill affordability  
5 rate design panel and Mr. Barnlund can come and help  
6 me.

7 MR. BOB PETERS: Okay. No, I'm -- I'm  
8 fine and we'll --

9 MS. LOIS MORRISON: But --

10 MR. BOB PETERS: -- we'll -- we'll --

11 MS. LOIS MORRISON: -- but --

12 MR. BOB PETERS: -- we'll deal with  
13 it.

14 MS. LOIS MORRISON: -- under this  
15 plan, a 2016 plan, which was prior to the introduction  
16 of the Efficiency Manitoba legislation, that we were  
17 entertaining pursuing conservation rates.

18 MR. BOB PETERS: On page 67 of Board  
19 counsels' fourth book of documents, we have a busy  
20 chart at the top of the page that we would like to  
21 make sure the panel understands. And as a starting  
22 point, the legislation that you told us about for  
23 Efficiency Manitoba has -- has built into it a number  
24 that is a 1.5 percent savings of annual load.

25 Do you -- are you aware of that?

1 MS. LOIS MORRISON: Yes.

2 MR. BOB PETERS: All right. And so if  
3 we look at this chart on page 67, what you're telling  
4 the Board is that Manitoba Hydro has an average  
5 savings of load of approximately 1.2 percent a year?

6 MS. LOIS MORRISON: Under the plan  
7 that is presented here, which is a fifteen (15) year  
8 plan, we were projecting based on our plans --  
9 activities, planned programs, planned savings, to  
10 achieve an overall average annual savings of 1.2  
11 percent of our domestic load.

12 MR. BOB PETERS: And to accomplish  
13 that, Manitoba Hydro was planning to spend \$1.2  
14 billion?

15 MS. LOIS MORRISON: That is correct.

16 MR. BOB PETERS: In the next four (4)  
17 years, as we look at this -- this chart, Manitoba  
18 Hydro exceeds the 1.5 percent savings in load, does it  
19 not?

20 MS. LOIS MORRISON: That is correct.

21 MR. BOB PETERS: And that's made up of  
22 some various components, one of which is codes and  
23 standards?

24 MS. LOIS MORRISON: Correct.

25 MR. BOB PETERS: And so to maybe use

1 some words from Dr. Grant, Manitoba Hydro is going to  
2 claim the benefit of the codes and standards savings?

3 MS. LOIS MORRISON: What we do is we  
4 report on them. We're very engaged at the provincial  
5 level and the national level in influencing both  
6 building codes at the provincial level -- and at the  
7 national level, actually -- and the national level at  
8 influencing minimum ener -- energy performance  
9 standards for products and technologies.

10 At the provincial level, we're very  
11 engaged in the -- the energy code that has been  
12 brought in for both residential and commercial  
13 buildings, and we work at the national level to  
14 influence the national energy code for buildings.

15 MR. BOB PETERS: And -- and Ms.  
16 Morrison, I wasn't in any way trying to diminish the -  
17 - the involvement of Manitoba Hydro in those codes and  
18 standards, but simply that makes up a significant  
19 portion of the -- of the DSM savings that's planned in  
20 the next four (4) years?

21 MS. LOIS MORRISON: That is correct.

22 MR. BOB PETERS: And just as an  
23 example of codes and standards, it could be something  
24 that a certain appliance is no longer available in a  
25 standard efficiency, and it has to be available only

1 in a high efficiency. That would be some type of an  
2 example of -- of that code and standard?

3 MS. LOIS MORRISON: Yes. The code  
4 would be something like that. So what we see is  
5 there's minimum energy performance standards for  
6 appliances. There's minimum -- the building code  
7 requires certain levels of insulation, certain  
8 equipment to be installed in it to be meeting the  
9 minimum for that building code. So what this is  
10 reflecting is the effect of bringing those energy  
11 codes into play.

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: Ms. Morrison, also in  
16 this chart on the top of page 67, conservation rates,  
17 again, appears in the brown shaded bar chart -- I'm  
18 sorry, fuel choice is the -- is the brown shaded  
19 portion, correct?

20 MS. LOIS MORRISON: That is correct.

21 MR. BOB PETERS: And fuel choice is a  
22 program, part of that education that we spoke of  
23 earlier, where Manitobans would be educated about  
24 their fuel choice options?

25 MS. LOIS MORRISON: No. This was an

1 incentive, the prep -- this was a proposal of an  
2 incentive-based program whereby we would provide  
3 incentives to assist customers converting from  
4 electric heat to natural gas heat. This was not  
5 launched in 2017/'18, as was shown here. It is not  
6 included in our 2017/'18 year -- one (1) year plan  
7 that was developed in consultation with the provincial  
8 government.

9 MR. BOB PETERS: Ms. Morrison, you've  
10 told the Board that Manitoba Hydro was -- was planning  
11 and forecasting to spend 1.2 billion over the next  
12 fifteen (15) years on the demand-side management,  
13 correct?

14 MR. BOB PETERS: Under the 2016 DSM  
15 plan, we had projected \$1.18 billion to be spent over  
16 fifteen (15) years. But as I should bring to the  
17 attention of the Board, under the Energy Savings Act,  
18 which is the predecessor to the Efficiency Manitoba  
19 Act, we are required to develop a one (1) year demand-  
20 side management plan in consultation with the  
21 Province, with the Minister responsible. And as such,  
22 there will be adjustments to our planning as we go  
23 through those consultations. And as I mentioned, we  
24 did not launch the fuel choice program in 2017/'18.

25 MR. BOB PETERS: Can you -- can you

1 tell the Board what 1.5 percent savings of annual load  
2 would cost over a fifteen (15) year period?

3 MS. LOIS MORRISON: I know you have  
4 the BCG report, which presents data around that.

5 MR. BOB PETERS: Well, at least  
6 somebody's been reading this book of documents.

7 Ms. Morrison, let's cut to that. I'm  
8 going to say Manitoba Hydro hasn't done the math and  
9 doesn't have its own number, but if we look at the  
10 Boston Consulting Group report on -- on the slide on  
11 page 69 of the Board counsels' fourth book of  
12 documents, we can see in the bottom right-hand corner,  
13 there is a \$2.266 billion number. I'll call that \$2.3  
14 billion is Boston Consulting Group's forecast of what  
15 Manitoba Hydro would have to spend to achieve that 1.5  
16 percent savings of annual load that I mentioned.

17 Do you agree with that?

18 MS. LOIS MORRISON: That is correct.

19 MR. BOB PETERS: Did you -- did  
20 Manitoba Hydro provide Boston Consulting Group with  
21 that -- that cost?

22 MS. LOIS MORRISON: We did.

23 MR. BOB PETERS: So then it is your  
24 number?

25 MS. LOIS MORRISON: It is a very high

1 level number that was provided at their request based  
2 on some very rudimentary assumptions.

3 MR. BOB PETERS: I'll accept all of  
4 that, and the point that I will ask you to accept is  
5 that to go from the 1.2 percent savings that Manitoba  
6 Hydro has shown the Board that they're on target to  
7 chie -- to achieve to get to 1.5 percent average  
8 savings of annual load will cost an extra billion  
9 dollars?

10 MS. LOIS MORRISON: Under this  
11 scenario, and under the assumptions that were included  
12 in this report, yes. But I would say that there were  
13 some very broad assumptions included in this, and I  
14 would not, at this point in time, feel it's -- I do  
15 not feel that it's appropriate for Manitoba Hydro to  
16 be committing that that will be the cost going  
17 forward.

18 MR. BOB PETERS: I'm -- I've -- I  
19 won't be here in fifteen (15) years to read the  
20 transcript back to you, I don't think, Ms. Morrison.  
21 But I do want to end today on page 73 of Board  
22 counsels' book of documents. Page 73.

23 Am I correct that in looking at this  
24 graph, you're telling the Board that as a result of  
25 Manitoba Hydro's DSM spending, its retained earnings

1 will be lower?

2

3

(BRIEF PAUSE)

4

5 MS. LOIS MORRISON: That's right.

6

7 MR. BOB PETERS: And so does it follow  
8 from that that DSM is putting upward pressure on  
9 consumer rates?

9

10 MS. LOIS MORRISON: That would be  
11 true.

11

12 MR. BOB PETERS: And if we look at  
13 this chart on page 73, would it also be true, Ms.  
14 Carriere, that if Manitoba Hydro spent no money on  
15 DSM, and had no expected savings, their retained  
16 earnings would be -- it's hard to look at that, but it  
17 could be \$4 billion greater on that scale?

17

18 MS. LIZ CARRIERE: Why -- what period  
19 of time?

19

20 MR. BOB PETERS: I am looking right at  
21 the end of the ski slope, up at the top, 2036?

21

22 MS. LIZ CARRIERE: Yes. If you go to  
23 page 2 -- or 72, sorry, of the previous page, there's  
24 a table that says it's \$4.2 billion incremental  
25 difference.

25

MR. BOB PETERS: And -- and you're

1 more numbers-oriented in the graph, so we'll -- we'll  
2 go to the graph. What you're saying is that by 2027,  
3 and we'll follow that across, if Manitoba Hydro spent  
4 no money on DSM, and there was no expected savings,  
5 its retained earnings would be \$1.157 billion greater  
6 than what's forecast?

7 MS. LIZ CARRIERE: That's correct.

8 MR. BOB PETERS: Maybe we'll put on  
9 the monitor page 72, again, just so that the panel can  
10 see that across from 2027, at the end of the ten (10)  
11 year current Manitoba Hydro plan, retained earnings  
12 would be greater if it spent no money on DSM?

13 MS. LIZ CARRIERE: That's right.

14 MR. BOB PETERS: And -- and to some  
15 extent, that's intuitive, is it, Ms. Carriere, because  
16 then Manitoba Hydro's not paying out the money, but  
17 the counterintuitive part is that with this -- with  
18 the energy that Manitoba Hydro saves, it's not able to  
19 capture that in -- in a meaningful revenue way?

20 MS. LIZ CARRIERE: Yes. As Mr.  
21 McCallum told us earlier, when you have a differential  
22 in the price, or the -- you're getting a higher price  
23 customer -- domestic customer rates are higher on  
24 average than export revenue. So you're not -- you're  
25 not replacing that. It's not a one-to-one

1 relationship in terms of revenue.

2 MR. JAMES MCCALLUM: I -- I think I'll  
3 -- that's -- that's true. And maybe I'll just point  
4 out for the Board's benefit, and I think Mr. Cormie  
5 can help us here too as need be, that the analysis is  
6 not quite this simple. Unfortunately, a lot of things  
7 that Manitoba Hydro seemed -- you seem to find that.

8 But -- but you'd have to -- in -- in  
9 thinking through whether to reduce your DSM spending,  
10 you know, in doing so, we are potentially bringing  
11 forward our need for new resource investments, which  
12 would go into the -- the calculations of what the  
13 right thing to do is.

14 The other thing that would not be in  
15 this analysis is that Mr. Cormie, who's responsible  
16 for -- for seeking out additional export contracts,  
17 you know, if we didn't have DSM spending, we would be  
18 -- we would have less in the way of, you know, energy  
19 available or known -- expected to be available to  
20 support additional long-term contracts, which is a,  
21 you know, a key priority for the Company.

22 So there's a lot of moving parts beyond  
23 -- beyond just this analysis that I wanted to make  
24 sure the -- the Board was aware of.

25 MR. BOB PETERS: Mr. Chairman, with

1 that answer, I'll conclude my questioning today and  
2 I'll refine my notes to finish up Monday morning as  
3 scheduled.

4 THE CHAIRPERSON: Thank you. Before  
5 we go, I just want to sort of raise the question. I'm  
6 a little concerned in the cross-examination of  
7 Daymark. When the process for Hydro to review the  
8 Daymark hasn't been -- wasn't concluded, there -- you  
9 know, I understand that some of the answers may change  
10 based on Hydro's review.

11 It's been put forward that if there's -  
12 - if -- if there's some issues it will be raised in  
13 rebuttal evidence. I'm just wondering for Ms. Ramage  
14 and Mr. Peters if that's actually the proper way to  
15 handle it, because I would have thought normally we  
16 would have been in a process where -- where Hydro  
17 would have had an opportunity to review Daymark; that  
18 process would have been completed. There would've  
19 been cross-examination, and then you normally would  
20 have done rebuttal.

21 I'm -- I'm just a little concerned  
22 about -- this is a little wonky process here. And I -  
23 - I, you know, if Ms. Ramage and Mr. Peters can get  
24 together and figure out sort of the best way to handle  
25 this. If it is strictly rebuttal, the way normally

1 rebuttal evidence would go, that's one thing, but I'm  
2 -- I'm just not -- I'm a little uneasy about it.

3 MS. PATTI RAMAGE: We're in a bit of  
4 uncharted territory.

5 THE CHAIRPERSON: Yeah.

6 MS. PATTI RAMAGE: It's our written  
7 rebuttal that is coming. In the normal process, we  
8 get to review a report and provide written rebuttal,  
9 just to clarify. And then what you were talking  
10 about, post-cross-examination is our oral rebuttal --

11 THE CHAIRPERSON: Correct.

12 MS. PATTI RAMAGE: -- so just to make  
13 sure --

14 THE CHAIRPERSON: Yeah, I -- it --  
15 that's why I'm a little --

16 MS. PATTI RAMAGE: There's two (2)  
17 things missing --

18 THE CHAIRPERSON: -- yeah. That's why  
19 I'm a little concerned, because I -- I see a gap  
20 coming up at some later point, and maybe counsel can  
21 talk about it.

22 MS. PATTI RAMAGE: And -- I -- I think  
23 this is going to be --

24 THE CHAIRPERSON: We've got time -- we  
25 have time to deal with it, but I just want to put it

1 on the record now.

2 MS. PATTI RAMAGE: This is going to be  
3 perhaps an even bigger issue for MGF, because we will  
4 be --

5 THE CHAIRPERSON: Yeah.

6 MS. PATTI RAMAGE: -- off the stand at  
7 that point.

8 THE CHAIRPERSON: I'm sorry, I in...?

9 MS. PATTI RAMAGE: With MGF it's -- it  
10 -- it could be an even bigger issue --

11 THE CHAIRPERSON: Yeah.

12 MS. PATTI RAMAGE: -- as -- as this  
13 panel will be off the stand.

14 THE CHAIRPERSON: Yeah, that's --  
15 that's the concern I have. I mean, I -- I want to  
16 make sure we address it properly. I don't want to  
17 have gaps in evidence later on where we're scrambling.  
18 So counsel may want to, you know, discuss it before  
19 next week.

20 Anyways, Ms. Will -- Mr. Williams --  
21 Dr. Williams...?

22 DR. BYRON WILLIAMS: I'll just  
23 indicate that -- and certainly, for our friends from  
24 MIPUG as well, we -- we face the same dilemma in term  
25 -- because these are issues that we'll be --

1 THE CHAIRPERSON: Yeah.

2 DR. BYRON WILLIAMS: -- asking  
3 questions on as well. So --

4 THE CHAIRPERSON: Okay.

5 DR. BYRON WILLIAMS: -- to the extent  
6 there's dialogues, we'd like to be -- be part of them.

7 THE CHAIRPERSON: Sure.

8 MR. BOB PETERS: And we'll certainly  
9 have the dialogue, Mr. Chair. I think the concern  
10 over MGF, we maybe overstated, because there's going  
11 to be a major capital panel for Manitoba Hydro  
12 witnesses after Manitoba Hydro files the written  
13 rebuttal to MGF. So I don't think that will reoccur.

14 What we do have here is a situation  
15 that the written rebuttal that Manitoba Hydro normally  
16 provides is -- is out of context a week because of the  
17 scheduling. So we'll discuss it, and we'll make sure  
18 we bring forward --

19 THE CHAIRPERSON: Yeah. I mean, that  
20 was the concern I had, which is the panel's gone. I  
21 don't know if we bring the panel back to conclude or  
22 what. But, you know, I -- I want Manitoba Hydro to  
23 have an oppor -- fair opportunity to review the report  
24 and deal with it.

25 You know, the problem arose simply

1 because of scheduling problems. But what I'd like to  
2 do is just have it addressed earlier on verses later  
3 so that it doesn't become a big problem -- or -- or a  
4 bigger problem later on. That's -- that's the only  
5 reason I raised it.

6                   So with that, thank you very much.  
7 Enjoy tomorrow, and we'll see you at 9:00 a.m. on  
8 Monday. Thank you.

9

10                                   (PANEL RETIRES)

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12 --- Upon adjourning at 4:34 p.m.

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17 Certified Correct,

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21 Cheryl Lavigne, Ms.

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