MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO

GENERAL RATE APPLICATION

2012/13 AND 2013/14

Before Board Panel:

Regis Gosselin - Board Chairman

Raymond Lafond - Board Member

Larry Soldier - Board Member

HELD AT:

Public Utilities Board

400, 330 Portage Avenue

Winnipeg, Manitoba

January 7, 2013

Pages 2087 to 2384

APPEARANCES

Bob Peters	)Board Counsel
Patti Ramage	)Manitoba Hydro
Odette Fernandes	)
Byron Williams	)CAC (Manitoba)
William Gange	)GAC
Peter Miller	)
Antoine Hacault	)MIPUG
Michael Anderson (np)	)MKO
Denise Pambrun (np)	)City of Winnipeg

TABLE OF CONTENTS

LIST OF EXHIBITS

LIST OF EXHIBITS (Con't)

LIST OF UNDERTAKINGS

LIST OF UNDERTAKINGS (Con't)

LIST OF UNDERTAKINGS (Con't)

--- Upon commencing at 9:04 a.m.

THE CHAIRPERSON: Good morning, everyone. I believe that we're ready to start. Well, on behalf of the other panel members, I offer you greetings for the two -- for the year 2013. All the best to you and your family for the coming year.

And I believe the January grind is now starting. So I turn it over to you, Ms. Ramage.

MS. PATTI RAMAGE: Yes, thank you and -- and happy New Year, Mr. Chairman, Mr. Soldier, and Mr. Lafond. Before we begin, I just wanted to offer our condolences to Mr. Lafond on behalf of the Manitoba Hydro panel. It was -- hopefully the new year will -- well, we can all start fresh, but I know it was a tough holiday season for your family.

We have filed this morning -- it also appears it was a tough holiday season for a few Hydro employees, and they appeared to have worked fairly hard on an entirely different level. But we've got a number of filings this morning. I thought I'd just very briefly walk through them.

I'm not intending, as I normally would, to walk through each -- each one of the exhibits. But we've handed out this morning a list called, "Exhibits filed January 7th." I'm not intending to make that an exhibit itself. It's just instructional.

But just to make sure everybody knows what they've received in the package this morning, the first box on that list, it says, "MIPUG Pre-ask 12," at the top line. You have a binder called, "Intervenor pre-asks." In your Intervenor pre-ask binder, MIPUG Pre-ask 12 should follow the MIPUG Pre-ask 1 to 6; 7 through 11 have not been filed yet, but we're putting 12 in. So that's where that first tab should go.

The next group of tabs are numbered 2 through 6, I believe it is -- 2 through 8. And they should go -- if you have that Intervenor binder -- to the very back of the binder, the last tab you would currently have is CAC/Manitoba Hydro Pre-ask 1.   The remainder of those tabs, 2 through 8, would get filed in that binder at that point.

That takes care of the first box on that list. The next groupings are revised IFF12 IRs. Manitoba Hydro was -- requested to update various IRs for the IFF12 information. So these are done in groups. But -- and -- this is -- I don't prepose to walk through each one. But the first group are MIPUG Round 1 IRs, and we're preposing they be marked Exhibit 38.

--- EXHIBIT NO. MH-38: MIPUG Round 1 IRs

MS. PATTI RAMAGE: The next group are PUB -- all PUB Round 1 IRs and it will be marked as a group, Exhibit 39.

--- EXHIBIT NO. MH-39: PUB Round 1 IRs

MS. PATTI RAMAGE: The next grouping is PUB Round 2 IRs. And there's nine (9), I believe, Second Round IRs of the PUB. They will be marked Exhibit 40, and that's twenty-four (24) pages.

--- EXHIBIT NO. MH-40: PUB Round 2 IRs

MS. PATTI RAMAGE: Following that is a series of undertakings, and it's Undertaking 9, marked as Exhibit 41.

--- EXHIBIT NO. MH-41: Response to Undertaking 9

MS. PATTI RAMAGE: Eleven (11) as 42.

--- EXHIBIT NO. MH-42: Response to Undertaking 11

MS. PATTI RAMAGE: Undertaking 12 as Exhibit 43.

--- EXHIBIT NO. MH-43: Response to Undertaking 12

MS. PATTI RAMAGE: Undertaking 15 is Exhibit 44.

--- EXHIBIT NO. MH-44: Response to Undertaking 15

MS. PATTI RAMAGE: And then on the backside of that instructional page, we go through Undertaking 18 is Exhibit 45.

--- EXHIBIT NO. MH-45: Response to Undertaking 18

MS. PATTI RAMAGE: Nineteen (19) is Exhibit 46.

--- EXHIBIT NO. MH-46: Response to Undertaking 19

MS. PATTI RAMAGE: Undertaking 20 is Exhibit 47.

--- EXHIBIT NO. MH-47: Response to Undertaking 20

MS. PATTI RAMAGE: Undertaking 30 is Exhibit 48.

--- EXHIBIT NO. MH-48: Response to Undertaking 30

MS. PATTI RAMAGE: Undertaking 31 is Exhibit 49.

--- EXHIBIT NO. MH-49: Response to Undertaking 31

MS. PATTI RAMAGE: Undertaking number 33 is Exhibit 50.

--- EXHIBIT NO. MH-50: Response to Undertaking 33

MS. PATTI RAMAGE: Undertaking 35 is marked as Exhibit 51.

--- EXHIBIT NO. MH-51: Response to Undertaking 35

MS. PATTI RAMAGE: Undertaking 39 is marked as Exhibit 52.

--- EXHIBIT NO. MH-52: Response to Undertaking 39

MS. PATTI RAMAGE: Undertaking 40 is marked as Exhibit 53.

--- EXHIBIT NO. MH-53: Response to Undertaking 40

MS. PATTI RAMAGE: And I should mention that Manitoba Hydro has marked all these on your copies, so that's why I'm going as fast as I am. There was a undertaking given at transcript page 1,583. It was not marked as a undertaking but that -- so it's an un-numbered undertaking. It is included as Exhibit number 54.

--- EXHIBIT NO. MH-54: Response to undertaking at transcript page 1,583

MS. PATTI RAMAGE: And then we have an update to -- two (2) additional updates. That's PUB Manitoba Hydro First Round 42 updated is now Exhibit 55.

--- EXHIBIT NO. MH-55: PUB/MH I-42

MS. PATTI RAMAGE: And MIPUG/Manitoba Hydro First Round 35A is Exhibit 56.

--- EXHIBIT NO. MH-56: MIPUG/MH I-35A

MS. PATTI RAMAGE: And that's the package of materials that we've filed this morning. And Mr. Warden -- was -- wished to speak to one of the undertakings, so if we could do that just before we get underway.

MANITOBA HYDRO PANEL 2 - REVENUE REQUIREMENT, RESUMED:

VINCE WARDEN, Resumed

DARREN RAINKIE, Resumed

DAVID CORMIE, Resumed

TERRY MILES, Resumed

MR. VINCE WARDEN: Yes, good morning Mr. Chair, members of the Board, ladies and gentlemen. The undertaking that I wan -- wish to speak to was actually Undertaking number 1. And that is we were requested to provide the estimated in-service cost per kilowatt hour for Pointe du Bois.

And I did want to speak to it, because whenever we do provide the unit costs of generating stations, it always has to be qualified, in terms of the year in which we are expressing those costs. And with in the case Pointe du Bois, the in-service --

schedule in-service date for the powerhouse and transmission isn't until 2030. So we want to be careful when we express the unit cost so that it's expressed in some common dollars.

So what we've done is we've calculated the unit cost for Pointe du Bois and then -- then brought it back to 2012 dollars. And on that basis, it's seven point eight (7.8) cents per kilowatt hour. And maybe just for comparison purposes, because we've done that for all the generating stations -- or at least for the Wuskwatim, Keeyask, Conawapa generating stations -- putting it in common 2012 dollars for comparison purposes, maybe I'll put those on the record at this time as well.

So, as I mentioned, seven point eight (7.8) cents per kilowatt hour for Point du Bois. Conawapa would be seven point zero (7.0) cents; Keeyask, seven point five (7.5) cents; and Wuskwatim, seven point three (7.3) cents. Now, I think we had some slightly different numbers on the record previously, but this for the -- for this purpose, all of those unit costs are in 2012 cents per kilowatt hour. Thank you.

MR. RAYMOND LAFOND: Thank you. First of all, thank you for your wishes, Mrs. Ramage. And thank you all for having accepted to essentially end the hearings just before Christmas. I have to tell you that when I got the call at ten (10) after 8:00, I was all ready to come. And, of course, I wanted to call my five (5) children and spe -- see my mom's body for the last time and spend some time with my sisters and brothers. So I thank you very much for having accepted to do that.

Now, back to business. Mr. Warden, in terms of the costs you've just indicated, these would include, of course, amortization or depreciation, would include financing costs, would include the operation. Does it include any overheads from Manitoba Hydro?

MR. VINCE WARDEN: Yes, thank you, Mr. Lafond, for that question. And I should have clarified that. That is the capital cost only, which include the cost of -- of building the -- the powerhouse, or the powerhouse and transmission. But it does not include operating costs. So it excludes operating and maintenance costs and water rental. So it's only the capital costs which would reflect the interest and depreciation.

And the interest, by the way, is -- is -- the -- the unit costs are very sensitive to the interest rate that we assume for calculating these unit

-- unit costs. So the interest rate that was used for this purpose was 6 percent.

MR. RAYMOND LAFOND: And the depreciation amounts would be based on the old formula or the new formulas? Or the ones being proposed, I should say.

MR. VINCE WARDEN: Well, they would be -- the depreciation would be based on a -- a straight-line amortization of depreciation of per -- with a sixty-seven (67) year life.

MR. RAYMOND LAFOND: How many years? I'm sorry.

MR. VINCE WARDEN: Sixty-seven (67) years, which we've used as the average life for all components of the generating station.

MR. RAYMOND LAFOND: Thank you.

THE CHAIRPERSON: I'm afraid I'm lost. So it doesn't include operating costs, but wh -- where does depreciation come into the equation?

MR. VINCE WARDEN: Sorry, the -- the operating costs we're referring to are the -- the wages and salaries, the -- the costs of people operating the plants and --

THE CHAIRPERSON: Okay.

MR. VINCE WARDEN: -- but it includes

depreciation in financing costs --

THE CHAIRPERSON: I see.

MR. VINCE WARDEN: -- associated with -- with that investment.

THE CHAIRPERSON: Okay.

MR. RAYMOND LAFOND: I would imagine that internally you would do some allo -- you -- you would do some analysis, in terms of the main -- well, the direct -- well, it's fairly simple, the direct maintenance and operation, but also an allocation of overheads. Would you do that?

MR. VINCE WARDEN: Yes. Yes, we would do an allocation of overheads. They typically get included in -- in what we would refer to as the operating costs of -- of the plant. We've -- in the past, we've used a -- a rough -- for -- for purposes -- I shouldn't say rough, but it's for purposes of doing our an --analysis, we've used 1 percent as the ope -- representative of the operating cost of -- of the plant, which would include associated water rentals.

MR. RAYMOND LAFOND: So the operating cost would be 1 percent of the -- for instance, the seven point zero (7.0) cents for Conawapa?

MR. VINCE WARDEN: No, actually, what we would do -- and we could do that if -- if you would like to have that number expr -- the operating costs included. What we would do, instead of using a -- a rate of 6 percent for purposes of the calculation, we would use a rate of 7 percent, which would be all inclusive of operating costs.

MR. RAYMOND LAFOND: I see. For -- I would imagine that internally you would have for every project, whether it would be Great Falls, Long Pru -- Long Spruce, or Slave Falls, or whichever -- Limestone, you would know your costs of production for every one of them, in terms of, of course, capital cost and transmission, but also maintenance and operation and also allocation of overheads.

Would it be possible to get an analysis of all your sources of production and your cost and allocation? I mean -- and I'm not talking of a fifty (50) page document. I'm talking of one (1) or two (2) pages here.

MR. VINCE WARDEN: Yes, we can do that for the existing generating stations, for those that in service currently, yes.

MR. RAYMOND LAFOND: Because it would help us to understand to the comparison between a facility built twenty (20) years ago, fifteen (15) years ago, and today and in the future.

MR. VINCE WARDEN: Yes. And, you know, I could have also given you Limestone, which, in the 2012 cost per kilowatt hour comparison, was one point eight (1.8) cents. So the one point eight (1.8) cents would be comparable to the seven point eight (7.8) cents for Pointe du Bois.

But, Mr. Lafond, in response to your -- your question though, we will take an undertaking to provide the operating costs of all existing generating stations on Manitoba Hydro's system at this time.

MR. RAYMOND LAFOND: And to the point, for instance, total expenses of -- except for the distribution, but transmission coming in, et cetera, would be all included?

THE CHAIRPERSON: Now, some of these questions as you're going -- will appreciate will be germane to a future NFAAT process. Now, I guess one (1) of my interests, looking forward -- not today, but looking forward -- would be trying to establish what the returns have been on some of those dams over time, because I think that gives a better picture of the economic reality of those investments.

And so I guess what I'm trying to understand is, for example, Wuskwatim is not going to be profitable initially. And that should be factored into a picture of what the potential return might be from Wuskwatim over time, given that in the initial years it probably won't be profitable venture.

What I'm trying to get at -- and this is not for today -- I think we need to understand what kind of return we can expect if you're going to be making these kinds of investments. What's the potential return on -- over time for some of these structures, net of all costs? So in any case, it's not for today.

Do we have any other -- do you have any questions? No.

MR. VINCE WARDEN: Can I just -- sorry, just to be clear on that last undertaking for Mr. Lafond, the allocation of transmission would be a little bit more difficult. We'd have to make a lot of assumptions to allocate transmission to the generating station.

So I think, if it's okay with you, maybe as a starting point, we can give you the operating costs for each generating station. And then you can make -- make a determination at that point whether it meets your -- your needs.

MR. RAYMOND LAFOND: Well, I -- I think I -- I would agree with that. But somehow, at the end of the line, I would like to have -- see all expenses. And those that cannot be allocated easily without any kind of arbitrary assumptions -- just in total for all the plant so that we can see the total expenses of Manitoba Hydro as best as they can be allocated by source of generation, and then those that cannot be allocated, that at least we see in total.

MR. VINCE WARDEN: Yeah. And -- and, Mr. Lafond, now I think we're getting into the cost of service study a little bit, because that's what the cost of service study does. It shows the cost of generation, transmission, distribution, administration, breaks that out and shows what kind of -- how that compares to the -- the revenues that are being received for -- applicable to those -- those costs -- recovery of those costs.

But that'll be clear in the cost of service study, which will be another proceeding. I will ensure though that, for purposes of this undertaking, that you -- you are totally aware of what the costs of generating stations are, including all costs that are allocated to those generation station, all overheads.

MR. RAYMOND LAFOND: I'll accept that.

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, I think the undertaking is that Manitoba Hydro will provide the costs -- unit costs of all existing generating stations on Manitoba Hydro's system.

--- UNDERTAKING NO. 42: Manitoba Hydro to provide the unit costs of all existing generating stations on Manitoba Hydro's system

CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

MR. BOB PETERS: Thank you, Mr. Chairman. I too wish all gathered and listening the best of the new year. Mr. Warden, in an effort to assist the Board with your last undertaking, did your calculation of in-service costs include any allocation of internally generated funds?

MR. VINCE WARDEN: No, it did not.

MR. BOB PETERS: So it assumed the full capital costs for purposes of interest and depreciation?

MR. VINCE WARDEN: That's correct, Mr.

Peters.

MR. BOB PETERS: And in terms of bringing the calculation back to 2012, as you indicated Manitoba Hydro has done, can you explain to the Board how you did that, how Manitoba Hydro did that?

(BRIEF PAUSE)

MR. VINCE WARDEN: So we have for -- in the case of Pointe du Bois powerhouse and transmission, we have an in-service cost of $1.6 billion, I believe is the number. Just one (1) minute please, Mr. Peters. I just want to confirm that.

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, Mr. Peters. I just wanted to confirm that -- that in-service cost. So the in-service cost of Pointe du Bois, including transmission, is 1.6 billion. We simply took a present value of that number back to -- sorry, back up a step.

We -- we determined what the annualized payment is necessary to -- to amortize that capital cost over a sixty-seven (67) year life; looked at the annual generation that comes out of Pointe du Bois, which is 900 gigawatt hours; came up with an in-service cost of eleven point one (11.1) cents per kilowatt hour. So that's in-service in two (2) thou -- in the year 2030. And then present value, that eleven point one (11.1) cents to 2012.

MR. BOB PETERS: Was the provincial debt guarantee fee included in your calculation, Mr. Warden?

MR. VINCE WARDEN: Yes, the -- we -- again, we used an assumption of 6 percent interest, which would include the debt guarantee fee.

MR. BOB PETERS: Five (5) percent long term, plus 1 percent provincial debt guarantee fee?

MR. VINCE WARDEN: That's right. And for this purpose, you know, we used 6 percent across all -- for all generating stations and -- yeah. Although not precisely what our current borrowing costs are, it -- it's very close.

MR. BOB PETERS: And as I understood your undertaking to Board member Lafond, you're going to provide the detailed calculation of in-service costs and bring them to 2012 for all of the generating stations of Manitoba Hydro?

MR. VINCE WARDEN: Yes, we will show the current operating costs for the fourteen (14) generating station -- hydraulic generating stations that we currently have on the system. I guess that's fifteen (15) with Wuskwatim, actually.

MR. BOB PETERS: And when you say, "operating costs," but do you also mean the in-service unit cost of energy that's going to be produced by each of those stations?

MR. VINCE WARDEN: Yes, that's right.

(BRIEF PAUSE)

MR. BOB PETERS: And I just want the Board to be aware, Mr. Warden, that when you used a 6 percent interest calculation to -- to bring the present value back to 2012, that's an approximate interest rate, not -- not based necessarily on what actual interest rates will be for the particular station?

MR. VINCE WARDEN: Yes, that's right. It -- it was used to represent what the interest rates -- we, you know, don't know, of course, what the interest costs will be in 2030. But -- but for purposes of comparing one (1) generating station to -- to the other, we used the same rate across -- across all.

MR. BOB PETERS: It's just that your

IFF12 used -- shows a higher interest rate going forward than -- than what you've just indicated. But you're rounding it to provide a comparison based on --

MR. VINCE WARDEN: Yeah, this is -- for a scenario analysis purposes, as long as we're using a consistent rate which is representative, yeah, that's considered -- that's what we did.

MR. BOB PETERS: Thank you, Mr. Warden. Mr. Chairman, if that completes the undertakings, and I -- I would like to step back and do some procedural housekeeping matters that I -- that I -- if the Board would indulge me, please.

Earlier this morning -- there is an orange or coral-type colour calendar of the month of January of 2013 provided to the Board and also to counsel. This is a copy of a calendar that had been circulated in December after counsel had met. And I wanted to run the Board through it. And, also, I will invite counsel who participated in the meeting, if they have any points to make that I have failed to make, that they're welcome to -- to get to the microphone and -- and provide them to the Board.

The concern of -- of the Board, Mr. Chairman and Board members and all parties, is that the Board's availability to conclude this General Rate

Application was prescribed by the -- the dates that had been previously provided. We were looking, once we were underway of the hearing -- and I think we've sat for seven (7) days already -- to see how the -- the hearing would unfold.

So what the Board sees in front of them, starting today, Manitoba Hydro's revenue requirement panel is back. And, quite frankly, the revenue requirement panel will be -- will be the panel that Manitoba Hydro brings back and forth to fill in the dates as required.

You will see, starting tomorrow, that there will be a new panel before the Board to accommodate Manitoba Hydro's witnesses. The rates panel, speaking primarily on rates issues as well as diesel, will be available for a couple of days. And not only the Board, but all other parties will ask their questions of that panel and complete that panel.

It's envisioned that Manitoba Hydro's demand-side management witnesses will be available starting on the 3rd of January. And it was hoped that the DSM panel would be concluded certainly before the Intervenor witnesses come the following week.

So the DSM panel was -- is slated for Thursday/Friday. And we boldly also indicated that it would be available on Saturday, because the Board had indicated an availability to sit on Saturdays if required. I should indicate that one (1) of Manitoba Hydro's witnesses -- I believe, Mr. Miles -- will not be available on that date. So we will have to work around that issue.

Next week, Mr. Kennedy will return on the Monday. He has a number of undertakings that have -- I shouldn't call them undertakings. While there are some undertakings that I haven't checked to see which ones are answered -- filed this morning, there also were some pre-ask questions over the holiday season that our friends from MIPUG had advanced. And there were also some undertakings to CAC/MSOS.

I believe Mr. Kennedy's evidence will conclude in one (1) day, and that will include primarily MIPUG's questioning and possibly some -- some questions from CAC. The revenue requirement panel would be called back to fill in the time on the 15th of January.

And then on the 16th and the 17th, we would proceed to Intervenor witnesses. We would expect Mr. Chernick would take all day on the 16th. The day will also include presentations just after the lunch hour by, I believe, two (2) representatives of MIPUG that would like to come and address the Board with a presentation. That isn't expected to be lengthy, but that would take place right after lunch.

MR. ANTOINE HACAULT: Mr. Peters, on that, it may be that the presenters would be the day before. But I'll speak to you further on that.

MR. BOB PETERS: Yes, thank you, Mr. Hacault. On the 17th of January, it's envisioned and scheduled that Mr. Dunsky will be in town to testify on behalf of the Consumers Association of Canada (Manitoba Chapter) as well as testifying on behalf of the Green Action Centre.

And following his testimony on the 17th, it's envisioned that the revenue requirement panel would be available again on the 18th, and perhaps even the 19th, should that be required and requested by the Board. It's envisioned that the following week, to the extent only needed, it would clean up with any further questions of the revenue requirement panel and also to deal with MIPUG's witness evidence.

I've kept only a rough scorecard, Mr. Chairman, and the schedule does include a couple of extra days -- maybe as many as two (2), up to three (3) days -- that are before you that -- that, based on the time estimates, we will not need. So I'm optimistic that the evidence certainly can be finished within the calendar shown to you.

The complication becomes, quite frankly, the Board's availability and counsel's availability on dealing with closing submissions. Counsel has repeated their request that they be allowed some opportunity following the close of evidence to collect their thoughts, to review transcripts and documents, undertakings and responses, to provide closing submissions.

And Manitoba Hydro also would prefer at least one (1) clear day after hearing from Intervenors to ensure that their closing submissions join all issues and provide Manitoba Hydro's response to that.

So I put this before the Board today. I will caucus with the Board and find out the Board's availability in February for closing submissions. And I do recognize that it is limited. And that being the case, that may dictate whether -- whether we sit later some evenings and whether the weekend dates that are prescribed will, in fact, be used.

So with those comments, Mr. Chairman, we'll -- we'll keep our hand on the pulse of the schedule. And we'll -- we'll work to make sure that we conclude the schedule in the availability of the Board, as well as the parties. If I've left any comments out that counsel wish to provide, I'd invite them to jump on the microphone before I continue.

(BRIEF PAUSE)

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: All right. Hearing none, I want to turn to Mr. Warden and Mr. Rainkie. And hopefully they didn't re-gift Board counsel's Volume II of the book of documents, PUB Exhibit 14. Tab 17, Mr. Rainkie, is approximately where we concluded. Yourself and Mr. Warden were providing responses to the Board.

We had dealt with some issues, particularly the impact on retained earnings. And I think we came to common ground that Manitoba Hydro, in the test years, was not proposing to write off rate-regulated assets against retained earnings. That would be a matter that the Corporation is contemplating doing in fiscal -- in -- in the fiscal years following the two (2) test years of this General Rate Application.

Have I got that right?

MR. DARREN RAINKIE: You have, Mr. Peters. And just maybe one (1) piece of information for the Board that happened subsequent to the last day of the hearing, is that the International Accounting Standards Board was meeting, I think, between Dece -- I want to say December 13 and 17. And it took to about December 20th to get some information on what happened at the meeting, at least to us.

And they indicated that they are proceeding with looking at an interim standard with respect to rate-regulated accounting. Just -- we'll caution the Board once again that just -- that's their plan. If -- if they develop an interim standard, it would be exposed for public comment. And so you're never quite sure if it's actually going to get to fruition or not. But I don't think we had that information when we last spoke.

But they now have decided to go down that path of an interim rate-regulated accounting standard, which may mean that we never have to write off those assets. I'll just leave it at that, Mr. Peters.

MR. BOB PETERS: Well, no, I think -- thank you for your last comment, or your last sentence, Mr. Rainkie, because what you're telling the Board is, for certain, rate-regulated accounting is permitted during the two (2) test years that are before this

Board?

MR. DARREN RAINKIE: That's right, because we've decided that we're going to defer any implementation of IFRS to 2014/'15. So that would bring that outside of the test years, Mr. Peters.

MR. BOB PETERS: And what you're telling the Board is while it is certain that -- that rate-regulated accounting is not -- is going to be permitted during the two (2) test years, it may be permitted longer, depending on the International Accounting Standards Board?

MR. DARREN RAINKIE: Yes, one (1) of the -- one (1) of the options in front of the Board is to grandfather existing practices for -- for a company -- for -- sorry, for countries that are trans -- transitioning to IFRS until they develop a final standard. And the best information that we have right now is that they wouldn't develop a final standard until 2016 at the very earliest, I think.

So if the interim standard is exposed and approved by the International Board, then there would be at least, you know, a temporary period that we would be able to maintain rate-regulated accounting. And then we'll go through the process again with the final standard. They'll develop one. They'll expose it and see what the public comments are. And they'll either decide to finalize it or not.

So it's -- it looks like we have a few more years of this continuing question, based on the information we have right now.

MR. BOB PETERS: I was going to make some flippant comment about lawyers always being blamed for delays, Mr. Rainkie, but I think this one the accountants... What -- what you're telling the Board -- when you say, "grandfathered," does that -- does that potentially mean that, for Manitoba Hydro, who has used rate-regulated accounting, the grandfathering could continue in perpetuity?

MR. DARREN RAINKIE: Well, I'm not sure in perpetuity. I think the -- the grandfathering, the reason it would be called an interim standard would be that we would be allowed to continue our current practices until they determined finally whether it's a go or not.

So that may give us a couple more years, until 2016. And then we'll have to see what happens, in terms of the final project, Mr. Peters. As I said, it's -- we're not able to predict whether the board will approve this in the final stages or not.

But, you know, I think there's -- it's a positive sign, I think, developing an interim standard. But much like when this Board produces an interim order, it says it's not the final order. It's the same -- it's the same caution there, that even we get to interim standard, it doesn't preclude them from changing their mind in a final standard.

MR. BOB PETERS: Perhaps a good analogy, Mr. Rainkie. Mr. Rainkie, would it be -- would it be possible for Manitoba Hydro to undertake to file written communications respecting the most recent decisions of the IASB with this Board?

MR. DARREN RAINKIE: I'm just -- I can take that undertaking, Mr. Peters. I'm not sure if -- if the material -- this is just material from their website. I'm not sure if it's copyrighted or not. But if we can't provide the actual physical material, we can certainly point you to the -- to the link. But I just would have to check whether it's copyrighted and -- or not.

MR. BOB PETERS: Well, then plea -- please would -- that would be appreciated, I think, Mr. Rainkie. Can you also indicate at this time to the Board whether Manitoba Hydro has received any information it can file with this Board from your external auditors related to this issue?

MR. DARREN RAINKIE: No, no additional information. I think everybody's still digesting what came out of the International Accounting Standards Board meeting, Mr. Peters. So I think everybody is referencing that same one (1) or two (2) pages that's on the International Board's website that's saying that they've -- they're proceeding to develop an interim standard.

MR. BOB PETERS: Thank you for that undertaking, Mr. Rainkie. And we'll await to see if you can provide the written material from IASB related to their interim standard for rate-regulated accounting or whether you will only be able to provide the Board with a link, and then the Board can access it from that venue.

--- UNDERTAKING NO. 43: Manitoba Hydro provide the written material from IASB related to their interim standard for rate regulated accounting or a link to the information

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Rainkie, back at

Tab 17 of the book of documents, on page 194, maybe just to close off on this topic -- and thank you for that update -- in terms of the treatment of rate-regulated assets and liabilities, what we see on pages 194 and 195 of PUB Exhibit 14 is that different jurisdictions are treating the issue differently, as it were, both respecting regulatory purposes as well as external reporting purposes, sir?

MR. DARREN RAINKIE: Yes, Mr. Peters, different jurisdictions have had -- developed different approaches to this issue. But just -- just to make sure we're clear, I think when I -- when I look through the pages that have been reproduced here, probably in most of the circumstances it hasn't resulted in dif -- differences between financial reporting and regulatory reporting.

And it was just that last part of your question I wanted to make sure we were clear on, is that almost invariably -- and I -- I can't say that I've looked at every jurisdiction across the country -- is that if a utility has moved, let's say, to US GAAP for its financial reporting purposes, it has asked for and almost invariably received approval from its regu -- regulator to use the same framework for -- for regulatory purposes, so. There might be one (1) -- one

(1) exception. I'm not sure about ATCO Electric and ATCO Gas.

But, you know, we talked about -- before the break about, you know, the principles about this. And I think the principle has been -- really, has developed into each ind -- individual utility looking at their circumstances, determining what makes sense for them and their customers, and then going to the -- their respective board and asking for whatever they need, in terms of approvals. But I think there's been a real push in the industry to tie -- to try to keep one (1) set of books, if you like, between financial reporting and regulatory report -- reporting.

So the information we've looked at and my staff has looked at, when -- when companies have changed their financial reporting framework they've asked their regulator to use that for -- for finan -- for regulatory and rate-setting purposes just because of the confusion and cost of having two (2) sets of books.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Rainkie and Mr.

Warden, would I be correct in suggesting that, as initially filed, Manitoba Hydro's GRA based on IFF11-2, accounting changes were a significant driver of the rate increase requests?

MR. VINCE WARDEN: No, Mr. Peters, I wouldn't agree with that. It's more so the -- the situation in the export market that would drive rate increases and -- or at least the rate increases we're seeing, together with increased cost of maintenance associated with the aging infrastructure issues. So, no, accounting changes would not have been driving the rate increase.

MR. BOB PETERS: Well, let's just explore that a bit further with the Board, Mr. Warden, by turning to Tab 18 of the book of documents and looking at Appendix 5.6 on page -- page 199 of PUB Exhibit 14. And perhaps, Mr. Rainkie and Mr. Warden, we can -- we can work through that by -- by -- let's review with the Board the accounting changes that Manitoba Hydro has already made. And let's start with 2009/'10.

Am I correct, gentlemen, that back in twen -- in 2009/'10, Manitoba Hydro wrote off to operating costs certain previously capitalized costs?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And they're listed there as the stores overheads, executive costs, and property taxes on facilities, correct?

MR. VINCE WARDEN: Correct.

MR. BOB PETERS: And -- and so that $9 million back in '09/'10 became an additional revenue requirement in Manitoba Hydro's cost of service?

MR. VINCE WARDEN: Well, we -- you know, we haven't talked cost of service yet, but yes, that would -- that -- that additional -- that $9 million would find its way into operations, whereas previously it was charged to capital.

MR. BOB PETERS: And likewise, these planning -- there's a -- there's an item called "intangible assets ineligible for capitalization". And if memory serves -- and it might not -- Mr. Warden, that related to planning studies?

MR. DARREN RAINKIE: Yeah, that -- primarily planning studies. There was some, I think, some write-off of IT costs as well, Mr. Peters, and that. But the largest chunk was planning studies.

MR. BOB PETERS: And that was no longer eligible for capitalization, Mr. Rainkie?

MR. DARREN RAINKIE: That's right. We made that change when the new -- the Canadian accounting standard on goodwill and intangible assets came into being.

MR. BOB PETERS: And the reclassification at the bottom part of the chart that netted out to $1.94 million, that again was Manitoba Hydro's reclassification of -- of accounts and expenses, Mr. Rainkie, that it decided to -- to bring to the operating statement, as opposed to -- I suppose, previously having it capitalized?

MR. DARREN RAINKIE: Well, Mr. Peters, what we need to make sure of is that this -- this particular schedule that we're looking on, on page 199, is changes to operating costs, right? They're not all of the accounting changes. This is just changes to operating costs. And so, for instance, the reclassification of the funding payments for the Town of Gillam and schoo -- the Frontier School Division, they would be moving from operating costs to capital costs. So there's no income statement effect, if you like, or revenue requirement effect of that particular change.

Sorry, Mr. Peters. I said, "Capital costs." That should be capital and other taxes.

MR. BOB PETERS: Yes, thank you, Mr. Rainkie, for the clarification. The -- the accounting actions that were made back in '09/'10 was a conscious effort by Manitoba Hydro to move away from what Manitoba Hydro called "full-cost accounting," Mr. Rainkie and Mr. Warden?

MR. DARREN RAINKIE: Well, the -- if you're looking at 2009/'10, the stores overhead was related to a new Canadian accounting standard for inventories that came into being in that particular fiscal year. And, you know, each year we do look at our overhead capitalized and make adjustments. We look at what's happening in the industry. So, yes, that -- that's probably the start of us looking at what was happening in the utility industry and moving away from -- moving away from full-cost accounting.

But there are -- mixed in here is also some direct application of some new accounting standards that came into being under Canadian GAAP during that period, Mr. Peters.

MR. BOB PETERS: Would it also be correct, Mr. Rainkie, that those accounting changes in Canadian GAAP, it was also in anticipation of Manitoba Hydro's expectations of IFRS requirements?

MR. DARREN RAINKIE: Well, not just Manitoba Hydro's, but the Canadian Accounting Standards Board. I mean, people are not making accounting changes that are inconsistent with IFRS. Of course, when -- and that goes with the stan -- the Canadian standard-setters as well. They have been implementing some of the IFRS sections early under Canadian GAAP. And so all of the changes that are on this page are consistent with, I think, IFRS in the end but are permissible under Canadian accounting standards.

MR. BOB PETERS: It would have also been permissible under Canadian accounting standards to continue to capitalize some of those expenditures that were brought to the operating statement, Mr. Rainkie?

MR. DARREN RAINKIE: No, Mr. Peters, I'm not sure I -- I share that perspective. As we've, you know, talked about over the last seven (7) or eight (8) days of the Hearing, there are some different accounting practices in the utility industry. And in my mind, when the accounting practices in the industry changes, Canadian GAAP in the industry changes.

It -- when you look out and you do research, as we do every year, into what's happening and you see changes happen out there, you have to make those changes. So -- ha -- when you go out and you do surveys and you look at what's happening, either for our normal business practice -- because we look at this every year. As well, we've been looking at this very

-- in very much detail in the last number of years because of IFRS has been impending for a number of years.

When you get that information, overhead is a -- is a accounting estimate just like depreciation. And when you get that information, you have to make changes. And that's, you know, what we've essentially done over the last number of years, Mr. Peters.

MR. VINCE WARDEN: I might just add to that, Mr. Peters. We were getting pressure from our external auditors as well. They were -- they had expressed discomfort with some of our full-cost accounting policies in the past. So we were strongly encouraged to move in this direction by our external auditors.

MR. DARREN RAINKIE: Mr. Peters, you might also recall that the Board, in Order 116/08, made a recommendation to Manitoba Hydro that we look at our overhead practices. And they actually, in that recommendation, said that we should sit down and talk with our IFRS advisors and -- as well as our external auditors about this sit -- about the issues. So if you go back to that order, you'll -- you'll see that recommendation as well.

MR. BOB PETERS: Mr. Warden, where will the Board see the recommendations, or the strong recommendations, from the external auditors? That's not contained in the financial report, is it?

MR. VINCE WARDEN: The financial report, Mr. Peters?

MR. BOB PETERS: The -- the annual report.

MR. VINCE WARDEN: Oh, the annual report, sorry. No, it's not in the annual report. But we certainly have received that from our external auditors, both verbally and in some written communication that we received from our external auditors, as well as part of management.

Whether the external auditors would be willing to put that on the record or not, I would have to double check with them. But -- but that -- it is -- it is definitely there.

MR. BOB PETERS: Well, then could you undertake to check with your external auditors and, to the extent possible, provide to this Board the -- the advice or the pressure or strong recommendations that you've indicated have been made by them with respect to Manitoba Hydro's accounting practices?

MR. VINCE WARDEN: Yes, we'll undertake

to do that, Mr. Peters.

--- UNDERTAKING NO. 44: Manitoba Hydro to provide the advice or the pressure or strong recommendations by external auditors with respect to Manitoba Hydro's accounting practices

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Yes, thank you for that, sir. Mr. Warden, were the expenditures necessary for the capital projects to which they were originally charged?

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, absolutely. All expenditures by Manitoba Hydro are prudently incurred. What -- it's a question of whether or not they would be charged to capital or operating. But, yes, absolutely.

MR. BOB PETERS: And knowing that these costs were no longer going to be capitalized, could Manitoba Hydro have either cut out these expenses or reduced them further?

MR. VINCE WARDEN: No. No, it had really nothing to do with the cost control part of our business. Those costs, as I mentioned, were all prudently incurred.

MR. BOB PETERS: So Manitoba Hydro's only response was to then move these costs to the operating statement?

MR. VINCE WARDEN: Yes, and -- and all costs, whether they are capital or operating, are -- are subject to cost cons -- ongoing cost constraint measures.

MR. BOB PETERS: I was just thinking further of Mr. Rainkie's comments this morning. Would it be correct to conclude that until the International Accounting Standards Board makes a final decision on rate-regulated accounting, Manitoba Hydro's own policies will not be finalized?

MR. VINCE WARDEN: Yes, our policies will be consistent with the International Accounting Standards Board. So that -- that's correct. We will not finalize until we're clear on what that direction is.

MR. BOB PETERS: And for regulatory purposes, those policies will be influenced by the directives of this Board?

MR. VINCE WARDEN: Yes, to the extent that we have regulatory assets and liabilities, they will be influenced by the direction of this Board, yes.

(BRIEF PAUSE)

THE CHAIRPERSON: Could I ask a question at this point? I -- you know, I'm looking at page 199. And I recall a similar table that we -- we reviewed some days before this -- before today was -- which -- which labelled some of the changes as being IF -- IFRS-related changes -- I don't know if you recall that table -- and identified some recent changes, even some current changes that related to -- to IF -- IFRS.

And I guess the question is: Those will stay in place, notwithstanding the fact that IFRS has been kicked ahead?

MR. DARREN RAINKIE: Yes, I think we engaged, Mr. Chairman, you and I, a little bit on this in one of the first few days of the hearings, that -- that we use the term "IFRS related" to mean that they wouldn't have to be unwound under IFRS. They were -- they -- they were permissible and required under Canadian GAAP, but they're consistent, ultimately, with

IFRS.

THE CHAIRPERSON: And -- and the fact that the -- and the fact that IFRS has been delayed, will -- will that entail further IFRS -- IFRS-related changes in the coming couple of years?

MR. DARREN RAINKIE: Yes, Mr. Chairman. In fact, I don't know if you can find it in your big stack of documents that were just filed, but if you look at Manitoba Hy -- Hydro Exhibit number 55, I think it is, which was the update of PUB/Manitoba Hydro First Round 42 Information Response, it will tell you, if you look under the 2015 column, which is the current date that we expect IFRS to be implemented for Manitoba Hydro.

If you go down the page, if you have it, sir, it would be page 2 of 13. If you go under -- if you go down underneath "IFRS changes" and you see the -- the line that says, "Adminis" -- "Admin in general," you'll -- and if you move over to the 2015 column, you'll see that we're planning another re -- reduction of overhead capitalized of about $37 million, commencing in 2014/'15.

And we -- in the original material that was in the Application that -- you would have seen that figure in the 2013/'14 column. But now that we've deferred IFRS by one (1) year, that's been pushed into 2014/'15.

MR. RAYMOND LAFOND: That -- this $37 million from 2015 would be, if I recall from reading somewhere else, the 17 percent of overheads actually cap -- being capitalized, versus 24 percent a few years ago?

MR. DARREN RAINKIE: We actually are back at -- at a 20 percent overhead rate. But what will happen under IFRS is that the overhead rate will disappear in its entirety. That pool of cost will no longer be -- be acceptable to be capitalized.

MR. RAYMOND LAFOND: I understand that. But you -- you were at twenty-four (24), went down to seventeen (17), and now back up to twenty (20)?

MR. DARREN RAINKIE: Yeah, it's -- we -- we -- that's true. It's a bit counterintuitive. What -- what we did is we -- we could allocate overhead in the company through two (2) -- on two (2) bases: one (1) through our activity rates and one (1) through our overhead rate.

So our activity rates are a buildup of salaries and benefits and other costs in a particular department. And then our overhead rates, we segregate certain costs into our overhead pools and develop an overhead rate to be applied.

So as part of our preparations, if you like, to be IFRS compliant, what we did is we moved any costs out of our activity rates that would no longer be IFRS compliant into our overhead pool so that when we do our comparative reporting, we -- we can track those costs so that now all of -- all of the costs that will no longer be eligible for capitalization have been moved into our overhead pool.

And that resulted in rate increasing a little bit again. It's kind of a counterintuitive result. And you have to kind have almost been part of the company to understand why.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Rainkie, to assist the Chairman in his deja vu moment, page 20 of Mr. Warden's Exhibit Manitoba Hydro-15, it was a coil-bound PowerPoint presentation that had slides on it. And I'm just wondering if this was the -- this -- this is the only chart I could think of that may have been discussed previously with the Chairman. And I -- I may be incorrect on that.

But does that not also depict some of the same information that we're going over at this time, sir?

MR. DARREN RAINKIE: Did you say page 20, Mr. Peters?

MR. BOB PETERS: Slide 20.

MR. DARREN RAINKIE: Yeah. Yeah, that -- that has been updated for IFF12. But unfortunately, we don't have the 2014/'15 year, which is where IFRS would be implemented. But we do have this similar chart in that PUB -- that revised PUB/Manitoba Hydro-1-42 that we just looked at, Mr. Peters.

MR. BOB PETERS: Yes. And -- and, Mr. Rainkie, you'll note then -- the Chairman will note that starting on page 200 of Board counsel's book of documents is -- is a copy of Manitoba -- is a Public Utilities Board Information Request First Round 42 to Manitoba Hydro and the, then, response.

And Mr. Rainkie was obviously busy over the Christmas recess, not just resolving the NHL dispute, but filing a new document that contains the updated information based on the current information that Manitoba Hydro has.

MR. DARREN RAINKIE: That's correct, Mr. Peters. I -- I slept with this stuff under my pillow.

MR. BOB PETERS: Yes. You are under

oath. Mr. Rainkie, let's take the Board to -- let's stay on page 199, because I think we can, with a sharp pencil, show the Board exactly the point that you had made with Board member Lafond and the Chairman.

Turning to 2010/2011, the actual results, Mr. Rainkie, in addition to the changes made in the previous year, Manitoba Hydro made an additional $19 million of items being charged to current expenses, correct?

MR. DARREN RAINKIE: Yes, that's the total of those three (3) changes you see there, Mr. Peters.

MR. BOB PETERS: Yes. And the three (3) changes between fiscal '10 and fiscal '11 amounted to $19 million.

And, again, these were expenses that had previously been capitalized by the Corporation?

MR. DARREN RAINKIE: That's correct. Now they will be operating costs.

MR. BOB PETERS: And this time the change was made in anticipation of IFRS?

MR. DARREN RAINKIE: No, Mr. Peters, it -- it -- this change, I think, resulted from us doing our normal practise of looking at what's happening in the utility industry, in terms of overhead capitalized practices. Certainly we were taking a much more comprehensive look at that issue because we were getting ready for IFRS. But the changes that are made here are not early implementation of IFRS; they are just changes that are consistent with what we saw going on in the utility industry in Canada under Canadian General Accepted Accounting Principles.

As I mentioned to the Chairman a few minutes ago, they won't have to be unwound when we move to IFRS; they certainly are consistent with IFRS. But they were driven by us looking at what's happening in the industry and making a change. As I -- as I mentioned, overhead is an accounting estimate, so when you -- just like depreciation, when you find information that's different than your current practise you are required professionally to -- to implement those changes.

MR. RAYMOND LAFOND: Could I assume that, on that column, one (1) of the major elements of this addition of $29 million would be the $11 million for interest on common assets, facilities and equipment, and that would correspond to the opening or putting into service the new building?

MR. DARREN RAINKIE: No, this -- this would be -- it wasn't driven by the new building. What

-- what it would be is all of our common assets that we have, all -- so it would be 360 Portage, it would be our Taylor Avenue, it would be warehouses, it would be all common assets that we have across our whole company.

MR. RAYMOND LAFOND: Thank you.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Rainkie, would it not also be correct that Manitoba Hydro could have continued to capitalize these expenses?

MR. DARREN RAINKIE: No, Mr. Peters, I -- I don't -- I don't think so. As I just mentioned, we -- we're doing infa -- surveys of what was happening in the utility space and we found that other companies weren't capitalizing these types of costs, and that together with the review by our auditors, as Mr. Warden mentioned, as well as, you know, taking into consideration the previous views of this Board in terms of our capitalization practices, we decided to make those changes under a Canadian GAAP.

So in my mind if they're -- if -- if you're capitalizing these types of cost in the first place because of industry practices, when those industry practices change then in my mind Canadian GAAP changes. You know, I -- I hope that -- that perspective is clear, Mr. Peters, because it's an important one. We can continue on this discussion if it isn't clear.

MR. BOB PETERS: Well, if -- if the Board directed, for rate-setting purposes, these items should continue to be capitalized then that would be an acceptable approach?

MR. DARREN RAINKIE: Are you -- are you saying hypothetically that the Board would direct those to be set up as a rate regulated asset? Is that --

MR. BOB PETERS: That's the -- that's the premise of the question.

MR. VINCE WARDEN: I think then, Mr. Peters, it would become a policy decision as to whether or not we did that. And Manitoba Hydro -- as you know, the Board has jurisdiction over rates, but not over accounting policies. So although we look to this Board to endorse our accounting policies, we don't look to this Board to approve or set our accounting policies.

MR. BOB PETERS: And to the extent that this Board determines that for rate-setting purposes those expe -- those expenses should continue to be capitalized to the projects that they were, then for rate-setting purposes the -- the pol -- the accounting policy would -- would reflect that.

MR. VINCE WARDEN: Yes. And then we'd have a decision to make if we didn't agree that those costs should continue to be capitalized, and -- and that's certainly the position we've come to, and if the Board continued to be of the view that it should be capitalized then we would have the situation where we might require two (2) sets of books, which Mr. Rainkie has indicated earlier where we would definitely attempt to avoid at all costs.

MR. BOB PETERS: I think we've got that position, so thank you, Mr. Warden, for your response.

MR. DARREN RAINKIE: Mr. -- Mr. Peters, sorry, I'm --

MR. BOB PETERS: Yes, sir?

MR. DARREN RAINKIE: -- I -- I guess I'm having trouble following some of the train of thoughts. I don't disagree with what -- what Mr. Warden said, but these changes were reviewed at the last general rate application. I think by the time that the end of the last GRA happened that we had indicated we were making some of these changes. And they were accepted by the Board for rate-setting in Order 5/12. And they were consistent with the previous directives of the Board in Order 116/08.

So I'm -- I mean, it's an interesting theoretical discussion that we had about what would happen if the Board directed otherwise but, to me, the Board has looked at these changes and ruled on them. And -- and so I'm -- I'm having trouble with the source of the questioning, that the Board would unwind those at this point.

I understand it's a hypothetical question, but, you know, I just wanted to point out that we've -- we -- these -- these in -- these changes have been out there for a number of years, and they seem to have been accepted for rate-setting purpose thus far.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Rainkie, at the last general rate application that you referenced, there was a indication from Manitoba Hydro that a provision would be taken for another $15 million of other charges for IFRS-related changes for the 2013 fiscal year?

MR. DARREN RAINKIE: That's correct. That's what the provision was at -- at that point in time. I think it was 18 million one (1) year and 15 in the next, but it was --

MR. BOB PETERS: Well, if we -- thank you, Mr. Rainkie. If the Board looks to the column on page 199 under the 2012/'13 year, the Board will see that the provision is -- isn't 15 million or 18; it's 17.1 plus 9.5 million now, another $26.6 million, Mr. Rainkie.

Have I got that right?

MR. DARREN RAINKIE: Well, Mr. Peters, if we moved -- if we're moving to the 2012/'13 changes, those are -- those are additional changes that we're proposing -- well, that we are implementing in 2012/'13. So the original provision was never -- they weren't contemplated at that point in time. I was talking about the three (3) changes above, in terms of the provision.

MR. BOB PETERS: Okay, I -- I've got your point. What was taken as $19 million in the previous GRA, Manitoba Hydro was estimating back then it was going to be 15 to $18 million going forward?

MR. DARREN RAINKIE: That's correct.

MR. BOB PETERS: All right. And then now we see under the 2012/'13 column, there's an additional $26 million of expenses that the Board has not, as you put it before, ruled on or considered, correct?

MR. DARREN RAINKIE: That's right. They couldn't have because they didn't have that information until we filed this general rate application.

MR. BOB PETERS: Well, Manitoba Hydro didn't put it before the Board. You weren't aware of it at the last general rate application, or that was a decision made subsequent?

MR. DARREN RAINKIE: That's fair. That's right.

(BRIEF PAUSE)

MR. BOB PETERS: And when we add the 17.1 and the $9.5 million, Mr. Rainkie, to the previous amounts, that generates the $56 million of reduced capitalization that is now put forward to the operating statement?

MR. DARREN RAINKIE: That's right; related to the overhead capitalized item.

MR. BOB PETERS: And so, Mr. Warden, back to you. I asked you earlier to agree that accounting changes was contributing to the additional revenue requirement. And it appears that there's $26.6

million of additional accounting changes that is contributing to additional revenue requirement?

MR. VINCE WARDEN: Yes, Mr. Peters, definitely contributing. I think your -- your proposition earlier though was that accounting changes were driving the rate increase, and I didn't agree with that.

(BRIEF PAUSE)

MR. DARREN RAINKIE: Mr. Peters, I mean, the other point perhaps we should make clear at this point, is that there's another accounting change that we've made that we've talked about previous, and that's the reduction in our service lives and the direct reduction in depreciation expense, which, if you look at Manitoba Hydro Exhibit number 55, was a reduction of expenses of 35 million in 2012 and we're forecasting a reduction of expenses in 2013 of 40 million and 2014 of 44 million.

So just keeping in mind the sheet that we're on is the changes in operating costs, but there are other parts of our revenue requirement that are impacted by accounting changes. And, in my mind, depreciation and overhead are both accounting estimates and they change over time, based on the information that you have. And we should take into consideration both of them in -- in thinking about our revenue requirements and not get fixated just on operating costs.

MR. BOB PETERS: But the point you're making Mr. Rainkie, is that there are some offsets to this increase; that's the -- that's the point you're trying to make?

MR. DARREN RAINKIE: Yes, if you're going to talk about accounting changes, let's make sure that the Board is apprised of the full picture and not just one (1) part of it, I suppose.

MR. BOB PETERS: And if we're talking about the accounting changes relating to the operating statements, we're -- we're dealing with a $26.6 million additional request for the test years?

MR. DARREN RAINKIE: Well, whether it's an additional request, it's certainly an additional cost, Mr. Peters. In our cost of service rate-setting methodology, the -- the Board does not approve each line of our cost, or doesn't approve our accounting policies as Mr. Peters -- Mr. Warden indicated. What the Board has usually done is look at our revenue request and used cost as a guideline.

But -- but I think what we're -- we're not accepting as a proposition that if costs increase one dollar ($1), rates increase one dollar ($1). We -- we look at our financial targets on a go-forward basis and make our rate proposals, but it's not a dollar for dollar -- it's not like a rate-based rate of return type of scenario, Mr. Peters, and that's I think what we're trying to clarify here.

MR. BOB PETERS: Put another way, Manitoba Hydro can point to offsets to increases to -- to come up with a net figure?

MR. DARREN RAINKIE: Yes. And there also is some judgement in the amount of revenue increase that we request, Mr. Peters. Just because a cost goes up doesn't mean we necessarily have to increase our rate -- rate -- rate increase. At least, that's the way it's worked in this jurisdiction historically.

MR. BOB PETERS: Maybe put another way, Mr. Rainkie. If the Manitoba Hydro didn't come in looking for an additional $26.6 million of operating costs then the net income that was initially filed would have increased from -- would more than doubled from the 20 million that you'd filed up to $46 million.

MR. DARREN RAINKIE: With that I guess

we get back to our previous discussion: Should we have withheld the reduction in depreciation expense?

MR. BOB PETERS: Well, is the only reason it's including is to offset this amount?

MR. DARREN RAINKIE: No, no, Mr. Peters. Both of these items, depreciation and overhead, are accounting estimates and they are reviewed each year by the Company and we make changes based on the best information we have.

MR. VINCE WARDEN: And, Mr. Peters, I think when it comes right down to it, as we've said many times, when we apply for a rate increase to this Board, we're balancing fiscal responsibility of Manitoba Hydro with customer sensitivity. So, regardless, I -- I believe the rate increase we -- is -- is -- to a large extent, and in fact historically at Manitoba Hydro, the rate increase has been drive by -- more so, by customer sensitivity then as by fiscal responsibility.

We've always, for most of the time -- years we've been before this Board, we've been striving to attain that financial structure which we -- we finally have achieved. But, going forward, we want to make sure that financial structure is maintained, and to maintain that we want to make sure that we have that appropriate balance; that -- that the balance being between fiscal responsibility/customer sensitivity.

MR. BOB PETERS: Mathematically, if the operating costs were not increasing $26.6 million, the rate in -- the rate increase request before this Board would be reduced by 2 percent?

MR. VINCE WARDEN: No, no, because we -- we think the rate increase that we're requesting before this Board takes into full account customer sensitivity. You can see from our financial forecast that our ratios are going to be declining substantially in -- over the next decade, and if we didn't have that customer sensitivity in mind we'd be asking for a much higher rate increase than we are today.

MR. BOB PETERS: Well, just to close that up then, Mr. Warden. Manitoba Hydro -- and it was discussed when your depreciation consultant was here -- Manitoba Hydro could remove net salvage value, that $55 million additional cost, and adopt that policy early, if it so chose?

MR. VINCE WARDEN: Mr. Peters, depreciation -- and we'll be talking more about this when our witness returns -- but depreciation is an allocation of costs over future periods; recovery of -- of the capital costs over future periods. So we would not be looking at retroactively adjusting depreciation rates; that would just be contrary to all accounting principles to be doing that.

MR. BOB PETERS: But you could early adopt the issue of removing net salvage value from the depreciation expense item? And that would be something that wouldn't have to be unwound, or that wouldn't be contrary to external audit --

MR. VINCE WARDEN: And -- and we are proposing to do that, but in -- in conjunction with going to ELG method -- methodology depreciation, which largely offsets.

MR. BOB PETERS: The -- the point I was getting across, or trying to, Mr. Warden, was that those two (2) aren't linked together, other than Manitoba Hydro choosing to introduce them at the same time?

MR. VINCE WARDEN: Well, to some extent they're linked together, because if we were to remove net salvage value and -- and stay with ASL methodology, we would be looking at a much greater level of componentization of our assets than we have today. And -- and that, in itself, would move us more towards the ESL methodology of depreciation.

So I think we'd end up at the same

place, essentially.

MR. BOB PETERS: Let's move forward, looking at the 2013/'14 column on page 199. On mine, I've drawn a line under that $9.690 million attributed to building depreciation and operating costs.

Is that the expense for the new office tower?

MR. DARREN RAINKIE: No, Mr. Peters, that -- much like the interest on common assets, that's the -- the depreciation part of -- of common assets and op -- and the related operating costs. So it's all of our common facilities; it's not related entirely to the new head office.

MR. BOB PETERS: All right. The request for -- for the fiscal '13 and the fiscal '14; for fiscal '14 has now changed, Mr. Rainkie, and those items starting with technical and soft skills training, all the way down to fleet and stores administration, there is an approximate $37 million of additional costs that have now been referred out to fiscal 2015, correct?

MR. DARREN RAINKIE: Yes, that change would be made under IFRS now, in '14/'15.

MR. BOB PETERS: And that was the number you drew to the Chairman's attention a short while ago when you introduced him to Manitoba Hydro Exhibit 55 on page 2, where you demonstrated that additional IFRS changes for administration and general would be $37 million, out in that 2015 fiscal year?

MR. DARREN RAINKIE: Yes, those are the same -- same costs, Mr. Peters.

MR. BOB PETERS: And when we look at page 20 of Manitoba Hydro's Exhibit 15, which was the presentation by Mr. Warden and yourself, Mr. Rainkie, and others, the Board will also see that the rate-regulated accounts, which, coincidentally I guess, also total up to approximately $37.6 million, those also are going to be deferred out to a subsequent test year, out to 2015, depending on what happens with the International Accounting Standards Board's interim ruling and exposure drafts?

MR. DARREN RAINKIE: You learn very quickly, Mr. Peters. That's correct.

(BRIEF PAUSE)

MR. RAYMOND LAFOND: Can I go back two (2) -- two (2) seconds for the building depreciation and operating costs? You said it is only partly to the head office.

Would that not be the major component? I mean, the building is what, amortized over fifty (50) years? And then the operating costs would be what, six dollars ($6) a square foot times 700,000 square feet?

MR. VINCE WARDEN: Mr. Lafond, to be clear on this though, we're only -- what we're removing from capital and charging back to operating is -- is the portion of our buildings, and this is buildings across -- across the Corporation, the -- the portion of those buildings that were used for capital purposes. So all the -- to the extent that the building is used for operating purposes, it would already be included in depreciation expenses. Only that capital portion is being removed here.

MR. RAYMOND LAFOND: The portion of the depreciation that was capitalized?

MR. VINCE WARDEN: Correct.

(BRIEF PAUSE)

MR. RAYMOND LAFOND: And the IT infrastructure and related support, $17 million, comes about all of the sudden in 2012/2013. Is this because of a replacement or -- or what? Like -- like that's an additional amount to previous years in terms of IT expenses?

MR. DARREN RAINKIE: No, it's -- it's not a change in our operations. It's simply looking at whether or not those types of costs are being capitalized across the industry. And when we did that research we found that other companies -- or the utilities were not -- no longer capitalizing those costs, or had never been capitalizing them, so we also made that change, Mr. Lafond.

MR. RAYMOND LAFOND: Okay. Then I understand that the IT infrastructure and related costs prevly -- previously capitalized, that will not capitalized in the future?

MR. DARREN RAINKIE: That's correct.

MR. RAYMOND LAFOND: Thank you.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Rainkie and Mr. Warden, I just want -- before I leave the rate-regulated accounts, the Board will see that Power Smart programs is the major component, at $32 million approximately. The intention, if IFRS was adopted at this point in time in the 2014 fiscal year, would be to expense those items as opposed to capitalize them, or -- or depreciate them or amortize them over a ten (10) year period?

MR. VINCE WARDEN: Correct.

MR. BOB PETERS: And if the Corporation was required to expense the IF -- I'm sorry, the demand-side management expenses in the year incurred, it would approximately equal the amount that's proposed to be written off here, correct?

MR. VINCE WARDEN: Yes, approximately tho -- those amounts equal each other.

MR. BOB PETERS: The new items that are found on page 20 of your presentation at Manitoba Hydro Exhibit 15, Mr. Warden, were expenses in the test years related to pensions and a change in the discount rate.

Do you recall that?

MR. DARREN RAINKIE: I recall it very vividly, Mr. Peters.

MR. BOB PETERS: Well, $8 million in the first test year and 10 million in the second test year, Mr. Rainkie, were being added in to the operating statement, correct?

MR. DARREN RAINKIE: That's correct. Added in to operating costs, Mr. Peters.

MR. BOB PETERS: All right. From where?

MR. DARREN RAINKIE: Well, as a result

in the -- of the change in the discount rate, our pension obligation is now higher. So a reduction in the pen -- in the pens -- in the discount rate increases the obligation, and when you increase the obligation you increase the -- the cost that you recognize each year. So it's not coming from anywhere; it's a change in the discount rate, which is -- is resulting in increased current service costs.

Now, when you increase the discount rate you also -- it also results in a actuarial loss on the obs -- obligation. That actuarial loss would be recognized in income under Canadian principles over the rem -- remaining employee service life.

So those two (2) components will increase expense on a go-forward basis. That -- what seems like a simple change in a discount rate down will result in quite a large increase in operating expense--

MR. RAYMOND LAFOND: Would I simply summarize this on the basis of expected revenues from investments are going to be less, so, therefore, we need to meet the obligation through some other way?

MR. VINCE WARDEN: We haven't really changed our assumption with respect to a return on investments. We think -- well, the people that manage the investments think that we will return to the rate.

I believe it's 7 percent we're using in our assumption for -- for overall return on the pension fund. We think that -- or, again, the people that do this think that it's going to return to that over the long-term.

MR. RAYMOND LAFOND: So why the increase in obligation to -- to employees?

MR. DARREN RAINKIE: If you -- if you think about a present-value calculation, Mr. Lafond, if you reduce the discount rate, you get a high -- you have a higher value, right? If you take a stream of future -- what we're trying to do here is we're trying to say, What are the future payments to employees? And then you take a discount rate to figure out what the current obligation is.

If you reduce the discount rate, mathematically it increases the obligation. If you increase the obligation and then you're take -- you're taking that obligation and you're allocating it to each year as the employees render service, then you're increasing the cost.

MR. RAYMOND LAFOND: So what is that discount rate being used now? Or the decrease from what rate to what rate?

MR. DARREN RAINKIE: At the last fiscal year it was reduced from 6 1/2 percent to 5 1/4 percent.

THE CHAIRPERSON: Now, the actuarial loss is not reflected here, obviously. This is just the -- the operating loss, right? Or the -- pardon me, the increased operational costs based on the discount rate.

MR. DARREN RAINKIE: This figure takes into consideration both the increase in current service that we just talked about, as well as the fact that we will amortize that actuarial loss over time. So -- so this -- this figure is those two (2) -- those two (2) figures, essentially.

MR. RAYMOND LAFOND: So the number is how much being amortized over how many years?

MR. DARREN RAINKIE: Mr. Lafond, if you look in our financial statements under note 18 -- let me see if I can find it here. I think it's --

MR. VINCE WARDEN: Page 81 in Manitoba Hydro's annual report.

MR. DARREN RAINKIE: If you --

MR. RAYMOND LAFOND: Thank you. I have that.

MR. DARREN RAINKIE: If you look at page 80, you can -- and if you look under the Manitoba Hydro pension fund column 2012 and you go down, you'll see that there was an actuarial loss of $137 million in 2011/'12. So that's the amount that we're talking about.

So what we've done is we've calculated the increase in current service and the amortization of that loss, and we've -- because part -- part of our employee benefits are capitalized, so we've -- you know, made provision for that. And then the figure that Mr. Peters was talking about is the net of that that would go to our operating costs.

If you look on page 80 -- 81 as well, it shows you all of the -- at the very bottom chart, it shows you the var -- the various pension and benefit assumptions that we've made.

MR. BOB PETERS: Mr. Rainkie, was the pension discount rate provided by your actuary?

MR. DARREN RAINKIE: Yes, Mr. Peters, it's provided by our actuary and it's based on calculations, particularly -- a particular methodology that's out on the marketplace.

MR. VINCE WARDEN: To be clear though, they are management's best-estimate assumptions, and the actuary provides advice to Manitoba Hydro as to what assumptions to use. And we can choose to use others if we -- if we decide to. However, this is --

this was in consultation with the actuary.

MR. BOB PETERS: Why wouldn't you use the same discount rate as you would for your present valuing? Your generating stations, for example?

MR. DARREN RAINKIE: Mr. Peters the -- the reason there was a change in the discount rate was there was a clarification by the Canadian Institute of Actuaries late in our 2011/'12 fiscal year about how to apply the discount rate. And previously, we have had a discount rate that had both -- well, it was kind of a weighted average between bonds and equity.

And the clarification from the Canadian Institute of Actuaries -- and there were -- was professional accountants that sat on this task force -- was that what you should be using is the yield, if you like, on high quality bonds, which I think is interpreted as being AA-rated bonds.

So this isn't a weighted average cost of capital calculation. The clarification of the accounting standards is that you're supposed to use a bond yield and a high quality bond yield. And that's what this a -- this 5.25 percent figure reflects.

MR. BOB PETERS: Just to finish up on the accounting chang -- excuse me -- accounting changes. If we're still on page 199, Mr. Rainkie and

Mr. Warden, of the book of documents, the bottom-line number for the two (2) test years has now changed.

And I suggest you can confirm to the Board that the more accurate, current calculation is now found on Manitoba Hydro Exhibit 55, filed this morning?

MR. DARREN RAINKIE: That's correct. That -- the new page that's equivalent to this is on page 13 of 13 of that exhibit.

MR. BOB PETERS: And in the 2013 test year, the total OM&A accounting changes for the test year 2012/'13 is $75 million and for the fiscal -- sorry, for the 2014 fiscal test year, it's $78 million?

MR. DARREN RAINKIE: That's correct, Mr. Peters.

MR. BOB PETERS: I apologize, Mr. Rainkie. You -- you did your homework and you -- I see on page 13 of 13, you've -- you've carried them forward to the -- to the next fiscal year.

MR. DARREN RAINKIE: Yeah, we thought that would be helpful and...

MR. BOB PETERS: I think it is, and I appreciate that, Mr. Rainkie. Mr. Chairman, this might be an appropriate time for the morning recess. I'll review my notes, but I suspect I'll be moving over to finance expense when we get back.

THE CHAIRPERSON: Thank you. Let's take ten (10) minutes.

--- Upon recessing at 10:33 a.m
--- Upon resuming at 10:47 a.m.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: I -- just looking at my notes -- and I'm sure the undertaking Mr. Warden provided earlier will -- will clearly answer this.

But, Mr. Warden, when you talked with the -- with Board member Lafond about the in-service unit costs of energy, depreciation for the plants was based on sixty-seven (67) years, as I understood it?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: So that's -- is that a 1.3 percent --

MR. VINCE WARDEN: One point three-three (1.33), I believe it is, yes.

MR. BOB PETERS: All right. And I'm sure that the calculation will show that. The interest rate, as I recorded it, was 5 percent plus 1 percent provincial debt guarantee fee? Six (6) percent total?

MR. VINCE WARDEN: That's the

assumption that was used for this purpose, yes.

MR. BOB PETERS: Right. And whether that's the actual interest rate or not, time will tell. But for comparative purposes, you've -- you've used the same interest rate?

MR. VINCE WARDEN: Correct, yes.

MR. BOB PETERS: And -- and then the point I wasn't clear on was in terms of the discount rate used to -- to bring back numbers or get numbers to 2012, what discount rate was used?

MR. VINCE WARDEN: Mr. Peters, subject to check, I believe we used...

(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, rather than put something on the record, I'm -- I'll just confirm that.

MR. BOB PETERS: And you'll just include that in your undertaking response would be fine, Mr. Warden.

MR. VINCE WARDEN: Yes, we'll do that.

MR. BOB PETERS: Yeah. All right. I'd like to move to finance expense. And I see that Mr. Schulz has joined the front table. And I'd perhaps ask

Mr. Singh to swear in Mr. Schulz, and I'll proceed with my questions thereafter.

MANFRED SCHULZ, Sworn

THE CHAIRPERSON: I wonder, before you start -- welcome, Mr. Schulz. Could you enlighten us about where you -- what you do at Hydro, just to situate you in the org chart?

MR. MANFRED SCHULZ: Delighted to be here, Mr. Chairman. And good morning to all members of the panel and Intervenors. My name is Manny Schulz. I'm curr -- currently the corporate treasurer for Manitoba Hydro.

Perhaps by way of a more broader CV, if you will, I have an architecture degree from the University of Manitoba in 1981, followed up by an MBA from -- from Man -- the University of Manitoba, also from 1988. I'm a CMA in two (2) thou -- in 1995 and became FCMA in 2009.

I joined Manitoba Hydro in 2006 as corporate controller. And then in 2008, Mr. Rainkie and I did a rotation. He was previously the treasurer, I was controller. And we did the rotation. I went into the corporate treasurer role. I've been in that role for approximately five (5) years.

THE CHAIRPERSON: Thank you very much.

MR. MANFRED SCHULZ: Thank you.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Welcome here, Mr. Schulz. You can give your -- your colleagues on the panel a -- a rest. I want to take the Board, as quickly as you will, through the finance expense chart, but to not gloss over it, because it's the second-largest revenue requirement expense in this General Rate Application.

Isn't that correct?

MR. MANFRED SCHULZ: That's correct, sir.

MR. BOB PETERS: And not only that, but it's forecast to essentially double in about seven (7) or eight (8) years as well?

MR. MANFRED SCHULZ: Finance expense does certainly become a very major component of the financial statements, moving forward.

MR. BOB PETERS: Mr. Schulz, if you can share a book of documents with your colleagues, Board counsel's Exhibit 14, Volume II, Tab 19, and particularly page 211 is perhaps where we can start with the Board.

This response to an Information Request posed summarizes the aspects of finance expense from '07 up until the two (2) test years, correct?

MR. MANFRED SCHULZ: That's correct.

MR. BOB PETERS: And the Board will note, and we should make that clear, that in IFF12, I think the finance expense in the first test year before this Board is 452 million, and in the second test year it's 444 million. So the numbers are slightly different from what is provided in this response.

But you'd agree that those are the orders of magnitude, sir?

MR. MANFRED SCHULZ: I would agree.

MR. BOB PETERS: And when we look at the gross interest paid to bond holders, Mr. Schulz, can you explain to the Board what that -- what -- what that's for?

MR. MANFRED SCHULZ: So the first line, called, "Gross interest," is primarily composed of the coupon payments that are made as part of our debt portfolio. So the -- the representations there would be for the interest payments made on our entire portfolio of long-term debt, both US and Canadian denominated.

MR. BOB PETERS: The debt appears higher in the first test year as compared to the second test year, at least in terms of the -- the finance expense, Mr. Schulz.

Is that related to this component, the gross interest on -- on the bonds?

MR. MANFRED SCHULZ: So I believe you're referring to the numbers there moving from approximately 513 million to 550 million. Is that what you're referring to, Mr. Peters? And if so, that does in fact reflect the increase in the gross interest costs through the -- through the test years.

MR. BOB PETERS: When -- what's the -- what's the length of debt that Manitoba Hydro prefers to issue?

MR. MANFRED SCHULZ: Well, I would suggest that our debt-management strategy is a good document. It's in Appendix 17 for those that would be interested in reading that. We borrow throughout the entire yield curve, both short-term debt as well as long-term debt. Our basic financing strategy is to take financing terms that are generally in excess of ten (10) years, although we do occasionally take shorter-term borrowings. So we're not heavily fixated on one (1) particular term. We do move anywhere from short-term debt, less than one (1) year, to debt that may be forty (40) years in tenure.

MR. BOB PETERS: Does Manitoba Hydro try to match the duration of the debt to the life expectancy of the asset?

MR. MANFRED SCHULZ: We don't do it in the same way that actuaries might have with an asset liability matching, if you're familiar with that concept. We do believe that with long-lived assets, that it's appropriate to have long-lived liabilities, particularly in the sense of the fixed-rate financing, and that it's a prudent way of matching some of the assets with the liabilities. So that is a consideration that we do consider when we apply our debt-management strategy decisions.

THE CHAIRPERSON: Sorry, Mr. Schulz, you referred to another source of information that we could read for -- whi -- which source did you refer to?

MR. MANFRED SCHULZ: Yes, our debt-management strategy. And it's in Appendix 17.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Schulz, when the Board has in front of it Manitoba Hydro's IFF12, which was filed as Exhibit Manitoba Hydro number 9, on page

37 it contained the electric operations financial forecast, which we call IFF Manitoba Hydro '12.

The finance expense in 2013 was approximately $12 million higher in IFF12 than it was in IFF11-2. Would you be aware of that, sir?

MR. MANFRED SCHULZ: Yes.

MR. BOB PETERS: Okay. IFF11-2 was found at Tab 3, way back in Board counsel's documents if you needed a copy.

But are you able to, at this time, tell the Board, with interest rates falling, why the finance expense went up as between those two (2) -- those two (2) IFFs?

(BRIEF PAUSE)

MR. MANFRED SCHULZ: The overall finance expense is a function of a number of moving parts. It's gross interest. It's -- I think you're -- you're suggesting it's also sinking fund. It's in -- capitalized interest. It's a number of different factors that go into play.

The -- the numbers that you're seeing in IFF12 on page 37 do show that for the fiscal year 2013, that finance expense does move from four fifty-two

(452) to four forty-four (444) in the subsequent year.

MR. BOB PETERS: Mr. Schulz, on page 211 of Board counsel's book of documents, for the two (2) test years, 2013 and 2014, we are just going down some of those line items.

Would you be able to undertake to revise this Schedule 5.6.0 by -- by updating the two (2) test year columns to -- to show the Board where the -- where the changes have been as between IFF11-2 and IFF12?

MR. MANFRED SCHULZ: I don't believe that an undertaking is required. It's actually -- I think it was filed this morning as part of the documents that were supplied to all members present here. And I think that you would find that under Exhibit 40 on that table of information that Ms. Ramage brought forward. And it's PUB/MH Second Round 64.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Schulz, you've -- you've deftly managed to escape an undertaking. I've -- I've located the document that you referred to. And I won't, on the microphone, compare the -- the two (2) items. But I believe we can -- we can work with that information. You've got the schedule updated, so we thank you for that, sir.

MR. MANFRED SCHULZ: You're welcome.

MR. BOB PETERS: Mr. Schulz, in addition to what you've told the Board related to gross interest, we also see that the provincial debt guarantee fee is recorded.

This is simply a function of the 1 percent provincial debt guarantee fee on both long-term and short-term debt on the year-end balances of Manitoba Hydro's debt?

MR. MANFRED SCHULZ: That's correct. And I think there's actually a schedule in tab 23 of the book of documents -- the PUB book of documents that describes the PGF calculation. But it's the -- the general calculation, as you've described, is correct. It's 1 percent of the outstanding advances at March 31.

MR. BOB PETERS: Mr. Schulz, moving to the amortization of the premiums or discounts and transaction costs, can you explain what that item represents?

MR. MANFRED SCHULZ: Be happy to. It's the -- when we're executing financing in the capital markets, there are occasionally situations where the arranged coupon rates are different than the -- the rates that we would have from an all-in yield perspective.

So the coupon rates are the ones that reflected in gross interest. And any kind of discounts and premiums associated with the financing are amortized over the life of the -- the piece of debt in that line item that you're describing there.

MR. BOB PETERS: We saw, Mr. Schulz, at the -- at the front end of Manitoba Hydro's IFF12, which was Manitoba Hydro Exhibit 9, there was a table that Mr. Warden and Mr. Rainkie had taken us to, just -- just reflecting that interest rates long term and, I think, short term had fallen since the -- since the previous IFF. Do you -- you're aware of that generally?

MR. MANFRED SCHULZ: I agree.

MR. BOB PETERS: Does that suggest then that debt is cheaper now than it was previously?

MR. MANFRED SCHULZ: You know, since the -- the economic downturn, primarily since 2008 and, happily, coincidental to when I started as corporate treasurer, the financing rates for long-term debt have been steadily moving downward in the last number of years. So if you were to compare our financing terms this year at the present rate compared to where it was even a year or two (2) ago, you would find it to be less expensive.

MR. BOB PETERS: Does that suggest that Manitoba Hydro would be wise to try to renegotiate some of its former debt with -- with more current debt, at least try to get a lower interest rate now, compared to what it may be locked into or had agreed to previously?

MR. MANFRED SCHULZ: Well, what you're suggesting is the notion that perhaps some of the debt is callable or we could refinance an -- existing rates of debt. And -- and there is actually an -- an Information Request on that matter that was raised. I -- I don't have that immediately in front of me.

But the reality is, is that our financing that we've arranged thus far is not open to renegotiation. We are fixed with what we already have negotiated. The refinancing that we do have would be when we have the periodic refinancings. And at that time, we can take advantage of the lower rate -- interest rate environment.

MR. BOB PETERS: Just for the completeness of the record, PUB/Manitoba Hydro First Round 29A, I think, is the -- the Information Request you referred to.

In that, if you could take it, subject to check, that you're commenting that the annual report, note 12, does not provide for early redemption or retirement with the exception of a couple of noted issues. And one (1) of them was $100 million of Hydro bonds and a $1.9 million mitigation bond.

Are you suggesting then that those are the only two (2) bonds where there is an opportunity for Manitoba Hydro to refinance at a lower rate?

MR. MANFRED SCHULZ: Those are the opp -- only opportunities that are available within the existing debt portfolio that we have to open up our existing long-term debt pieces to refinance them, if you will. Other than that, we are subject to the terms and conditions of the pieces of debt that we've already financed.

MR. BOB PETERS: And those pieces of debt contain penalties if you tried to refinance or open them up?

MR. MANFRED SCHULZ: I don't think they even allow for the opportunity to open them up.

(BRIEF PAUSE)

MR. BOB PETERS: Does Manitoba Hydro attempt to include that in its borrowings - that is, a -- a condition or a term that would allow for renegotiation under certain circumstances?

MR. MANFRED SCHULZ: I'm not sure how best to respond to that, because, as indicated, the financing terms and conditions that we have in our debt portfolio are not open -- are not callable and not subject to reconsideration or early retirement and renegotiation. Those -- those items are just not available to us on the provincial advances.

MR. BOB PETERS: And -- and the point that you are leading into is, when you call them "provincial advances," is -- is it Manitoba Hydro or the province that would end up negotiating that debt?

MR. MANFRED SCHULZ: The long-term debt is executed by the Province of Manitoba and advanced to the Manitoba Hydro Electric Board. So the terms and conditions on the original pieces of financing that the province would undertake in the capital markets are not open to being callable for early retirement purposes. Therefore, that availability does not extend back to us.

MR. BOB PETERS: Can you explain as we go down on page 211, the next item, which is the inter-company interest receivable?

MR. MANFRED SCHULZ: Yes, that's primarily associated with the interest receivable from the primary subsidiary, which is Centra Gas.

MR. BOB PETERS: And that's interest on the debt advanced for Centra Gas or -- or negotiated for Centra Gas?

MR. MANFRED SCHULZ: That's primarily associated with the -- exactly, with the -- due to parent that we provided short term, as well as the -- the other financing that we provide to Centra.

MR. BOB PETERS: Can you explain to the Board the interest earned on the sinking fund and how Manitoba Hydro gets to take that as a credit?

MR. MANFRED SCHULZ: Well, we have a sinking fund as part of our statutory obligation. And the earnings that we achieve on that sinking fund are items that you can see here, coming in as a contra or as a reduction to finance expense through these years. So to the extent that we have the sinking fund and they have earnings associated with them, we can recognize those reductions in finance expense on that line, as stated.

MR. BOB PETERS: And I don't recall the size of the sinking fund at this time, do you?

MR. MANFRED SCHULZ: Yes, the sinking fund has been steadily moving down. So, for instance, in the 2007/'08 year, the fiscal year-end balance for the sinking fund was $718 million in Canadian equivalent. And, for instance, at the actual for 2011/'12, it went down to 372 million. So there's been a steady, sort of, movement down in the volume of that sinking fund, which you can see reflected in the amounts of credit that you're seeing coming back to finance expense as well.

MR. RAYMOND LAFOND: Can I assume that means as of this day in the future, we are incurring debt without any sinking fund provisions?

MR. MANFRED SCHULZ: No, we have a statutory obligation to provide sinking fund contributions. And it's based on 1 percent of the gross debt at March 31 plus 4 percent of the sinking fund balances at March 31. So we still have that statutory obligation.

What has been happening, in terms of the reduction in the volume in the sinking fund, is that we've been able to make retirements out of the sinking fund and -- and, as a result of that, been able to reduce the overall balance. But every year, we still have to make those contributions.

MR. RAYMOND LAFOND: This obligation comes from the nego -- the terms and conditions of your agree -- of your negotiations for debt, or is it part of the Act, Manitoba Hydro Act?

MR. MANFRED SCHULZ: It's specified in the Manitoba Hydro Act. And it's also described in the notes to the financial statements too. I mean, we -- there is a sinking fund note there that you can reference if you like.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Does it follow, Mr. Schulz, that in light of Manitoba Hydro's preferred development plans, that this sinking fund is going to -- is going to increase significantly, going forward?

MR. MANFRED SCHULZ: I think our intention is to keep our sinking fund balances to a relatively minimal level. And the reason for that is that the -- the returns in our sinking funds tend to be slightly smaller than we have on our debt payment and so there's a negative cost to carry associated with the sinking funds.

So, our desire is to keep our sinking funds to an overall minimal level. And so we are moving the items out of the volumes that we have in the sinking fund, making the retirements in accordance with the availability that we have to draw out of the sinking fund, but then basically moving up the sinking fund based on the contributions. So, every year when we make a contribution we'll put it in and try to keep that down as much as possible.

The benefit of the sinking fund, and there's a number of them, but one (1) of them is -- and Standard & Poor's for instance have noted this, is that it's in a -- a form of enhanced liquidity, and at this point in time, Standard & Poor's for instance, considers that to be a positive rating characteristic.

So, we're balancing off a number of factors, but we do see that the sinking fund overall balances. We're trying to manage that so that while we are maintaining the obligation under the Manitoba Hydro Act, that we keep those balances at -- at manageable but minimal levels if possible.

MR. RAYMOND LAFOND: So, the sinking fund is all invested by the Province of Manitoba?

MR. MANFRED SCHULZ: Correct. Yeah, the sinking fund is managed by the Province of Manitoba.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Was there a consideration of asking the province to remove the sinking fund obligation on Manitoba Hydro?

MR. VINCE WARDEN: Yes, Mr. Peters. We have talked about this at previous proceedings and the province is aware that it's our intention or desire to eliminate the sinking fund. It would require a change to the Manitoba Hydro Act. It's one (1) of those things the province hasn't acted on as yet, but they -- in the meantime though, as Mr. Schulz has indicated, they have agreed to manage the sinking fund in such a way as that the amount is minimized.

We do, as well -- and maybe perhaps Mr. Schulz was getting to this, but we also use the sinking fund as part of our Foreign Currency Exposure Management Program. So it does -- as it's operating today, it does serve a purpose for -- for Manitoba Hydro.

MR. BOB PETERS: Just not sure I was clear on the management at a minimal level. But the requirement is still to fund it to the extent of 1 percent of year-end debt?

MR. VINCE WARDEN: It is, but we can -- we have some flexibility in how we draw it down. So when we have a debt maturity, we can choose to remove the maximum amount from the sinking fund for the purpose of that debt repayment.

MR. BOB PETERS: Mr. Schulz, can we

move down to the "interest allocated to construction" line item; and can you explain to the Board what this represents?

MR. MANFRED SCHULZ: Just as described, it's the amount of interest capitalized. So, as our capital projects move forward, they have interest that's capitalized and this is the contra that comes to that. So this is reduction in the gross finance expense to reflect those amount that are being capitalized.

MR. BOB PETERS: If I understood that answer, sir, the interest that is incurred on the capital projects is removed from finance expense and left as a capitalized expense?

MR. MANFRED SCHULZ: No, the amounts that are attributed to the capital projects are moved out of the gross expense that we're seeing here on the top line and capitalized, so that the amount that we're recognizing on the income statement for finance expenses reduce by that amount.

MR. VINCE WARDEN: Just to be clear, and perhaps it is, but that's only while the project is under construction. Once that project is placed in service then the interest on that capital item is reflected on the operating statement.

MR. BOB PETERS: It comes back into the top line expenses that Mr. Schulz was referring to?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Yeah. The corporate allocation, Mr. Schulz, can you explain that to the Board?

MR. MANFRED SCHULZ: That reflects the interest on the Centra acquisition debt.

MR. BOB PETERS: For how many years is that expected to -- to remain a -- an item?

(BRIEF PAUSE)

MR. MANFRED SCHULZ: The piece of debt that was undertaken in 1999 was a thirty (30) year swap arrangement. So the existing finance expense thereto pertaining will be moving forward to 2029. The expectation would be, however, that there would be a refinancing after that point in time.

So in 2029 there would be a subsequent refinancing. So after that point in time, there still would be some measure of corporate allocation at that point.

MR. RAYMOND LAFOND: Can you explain to me the difference between this corporate allocation and the intercompany interest receivable, which is also from Centra Gas, essentially due to the intercompany receivable, if I heard correctly?

MR. MANFRED SCHULZ: Yeah, so the -- due to parent, which we pro -- this is now speaking to the intercompany interest receivable -- is largely related to the short-term, due to parent, that we provide to Centra Gas. And so then there is a refi -- the -- the financing charges that we recover from Centra Gas as part of that subsidiarization comes back to a reduction, as shown here, from the MH electric purposes.

MR. RAYMOND LAFOND: What's your rate being charged for this short-term receivable?

MR. MANFRED SCHULZ: The due to parent is currently being charged at the three (3) month -- or just one (1) sec.

It's being charged at the three (3) month Canadian T-bill rate.

MR. RAYMOND LAFOND: And the other corporate allocation?

MR. MANFRED SCHULZ: The corporate allocation was being char -- for the Centra acquisition debt was -- it's approximately 6.4 percent. So it does move around and it does -- in terms of the refinancings, you can see that there's a step change that occurred in the -- from 2009/'10 to '10/'11.

So there are some periodic refinancings that occur on that debt stream all the way out to 2029. So that's still largely a fixed rate piece of debt based on interest rate swaps that we have out there.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Did I gather from your answer related to the refu -- or the Centra acquisition debt, that that amount will -- will continue in perpetuity?

MR. MANFRED SCHULZ: The response that I provided was that there's the expectation that we would be refinancing that stream of debt at the conclusion of the interest rate swap which concludes in September of 2029. So again, I was just conferring with Mr. Warden, but the expectation is that there would be continuity in subsequent refinancing.

(BRIEF PAUSE)

MR. BOB PETERS: The last item is "other amortizations"; to what does that relate?

MR. MANFRED SCHULZ: The primary aspect

to that is the -- the amortizations associated with the Winnipeg Hydro obligation.

MR. BOB PETERS: And what is that obligation?

MR. MANFRED SCHULZ: It's -- 16 million per year is associated with the Winnipeg Hydro obligation.

MR. RAYMOND LAFOND: For how many years?

MR. MANFRED SCHULZ: In perpetuity.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: What else will be included in that amount, in that line item?

MR. MANFRED SCHULZ: There are a number of other mitigation settlements that are associated with those other amortizations.

MR. RAYMOND LAFOND: Like what, for example?

MR. MANFRED SCHULZ: There would be some associated with the northern flood agreements, a number of other agreements with Nelson House, et cetera. I mean, there are a number of assorted array of -- of mitigation settlements that are in that line item.

(BRIEF PAUSE)

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Schulz, from what's included in page 211 of Board counsel's book of documents to Manitoba Hydro's Exhibit 40, it appears that these other amortizations have increased in the two (2) test years by about 3 million in the first test year and 5 million in the second test year.

Have I got that right?

MR. MANFRED SCHULZ: That's correct.

MR. BOB PETERS: Can you indicate to the Board what that relates to, what -- what the reason for the increase is?

MR. MANFRED SCHULZ: It'll be subject to check, but my understanding is there were a number of other mitigation settlements that -- new ones that came into place during that period of time and, in accordance with that, you have some changes in that line item.

(BRIEF PAUSE)

MR. BOB PETERS: Perhaps, you could --

perhaps you could confer with Mr. Warden or undertake to indicate to the Board what those additional mitigation resolutions were?

MR. MANFRED SCHULZ: We'll take an undertaking on that.

MR. BOB PETERS: All right. Thank you, sir. Mr. Schulz, you'll undertake to advise the Board as to the additional other amortization expenses in the two (2) test years, as between the IFF11-2 and IFF12?

MR. MANFRED SCHULZ: I agree.

MR. BOB PETERS: Thank you.

--- UNDERTAKING NO. 45: Manitoba Hydro to indicate the additional amortization expenses in the two (2) test years, as between the IFF11-2 and IFF12

MR. RAYMOND LAFOND: Before we leave that page, if I remember correctly, about 2 billion of the total, 9 billion, as of the end of March is US -- debt in US denomination?

MR. MANFRED SCHULZ: That's correct.

MR. RAYMOND LAFOND: And in the future, are we looking at borrowing more in terms of US denomination, or less? Like, what is the strategy?

MR. MANFRED SCHULZ: First of all, I mean, from a debt-management strategy perspective we always look to secure stable lowcost financing. So cost effectiveness is always a key consideration for us.

In terms of the denomination of the piece of debt, if we have -- if there's a requirement for a piece of debt, then the question is: Where can we obtain the best cost effectiveness for that? So, generally, that would be in the domestic Canadian markets.

However, though, we do occasionally find situations where we can occur -- or to achieve US borrowings on a global basis, and the swap it back to Canada at rates that would be less expensive than domestic issuance. So we will occasionally do that as part of our overall financing strategies, again, in keeping with the notion of having lowcost financing.

Occasionally though, we do keep some of those dollars still resonant in US denominations. So we wouldn't have made that swap and brought it back to Canada, per se.

In those scenarios, we leave those dollars in -- denominated in US dollars as part of our overall exposure management strategy; that we look to balance off our US dollar inflows and outflows to create the natural hedge. And -- and a good description of that IR, I think you'll find under CAC-MH Round 1 -- CAC 1-03 (phonetic). It provides a good explanation of some of the strategy intent that we have for that moving forward.

So in the IFF, we will -- as part of strategy we will, depending on the amount of US dollar inflows, primarily from US dollar denominated export revenues, we will have some offsetting US dollar interest payments that we will look to create that balance so that we, in effect, create some inoculation to our income statement from an exposure management program.

So as we move forward with our actual levels of US dollar debt and -- and US dollar revenues and all of the other kinds of changes we do take a close look at that; and at those points in times, looking not only at the cost effectiveness of the US debt, but also seeing where we are in the overall balancing of our effects exposure (phonetic).

MR. RAYMOND LAFOND: I understand. So you naturally, to use your expression, reduce your exposure to exchange rates with the offsetting inflows?

MR. MANFRED SCHULZ: Exactly correct.

MR. RAYMOND LAFOND: Can Manitoba Hydro actually borrow from another party than the Province of Manitoba?

MR. MANFRED SCHULZ: The long-term debt advances are all originated from the province of Manitoba. And it's my understanding that that's -- that's the manner, from a long-term debt perspective, that we have all of those advances, and that's the protocol that we use.

For short-term debt, we do have the jurisdiction under Manitoba Hydro Act to allow us to do our short-term borrowing up to five hundred (500) dol -- $500 million limit. And so that's what we can secure on our own behalf in the financial markets. And -- and that's something that we execute within the treasury division. But on the long-term debt side, for all the advances, they're executed by the Province of Manitoba.

MR. RAYMOND LAFOND: How much of your debt, for instance, today or last week, would be invariable rates?

MR. MANFRED SCHULZ: At December 31 it was 16.2 percent floating rate debt.

MR. RAYMOND LAFOND: When inter -- when interest rates are as low as they are now, you must certainly be tempted on moving it all to long-term debt because, though not everyone believes such, a lot of people are expecting interest rates to go up, and your actuaries and your pension plan to make a 7 percent return?

MR. MANFRED SCHULZ: Well, just as a little bit of a finesse to that I would agree with you, generally, but also you have to keep in mind that floating rate debt isn't necessarily short-term debt. We can take out long-term debt that's floating. In fact, we have pieces of floating rate debt that's fifteen (15) years long.

So just on the finesse of that, we have that point -- 16.1 percent of floating rate debt the -- that's both short and long-term debt.

As a general protocol, we have as our policy, our floating rate debt is not to exceed 30 percent, but we try and keep it within the target range of 15 to 25 percent. In the last number of years we had been closely watching that, as you would -- would expect and we had been keeping that at a -- the bottom-end of that range in large measure because we're seeing the -- the long-term fixed financing coming in at exceedingly low levels, too.

And in accordance with the earlier

question about asset liability matching and -- and those kind of things, to the extent that we have long-lived assets it seems very prudent for us to have long-lived liabilities, particularly if we can lock them in at fixed rates that are exceedingly affordable to Manitoba Hydro.

MR. RAYMOND LAFOND: I understand very well how variable or floating rates work on demand loans type -- type. However, on a fifteen (15) year fixed loan -- or, I guess, term -- a fixed term loan, how would you -- how does that work?

MR. MANFRED SCHULZ: On a fixing -- fifteen (15) year floating?

MR. RAYMOND LAFOND: Yes. I mean, do you revise the rate every year or every month or -- and on what basis?

MR. MANFRED SCHULZ: So floating rate Canadian debt, for instance, is -- and I'm just working off memory here, but I believe that our fifteen (15) year floating rate debt had a -- terms and conditions of a three (3) month Bloomberg BA rate, plus a fixed rate margin of around forty-eight (48) basis points, and it gets refinanced -- or, it's subject to interest rate resetting every six (6) months.

So, I think on that particular stream of debt, every six (6) months what happens is, is that three (3) month Bloomberg BA rate becomes the variable component. So whatever that ends up being -- like, it's approximately 1.2 percent right now, so in say six (6) months time if it goes to 1.3 percent then you take that 1.3 and you add the forty-eight (48) basis points and that becomes your rate for the next six (6) months.

So on the floating rate debt in that particular case, it becomes reset on the quarterly -- or, in this case I think it's semi-annual reset rates. So that's where it becomes floating.

So there's a fixed and a floating component to that. And for the extra length of time you'll often typically see that fixed-rate component have a higher com -- a higher measure to it; in this case I think it was around forty-eight (48) basis points.

MR. RAYMOND LAFOND: Thank you for this explanation, in that floating rates are not just on short-term rates, and I think I have a good understanding of what you just explained.

However, I come back to my first question. And to -- with today's rates being as low as they are, would you not be tempted to -- that 16 percent, to bring it down to just a few percentage points, if at all, and fixing these rates on these floating contracts?

MR. MANFRED SCHULZ: Well, I think as part of our overall debt portfolio, you would see that in fact our percentage of floating-rate debt has been moving down through the years in accordance with that. We can't just snap our fingers and have it happen over night. So as part of an overall strategy you're seeing us move towards the bottom end, if you will, of that target range.

There's always still benefits with floating rate debt. In some cases it comes in slightly less expensive in the -- in the short-term. But as a general measure, I would agree with you, from a strategy perspective, that we are advocating for long-term fixed rate financing; we think that's the appropriate way to go.

MR. RAYMOND LAFOND: When you've eluded to that getting down to the bottom of that range, what is the bottom? Is it 10 percent? Or is it 5 percent, or 2 percent?

MR. MANFRED SCHULZ: It's 15 percent.

MR. RAYMOND LAFOND: And this is established by Manitoba Hydro Board policy?

MR. MANFRED SCHULZ: It's interesting

that you talk about this. This was heavily canvassed at previous GRAs. The policy though for the floating rate debt not to be lower than -- not to be higher than 30 percent is a long standing policy of Manitoba Hydro; I think dating back to 1998. The target range has been -- certainly as far as I can recall and Darren Rainkie similarly so, and I'm sure Mr. Warden, as well -- the target range has been in that range for quite a while.

The consideration is, perhaps, we could move slightly below that, and there have been some discussions on that. But at this point in time, we're still -- you know, keeping to the target range of 15 to 25 percent.

MR. RAYMOND LAFOND: But, again, that 15 to 30 (sic) percent range is acce -- adopted by Board policy or -- or who makes that decision?

MR. VINCE WARDEN: Yes, Mr. Lafond, it is Manitoba Hydro Board policy.

MR. RAYMOND LAFOND: And revised every two (2) years, or looked at and reviewed every two (2) years, or so?

MR. VINCE WARDEN: Well, as Mr. Schulz indicated, it's been long standing board policy, so that range has served us well. And over the -- the long term, we've probably gravitated more towards 20 percent of floating rate debt, but given the circumstances of today, we -- we've moved it down to very close to the 15 percent.

We haven't really seen an advantage to going below that at this point in time. But if we did, based on the analysis that Mr. Schulz and others in treasury do, if we saw an advantage to moving below 15 percent then we would have to revise our policy and take it to the Board, but that has not been presented to our Board for many years as -- as a policy decision.

MR. RAYMOND LAFOND: Thank you.

THE CHAIRPERSON: Just a follow-up question. The underpinning logic of having fifteen (15) as opposed to five (5) in the current environment, what's -- what's the logic there? There must be some -- I can see variable rates, a floating rate being an advantage in declining interest rate markets, but now we're going -- we're probably heading back the other way at some point, and I'm trying to understand what the log -- what the -- what advantages does Manitoba Hydro have from having 15 percent?

MR. MANFRED SCHULZ: The floating rate debt provides -- as you were saying, there are some advantages to keeping some floating rate debt within our port -- portfolio from an economic perspective.

It's interesting too though, that it was a number of years ago we were commissioned to provide a consulting report and it was produced by National Bank Financial, whereby they looked at what should be the optimal, or what should be the range for floating rate debt within the portfolio. And as part of their analysis, one (1) of the key considerations they also looked at was that there was an interest rate hedging in effect between short term -- there was a correlation between short term interest rates and export pricing in the MISO market.

And so, based on that analysis as well as Monte Carlo simulation studies that they performed, they came through with an assessment that the floating rate portfolio for Manitoba Hydro should be between 14 and 27 percent.

So, it's not just on the economics as well; we're also seeing a hedging, if you will. So, there is a benefit to the overall volatility of the financial statements by having some interest rate hedging against export pricing. So, that's another component to it.

But as a general overall debt-management strategy, I agree with the propositions that are being put forth here, that the weight of our portfolio has in fact been moving more and more towards a higher level of fixed-rate financing.

MR. VINCE WARDEN: And at this point in time, there is a -- an advantage -- a differential that is between short term. And if we look at one (1) year versus thirty (30) year money, we're looking at differential of close to hundred and twenty (120), hundred and thirty (130) basis points.

So, they're -- you know, as along as the rates stay low then there is an advantage to going at a short term or keeping that rate variable. There's a risk of course, associated with that, and that's what we try to balance with the -- the range -- or with the proportion of short term versus -- or floating versus fixed-rate debt.

MR. RAYMOND LAFOND: I think that's one (1) of the issues in -- in my mind, in that there is a risk of doing such. And with a high level of retained earnings, then you can afford to take that risk. But retained earnings projected to come down to somewhere between 10 and 13 percent, that becomes a bit more -- makes Manitoba Hydro a bit more vulnerable to rapidly increasing rates, which would have been not forecasted.

MR. VINCE WARDEN: I absolutely agree, Mr. Lafond. That's something we have to be always cognizant of.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Maybe, Mr. Warden, just to conclude on this discussion, if the Board could find Manitoba Hydro Exhibit 9, which was the IFF12 document, and refer to page 3 of that document, Mr. Warden. I had understood -- I had understood Mr. Schulz to be indicating that -- that, at this point in time, Manitoba Hydro did not see an advantage to going below 15 percent on its floating debt. And I was wondering how Manitoba Hydro tested that.

And, Mr. Warden, you may have answered that question by saying that the basis point spread is the test. And if the -- if the spread is sufficient, while it carries a risk, that will allow Manitoba Hydro the ability to test whether or not to stay with the floating as opposed to looking to fix that debt.

Would that be a fair conclusion?

MR. MANFRED SCHULZ: Well, again, I would suggest that Appendix 17, debt management strategy, would be a good document to review on this matter. But we do look at our mix within our debt portfolio of Canadian and US and fixed and floating in a balanced fashion.

A number of considerations come into play. One (1) would be the -- the term spread, what would be the difference between fixed and floating. One (1) of the key considerations -- and, Mr. Lafond, you -- I think you were sort of alluding to this -- is just the interest rate risk as we're moving into higher levels of gross debt that we're undertaking and having the normal interest rate exposure associated with just taking on new debt.

The -- the consideration that we are actively looking at is to reduce the exposure on our existing debt portfolio, in keeping with the overall exposure we have on the new debt that's coming on. So in keeping with that and -- and consistent with that, we are starting to move the amount of floating rate debt to a lower level within the target range in recognition of the -- the fact that our overall interest rate risk profile is something that we need to really take a hard look at. It's not just on our existing portfolio, but the new.

So, Mr. Peters, one (1) of the things we do look at is the term spread and the differential between short- and long-term debt. But it's -- you know, when we're looking at financing going out thirty (30) years, we have to be careful that we don't take a myopic view and just look at the here and now. We also have to look at where the spreads have been in the past.

And there have been situations where short-term debt has been an inverted yield curve, where it's been higher than the fixed-rate financings and long-term debt. And so we just can't look at the spread now, because we're looking at financing that we want to take for thirty (30) years. And so we balance off a number of factors, sort of all coincidentally.

But to your point, Mr. Lafond and -- and Mr. Chairman, we very closely look at the overall interest rate risk profile. And that's why we have been moving it down in a measured way, down to the lower end of our target range. Will that circumstance arise where we maybe go below that? That may happen and -- and, as Mr. Warden suggested, you know, that's something that we will be taking a look at, perhaps as we move forward.

MR. RAYMOND LAFOND: I -- I would like to add that -- or ask Manitoba Hydro if it's considered, for instance, getting into interest swap agreements whereby interest rates would be fixed even before you start building in a project?

And -- and please let me explain. There

are some corporations who are doing that because they know -- they -- they signed firm contracts for exports or rentals or whatever. And then they know what their revenues are going to be for the next twenty (20) years, for instance. So, therefore, they immediately fix their rates so that they can maintain that margin and not be caught with fixed revenues for twenty (20) years, but having no idea where their fixed costs are going to be. And especially in projects, whether it's building projects for rental purposes or whatever, where the capital com -- component is major and -- and makes a corporation very vulnerable.

MR. MANFRED SCHULZ: The use of interest rate swaps is something that we do consider. And -- but there is a cost to undertaking those -- those costs. And there's the forward points that you have to take a look at.

In a circumstance, for instance, where we have seen in the last year or two (2) the overall fixed-rate financing at the point of incurrence being on the downward movement, to take a forward position may end up costing us more.

So we're -- in the environment where we see -- start to see a rapid escalation in the interest rate environment, then we become more motivated to undertake exactly the type of technical strategy that you're -- you're discussing. And that's something that the province, as well as Manitoba Hydro, would be certainly looking at, in terms of locking down financing as required.

MR. VINCE WARDEN: I might just add to that, Mr. Lafond, that in the National Bank study that was done for Manitoba Hydro, I believe it was three (3) years ago now, it was interesting they did see a correlation between prices on the export market and interest rates.

So, yes, it is important for us to lock down as much as we can or should, where it's appropriate to do so, with respect to our costs to the extent that our revenues are fixed. But our rev -- a lot of our -- approximately 50 percent of our revenues on the export market thereabouts are -- are variable.

So the variable -- the variation of those revenues, as this study indicated, is correlated, to some extent, with interest rates. So there is that -- that consideration, as well.

MR. RAYMOND LAFOND: Thank you.

THE CHAIRPERSON: Could you walk me through the -- how you finance, for example, Wuskwatim -- Wuskwatim, you know, from the date of -- from the date of which you start doing your prep work to the point where, you know, the dam is operating, how that was financed, in -- in general terms?

MR. MANFRED SCHULZ: Mr. Chairman, in -- in general terms, when we look at our overall corporate financing, we look at it on a consolidated basis. So in treasury, every day we look at what our cash positions would be, in terms of our utilization of -- of cash, cash burn for capital or operating expenditures, as well as what we're receiving on an incoming basis.

Based on that kind of a cash analysis on a consolidated basis, that drives our decisions about when we need to have additional cash coming in. At that point in time, if we reach a situation where we need to have an extra influx of cash, then we consider going -- either taking a short-term debt or we take a long-term debt.

We typically do not associate our actual treasury financings with any one (1) particular project and don't do specific borrowing. Not to say that we can't, but in general measure, we borrow and look at our cash management on a consolidated basis.

So with respect to Wuskwatim, we did not take out any specific borrowings targeted -- identified specifically for Wuskwatim. The debt that was attributed to the project was due to -- the calculation of that was derived as part of the agreements, in terms of the -- the notional amounts of, you know, which pieces of debt would be attributed to them.

But from an actual cashflow basis, we don't have $200 million increments that would go to Wuskwatim. And -- and we don't leave that in a separate bank account and just draw that down, because we look at everything from a consolidated perspective, in terms of our cash and sources and uses of cash.

THE CHAIRPERSON: So in terms of --

MR. VINCE WARDEN: Sorry, I was just going to add to that a bit further. Every -- every year we go to the province for Loan Act authority. So there -- we actually get authority to borrow our upcoming -- look at our upcoming requirements, including such projects as Wuskwatim, Keeyask, all of our capital requirements.

So we go through a process and identify what our capital requirements are, look at what the -- our internally generated funds are, take into account our current casp -- cash position, and then request additional authority from the province. And they'll actually have a Loan Act that identifies Manitoba

Hydro's requirements for the upcoming year.

So that could be in the order of $2 billion, based on -- on the -- on the amount of borrowing or constru -- capital con -- driven largely by the amount of capital construction that we've got going forward.

So in -- when Wuskwatim was constructed, that would have been part of that Loan Act authority that we would have had authorized by the province each year.

THE CHAIRPERSON: The attribution of interest cost during construction and after -- during construction would be based on a formula that you use, is that --

MR. VINCE WARDEN: Yes, we have a formula for capitalizing interest which is based on -- maybe I'll get Mr. Rainkie to just summarize how we -- how we derive that formula.

MR. DARREN RAINKIE: It's a -- it's a calculation of the thirty (30) year borrowing cost at the point in time where, as Mr. Schulz indicated, when our debt line gets to $200 million, we take it from a floating rate to a fixed rate so we just look in the market place or Mr. -- Mr. Schulz' staff look in the marketplace at that point and determine what Manitoba

Hydro's thirty (30) year borrowing cost would be at that point and that's what's attributed to the project.

MR. RAYMOND LAFOND: I'm sorry, you move from a floating rate to a fixed rate or floating -- floating term to a fixed term?

(BRIEF PAUSE)

MR. MANFRED SCHULZ: Just as a point of clarification, are you asking for information on the interest capitalization rate or the long-term debt that's attributed to the Wuskwatim project?

THE CHAIRPERSON: I think primarily the -- not the capitalization rate but the other one and -- and -- but the capitalization rate I think we should probably understand that too.

MR. RAYMOND LAFOND: If I can add to this, I can understand that when you look at your whole debt structure you would say, Well, our average term is such and our average rate is such and is that what you are charging on a new construction project; or rather, taking what the -- the -- the current terms and rates in the current markets to charge to that project?

MR. MANFRED SCHULZ: Okay, so just perhaps to provide some clarification and assistance, there are two (2), I think, questions that are being raised here. One (1) has to do with the interest capitalization rate and how that's derived and then the other one (1) was how is the -- what's the derivation of the long-term debt issues to the Wuskwatim project. So, if I could perhaps have the forbearance to answer or at least start the -- the discussion on those two (2) separate items.

So, on the first one (1) which is the attribution of the long-term debt to the Wuskwatim project, I think Mr. Rainkie provided the essence of that answer. Is that we have a calculation of a revolving line with the WPLP project and short-term debt. And at that point in time when it reaches a certain level, then we notionally assign, move it from short-term to the fixed-rate financing. And we don't actually go to the marketplace and secure $200 million of debt specifically for Wuskwatim but it is a notional assessment of that based on contractual terms in the agreements.

And I think one more thing, subject to check, but I believe what we're looking at there is we look at what the thirty (30) year financings would be from the capital markets and we -- we look at what on that particular day, what the long-term interest rates would be on a notional piece of debt at that point in time. And that's what we move forward into the agreements into for the Wuskwatim project.

With respect to the interest capitalization rate and I see that Mr. Rainkie is conferring with the back row but for the interest capitalization rate, what we look at is the -- the interest rate that will be in effect for that fiscal year.

So, for the fiscal year that would be, for say the '12/'13 year, that it would be the amount of interest that would be -- the weighted average cost of debt, if you will, during that fiscal year is part of the IFRS adjustments that we now have. That that's -- that's the amount of interest rate that's associated to the interest capitalization calculations. And you can see that coming in again as a contra to our overall gross interest expense.

MR. DARREN RAINKIE: Maybe I'll just try. We seem to be crossing each other's territories here. We work closely together on this kind of stuff, so --

MR. RAYMOND LAFOND: Well, you changed jobs with one another, so.

MR. DARREN RAINKIE: We did. It gets

kind of mixed up in your head after a while, who's doing what. But when it comes to the -- the capitalization rate, really, as Mr. Schulz described, what -- what we're doing is we would take -- when -- when we're trying to determine a capitalization rate, let's say, for 2013/'14, we would take our weighted -- we would look at our current debt portfolio. And then we would look at the borrowings that we plan on making in -- in that particular year.

And we would weight the rate between the outstanding borrowings and the new borrowings so that it's a weighted average rate under -- that's the requirement under IFRS. So it's really just a weighted average of the debt that's expected to be outstanding in the -- in the particular year that we're calculating the rate for, if that helps to clarify things.

So -- so, sorry. You might have -- you might have 8 billion worth of debt before the year in question, and you might have plans to -- to borrow a billion dollars worth of debt in the year in question. So you're just weighting it between the 8 billion that you have on -- you have in your -- you already have in your portfolio, and the 1 billion that you plan on issuing in the following year.

MR. RAYMOND LAFOND: I guess, I -- I

want to be clear on that. If, for instance, and --and I'm going to use a very simplistic example, your weighted average rate cost of interest was 5 percent and you were building a brand new project and it could all be done in the month of December of 2013. If a major catastrophe happened in the world and rates went up to 10 percent, would that new project be charged at 15 perc -- at 5 -- at 10 percent, or a weighted average?

And I'll tell you why I'm saying this. Like any project, usually when people look -- I mean, if -- if, for instance, you want to build a new building for rental purposes, you look at the financing costs of -- of this new capital, and not an average cost throughout the corporation. You understand my question?

MR. DARREN RAINKIE: Yes, I do. And -- and, as has been indicated, we do have the capability of -- of -- of specifically attributing a debt issue to a particular asset. But we haven't done that thus far. Our policy has been to look -- manage our requirements on an overall basis and use the weighted average cost. Because our customers are going to have to pick up the weighted average costs anyway, right? I mean, it's -- it's -- it doesn't -- if we act -- if we -- if we change the way that we calculate interest cap on a particular project, it doesn't change the bottom line finance expense of the company. It's really just what -- what project you're attributing costs to. And, thus far, we have used the overall capitalization rate for all of our projects.

MR. RAYMOND LAFOND: I accept that, except in terms of future projections, it can ha -- it can be a major factor in influencing as to whether or not you go ahead with a certain project.

MR. VINCE WARDEN: When we're looking at whether or not we proceed with a certain project or not, though, it's -- it's usually driven by -- by need. So -- well, in fact, it's always driven by need at some point. So if we're looking at Keeyask generating station, for example, we need to -- we need new power to supply the Manitoba load in that 2022 time frame. So we'll look at the cost of finan -- financing Keeyask, versus the cost of financing the alternative. So we're always comparing to an alternative when we're looking -- making an investment decision.

With respect to the -- the rate that we capitalize, though -- and -- and there's really no reason, if we were to go out and borrow specifically for a project like Keeyask, a large project like

Keeyask, then -- then we could attribute that borrowing directly to that -- to that project, as we did, actually. When we go back in time, we did that for Limestone. So we went out and specifically borrowed for the Limestone generating station. We had a specific interest capitalization rate that we used for that -- for that project.

We chose not to do that with Wuskwatim, because Wuskwatim, relative to some of our other plants, was quite small. And -- and there were agreements that we had with the -- our partner on that as well, as to how the financing was to be charged to the project.

But there's really no reason why we couldn't do that -- we couldn't do that. We could assign a specific borrowing to -- to a project.

THE CHAIRPERSON: I'm somewhat familiar with the way in which MPIC and the province work with respect to the investments, which is the flip-side of where you are.

Now, could you enlighten us about the management of your borrowings? The relationship between you and the province, within Manitoba -- between Manitoba Hydro and the province in term -- from a -- from a day-to-day standpoint or a yearly standpoint, how that works?

MR. MANFRED SCHULZ: As previously indicated the long-term debt advances are issued by and executed by the Province of Manitoba, however, we provide them with the guidance in terms of which particular term we want, which denomination we'd be looking at, fixed versus floating, those are determinations that we make.

Traditionally what happens is that out of the treasury division, based on looking at the cashes -- cash flows that occur on a daily basis, when we reach a certain measure of cash requirement then a recommendation will come out of treasury to the chief financial officer for a recommendation to say, for instance, we would like to secure a Canadian financing for a term not to exceed 'X' amount of years with a range of interest rates to be 'X' and 'Y' and then we would get the approval from the chief financial officer, provide that direction to the Province of Manitoba, and then they would seek to execute that.

In advance of that, however, there are ongoing conversations that occur between treasury division at Manitoba Hydro and the treasury division at the Province of Manitoba and we have ongoing discussions with them, as well as Manitoba Hydro has with the capital markets. So in treasury, we have capital market discussions with all of the different financiers so that we know what happens on the pulse of the capital markets on any point in time. We know what the arbitrage is in terms of the cost effectiveness between Canadian issuance versus US issuance. So we keep a very close eye on that. But we do work with the Province of Manitoba on such matters.

So for instance, on the US debt piece of issuance, the size and quantum of that piece of debt is traditionally very large, typically a minimum of $500 million. So that whole quantum is too large for us to -- for instance, to take on, so then we would work with the Province of Manitoba and -- and this would be understood and we work together in a collaborative fashion to determine if there is an appetite for them to take some of that financing, if we would take on some of it. So we work in collaboration with the treasury folks at the Province of Manitoba.

In terms of the actual working relationship, I would say it's very good and it's very close, but from a directional perspective we consider that we provide them the direction and give them a range so that as the capital markets move on any particular day - and they do move around - so we give them a range, let's say, we want the interest rate to be between here and here, and then they go and they execute that. So in terms of the working relationship I would say it's very good, but we are the ones that provide them the direction.

In terms of MPIC, you know, I'm not in depth familiar with the manner in which they -- they handle their investments and their -- their working groups and -- if you will. But from Manitoba Hydro's perspective, we consider ourselves to be the determinant of our debt portfolio.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: If I could try to finish up this area of finance expense before I request the lunch recess. Let's turn to page 212 and 213 of the book of documents at tab 19.

This information, Mr. Schulz, is now -- is now going to be updated by IFF12 and the balance sheet provided in that document, correct?

MR. MANFRED SCHULZ: Correct.

MR. BOB PETERS: And if I read it correctly, out by 2032, the net assets will go up to as much as $31 billion and the net debt would go up to about $28 billion.

Would you accept that, subject to check?

MR. MANFRED SCHULZ: Subject to check.

MR. BOB PETERS: Okay. Turning to page 215 -- well, just before I do that, one thing that struck me on the -- on the net debt is that it's got a downward slope at some point in time. And I -- I always remember Mr. Warden telling me that, in essence, debt is -- all debt is good debt and never paid off. Mr. Warden, help me out here.

Is -- even though debt eventually will go down for this Corporation?

MR. VINCE WARDEN: Yes. Not sure whether I will see it or not, but... Yes, our good debt/bad debt discussion goes back a few years, Mr. Peters. But good debt is -- is debt that we borrow for investment in new facilities, as -- as we do here.

But when we put a station like Conawapa in -- in service and we start generating significant revenues after the in-service date in Conawapa, and that's what we're seeing here, the revenues are contributing towards a reduction in that debt.

MR. BOB PETERS: There's no major projects planned right after Conawapa that are going to keep driving that debt higher?

MR. VINCE WARDEN: No, that's right.

MR. BOB PETERS: And I'm sure you'll see it, Mr. Warden. And we'll have that discussion. If we turn to page 215, the only point on this document -- this has also been updated by -- I think the Board will find at page 2 of IFF-12, which is Manitoba Hydro Exhibit 9, some of this information is -- is updated.

The most significant of which, Mr. Warden, appears to be that the debt equity ratio -- I was going to say bottoms out, maybe it tops out at 90 percent debt, 10 percent equity, out in 2022, around that time?

MR. VINCE WARDEN: Yes, that's right, Mr. Peters.

MR. BOB PETERS: And I know the -- the debt equity ratios will -- will change from what's depicted here. But I think the Board has that information at least in summary form on page 2.

To respond to a question about the -- the interest rates, perhaps we can -- I guess en route to getting there, page 216 of the book of documents, Mr. Warden.

Just remind the Board that back in 1992, when Limestone was -- was being constructed, the debt was 94 percent?

MR. VINCE WARDEN: The debt ratio was

94 percent; 94 debt, 6 percent equity, yes.

MR. BOB PETERS: And in the drought year of 2003 and '04, particularly '04, the debt equity ratio -- the debt reached 87 percent with 13 percent equity?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: If we follow that line item across, Mr. Warden, not only do we see the large net-income loss suffered by Manitoba Hydro, but the DBRS bond rating didn't correspondingly take a downturn at that point in time, did it?

MR. VINCE WARDEN: No, it didn't. And that's why it's so important for Manitoba Hydro to keep in -- in close contact with its rating agency. So they always understand what our situation is, and that's a good example of that.

MR. BOB PETERS: And -- and that's something you do on an annual basis?

MR. VINCE WARDEN: We do.

MR. BOB PETERS: Perhaps you travel there or they travel here?

MR. VINCE WARDEN: Typically they travel here. And it's -- it's really more than an annual basis. We're -- we're in contact with them whenever the need arises.

MR. BOB PETERS: Quarterly?

MR. VINCE WARDEN: Formally on an annual basis. But they don't hesitate to pick up the phone and call us if they have a question.

MR. BOB PETERS: All right. Looking at the interest sensitivity, which is on page 217, this was prepared based on IFF11-2, correct?

MR. DARREN RAINKIE: That's correct, Mr. Peters.

MR. BOB PETERS: And what it shows the Board, if we can cut to the chase, Mr. Rainkie, is that if the interest rate increases at 1 percent and the Board follows it over, there's going to be an extra billion dollars of long-term debt needed.

MR. DARREN RAINKIE: No, I think what it's showing is our retained earnings would go down by 724 million, Mr. Peters.

MR. BOB PETERS: You're -- you're ahead of me on that, Mr. Rainkie. I was just looking at the top lines. That the long-term debt issued would be $18.2 billion over a ten (10) year period, but if it went up 1 percent on average, that would increase it by a billion dollars?

MR. DARREN RAINKIE: Yes, Mr. Peters, I see where you're at now.

MR. BOB PETERS: All right. And what you've done for the Board is you've gone right to the bottom line, and you've -- you've shown that things like interest capitalized or on assets during construction would decrease, and the end result would be when the netting is done, that net income would be down as much as three-quarters of a billion dollars?

MR. DARREN RAINKIE: Yes, the 725 million, yeah.

MR. BOB PETERS: And turning the page to 218 just to conclude this area. If the interest rate goes down 1 percent, then there's a benefit, although not proportionally correct and directionally correct, but not exactly the same magnitude, correct?

MR. DARREN RAINKIE: Yes, it's pretty close to the $700 million figure. I mean --

MR. BOB PETERS: And what does that tell Manitoba Hydro -- or what should that tell the Board, is that -- that the bottom line on your calculations is tied into interest rate?

MR. VINCE WARDEN: Well, it's som -- it's intended to convey the -- the risk that Manitoba Hydro fac -- faces with the change, plus or minus, in -- interest rates. I think it's as simple as that, Mr. Peters.

MR. MANFRED SCHULZ: And I would also offer that when we're looking at the retained earnings, that further to the conversation I think Mr. Lafond had with Mr. Hacault on day 1, that retained earnings are not just to buffer against drought; that you can see that here the interest rate risk that we do see as a corporation that needs to be considered as part of our retained earnings and our buffering that we have on our debt-equity ratio.

MR. BOB PETERS: At the front end of IFF12, page 3 of Manitoba Hydro Exhibit 9, Mr. Warden, you set out that Manitoba Hydro had adjusted its long term interest rates.

You recall that?

MR. VINCE WARDEN: Yes, Mr. Peters. Our assumption of long term interest rates, yes.

MR. BOB PETERS: And so, that assumption has already been built into IFF12?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And the resulting impacts will be seen, particularly for Manitoba Hydro, when they get -- when the Board looks at page 37 of the IFF12?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: All right, I think Mr.

Chairman, recognizing the hour, this would be an appropriate time for me to stand down. Thank you.

THE CHAIRPERSON: I suggest we -- we recess and we restart the proceedings at one o'clock.

--- Upon recessing at 12:06 p.m.
--- Upon resuming at 1:02 p.m.

THE CHAIRPERSON: Good afternoon. I believe we're ready to resume the proceedings. We have some exhibits to acknowledge?

MS. PATTI RAMAGE: Yes, we have -- I -- I believe another four (4) have been distributed, the first of which, which is -- we're suggesting be marked Manitoba Hydro Exhibit 57. And that is a response to Manitoba Hydro Undertaking 32 regarding peer information for the companies relied on by Gannett Fleming for its currently approved life estimates.

--- EXHIBIT NO. MH-57: Response to Undertaking 32

MS. PATTI RAMAGE: The next, which -- exhibit is Undertaking 35, which we suggest be marked Exhibit 58. And that deals with Pointe du Bois, the retirements, and clarifying the vintage calculation.

Again, that's Exhibit 58.

--- EXHIBIT NO. MH-58: Response to Undertaking 35

MS. PATTI RAMAGE: Exhibit 59 again was an undertaking which Mr. Kennedy took. That was Undertaking number 36. And that's the provision of two (2) detailed calculations using an example of investment installed in 1923 with a lifespan to 2063, and detailed calculations assuming plant installed in 2013 with a lifespan to that same date. So again, that's Undertaking 36 being marked as Manitoba Hydro Exhibit 59.

--- EXHIBIT NO. MH-59: Response to Undertaking 36

MS. PATTI RAMAGE: And then lastly, Exhibit number 60 is Mr. Schulz's CV.

--- EXHIBIT NO. MH-60: CV of Manfred Schultz

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Thank you, Mr. Chairman. I'd like to start this afternoon in my discussions with respect to Manitoba Hydro's financial targets. And to the panel, I don't want to repeat what we've canvassed already, but one (1) of the three (3) main financial targets used is the interest coverage ratio.

Isn't that correct, Mr. Warden?

MR. VINCE WARDEN: Yes, it is.

MR. BOB PETERS: And when we talk of these financial targets, they become iterative calculations that work into the IFF once they're set.

Wouldn't that also be correct?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And so they do impact again on the rate increases that are sought by Manitoba Hydro?

MR. VINCE WARDEN: They do.

MR. BOB PETERS: Now, the interest coverage ratio is currently set at a ratio of one point two-zero (1.20), Mr. Warden?

MR. VINCE WARDEN: That target is set at one point two-zero, (1.20), yes.

MR. BOB PETERS: Was it -- was it lower than that back in the mid-2000s?

MR. VINCE WARDEN: Yes, it was at one point one-zero (1.10) at -- at one point.

MR. BOB PETERS: In approximately 2005?

MR. VINCE WARDEN: That sounds right, yes.

MR. BOB PETERS: All right. And the essence of the interest coverage ratio is that Manitoba Hydro wants to be able to pay 100 percent of the interest on its current debt that's payable in the year?

MR. VINCE WARDEN: Yes, it's an indication of the extent to which we are capable of paying bond holders interest on -- on the money that is loaned to us.

MR. BOB PETERS: And the ratio being one point two-zero (1.20) suggests that there's 20 percent more than would be absolutely, positively needed. So there's a bit of a cushion?

MR. VINCE WARDEN: It provides a -- a measure of comfort, yes, recognizing that our net income is subject to variation primarily due to water conditions.

MR. BOB PETERS: What you're saying, Mr. Warden, is that to the extent that this cushion of 20 percent isn't needed, the Corporation would expect that it would end up in the net income of the Corporation?

MR. VINCE WARDEN: Well --

MR. BOB PETERS: If it wasn't needed to pay a debt?

MR. VINCE WARDEN: It -- it -- yes, it will end up in the net income and -- and retained earnings of the Corporation to the extent that that, with the other ratios, are met.

MR. BOB PETERS: Well, it would be used -- the 20 percent cushion, if you -- if it wasn't needed in a particular year to pay the interest on debt, it could be used to pay the cost of major capital projects?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And so that's considered internally generated funds?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: And if it wasn't used in that capacity -- or even if it was used in that capacity, I suppose -- it would still flow to the bottom line as a contribution to net income?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Turning to the capital coverage ratio, this capital coverage ratio used to also be lower than its current rate, didn't it, Mr. Warden?

MR. VINCE WARDEN: Actually, I think

it's been one point two-zero (1.20) for some time. I don't recall it being lower than that.

MR. BOB PETERS: Mr. Warden, I'm not sure much turns on it this time, but my -- my marginal note to myself was that back in '07/'08 in the corporate strategic plan, the capital coverage ratio was one point zero (1.0) -- or was to be greater than one point zero (1.0).

MR. VINCE WARDEN: Okay, yes, I'll accept that Mr. Peters.

MR. BOB PETERS: And so in the last general rate application before this Board, it was increased to one point two-zero (1.20). Would you accept that?

MR. VINCE WARDEN: Yes, I will.

MR. BOB PETERS: And this is a amount that is built into the IFF to provide Manitoba Hydro with sufficient revenues from rates charged to consumers to allow Manitoba Hydro to pay 100 percent of the base capital expenditures each year?

MR. VINCE WARDEN: Yes. To the extent that the ratio -- the capital coverage ratio is greater than one (1), there'll be sufficient -- there'll be funds that could be used to contribute for other purposes.

MR. BOB PETERS: Right. And when we're talking about paying off 100 percent of the base capital each year, this is the type of capital, if I might, that perhaps Mr. Hall was talking about, in terms of some of the refurbishment of the distribution system and the -- the capital program that the Corporation undertakes on a regular basis?

MR. VINCE WARDEN: Yes, it's referred to as base capital by Manitoba Hydro, but "sustaining capital" is another term that's used. It's -- it's intended to sustain the current system and to provide for -- well, more than that actually, because it does provide for increased low growth or customer services.

MR. BOB PETERS: The base capital, what we've also then now called the sustaining capital, that excludes the major capital projects, correct?

MR. VINCE WARDEN: It excludes major generation and transmission, yes.

MR. BOB PETERS: All right. And with the capital coverage ratio set at one point two-zero (1.20), that dollar amount is then iteratively built into the IFF that Mr. Rainkie constructs?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And when it's set at one point two-zero (1.20) there's a 20 percent cushion

-- in my words, "cushion" -- that would be available again to apply to other matters as the Corporation determined?

MR. VINCE WARDEN: Yes.

(BRIEF PAUSE)

MR. BOB PETERS: And would the Board be correct in understanding that, again, of that 20 percent cushion for the capital coverage ratio, those monies could be applied on the major capital projects, such as Keeyask, Conawapa, and Bipole 3?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: Those would also be considered internally generated funds -- that is, that extra 20 percent -- Mr. Warden?

MR. VINCE WARDEN: They -- they would, yes.

MR. BOB PETERS: Does Manitoba Hydro acknowledge that with the 20 percent surplus built into the capital coverage ratio and, I suppose, the 20 percent surplus built into the interest coverage ratio, Manitoba Hydro's revenue requirement is increased over what it would be if the targets were less?

MR. VINCE WARDEN: I think we have to

take into consideration not only the interest coverage and capital coverage ratios, but also the -- the debt ratio. So it could very -- we could have a situation where the rate increases are being driven more so by the dr -- debt ratio than they are by the other two (2) ratios.

MR. BOB PETERS: Is that the case before the Board in the two (2) test years?

MR. VINCE WARDEN: Well, there's a balance. We certainly -- in -- in recent years, we have tended to focus more so on the debt ratio than we have on the other ratios, but they're all important though. They're all measures that the rating agencies look at. And, you know, they compare us to other -- other utilities in Canada. And, invariably, they'll -- they'll comment on the weakness -- the weakness of our ratios compared to other utilities in Canada.

So I think if we just strive for one (1) -- one point zero (1.0) on both interest coverage and capital coverage, we would probably run into some difficulties with the credit rating agencies on that.

MR. BOB PETERS: You have nothing in writing from them that would confirm that from their perspective?

MR. VINCE WARDEN: Other than in the

rating reports as they -- they continue -- continually refer to the -- the weak ratios of Manitoba Hydro relative -- relative to other utilities.

MR. BOB PETERS: That's been a longstanding comment by them, would that not be true?

MR. VINCE WARDEN: Yes. Yes, it is. It has been.

MR. BOB PETERS: And perhaps to -- to look at that point on page 220, at Board counsel's book of documents is a restatement of IFF11-2, where the capital coverage ratio is set at one point zero (1.0).

You've got that, do you?

MR. VINCE WARDEN: Yes, I do.

MR. BOB PETERS: And to look at the point, under 2013, the rate increase would be the same as currently applied for. But in 2014, the rate increase would be 0.10 percent if a capital coverage ratio of one point zero (1.0) was used?

MR. VINCE WARDEN: That's right. And -- and that's why it's -- it's important to not look at the ratios in isolation, because you can see on that same exhibit -- or on the same page, the equity ratio over that period of time drops as low as 6 per -- 6 percent by the end of the ten (10) year period.

MR. BOB PETERS: But the Corporation is

prepared to allow it to fall as low as 10 percent in its most current IFF. Isn't that correct?

MR. VINCE WARDEN: Well, we -- we have -- again, it comes back to what we talked about many times, the -- that balance that we're trying to achieve between customer sensitivity and fiscal responsibility. And, yes, for a temporary period, we are allow -- allowing the ratios to weaken.

MR. BOB PETERS: And would it also be correct though that on this -- on page 220, Manitoba Hydro has simply done the iterative calculation of reducing the capital coverage from one point two-zero (1.20) down to one point zero (1.0), with no adjustments to the -- to the other expense items?

MR. VINCE WARDEN: Yes, that's just to respond to this Information Request.

MR. BOB PETERS: All right. So this doesn't include any other management decisions that could be made if that was the reality, in terms of how to manage the -- the losses or the -- the equity ratio?

MR. VINCE WARDEN: Yeah, I think it points to the -- the fact that really you can't look at one (1) ratio in isolation. You have to look at the ratios together.

MR. RAYMOND LAFOND: Can I simply

intervene? And -- and I hear you when you talk about Manitoba Hydro accepting that its equity ratio come down temporarily. But the temporarily is twenty (20) years. And it's really planned, rather than because of an unforseen long drought or something to that effect.

MR. VINCE WARDEN: It is. Remember, drought is built into the forecast though. So we -- we -- assuming that we have average water flow conditions over that twenty (20) year period, it -- a drought will occur, and we will still get back to that 25 percent equity at the end of that twenty (20) year period.

That's though -- that's what we keep reiterating to the credit agencies, is that, yes, we are entering this period of major capital investment, our ratios will weaken, but they do recover. They do recover and it's -- that's how. We have to keep reinforcing that the ratios do recover with the assumptions that we have built into the forecasts, of course. And that assumes that there will be rate increases along the way.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: What you're telling the Board, Mr. Warden, is that the credit agencies are comfortable with the decrease in the equity ratio and the increase in the debt ratio that's forecast by Manitoba Hydro?

MR. VINCE WARDEN: They -- they've never gone so far as to say they were comfortable. They have though accepted -- they accepted the reasons why the ratios have -- have deteriorated or declined the way they -- they have in the fore -- are projected to in the forecast.

MR. BOB PETERS: Would the -- would the rating agencies been made aware of the IFF12 filed, I think, back on December 10th?

MR. VINCE WARDEN: Just a moment.

(BRIEF PAUSE)

MR. VINCE WARDEN: Yeah, the timing is such that when we reviewed our forecast with Moody's, Standard & Poor's, we would have -- only have IFF11-2 at that time. However, DBRS would have received -- because they were here later, they would have received IFF12. So we always review the most recent financial forecast with the rating agencies.

MR. BOB PETERS: There's an expectation by them that the equity ratio will deteriorate during times of major capital construction?

MR. VINCE WARDEN: Yeah. Yes, they -- they accept that as a natural consequence of the major capital investments that we're undertaking.

MR. BOB PETERS: Rate increases would be just too punitive to try to maintain a capital structure of 75/25 during the major capital program that Manitoba Hydro is envisioning?

MR. VINCE WARDEN: Yes, we would never recommend rate increases that would be necessary to maintain 75/25 throughout.

MR. BOB PETERS: We saw before lunch that the -- that the -- during the Limestone years, we saw the debt-equity ratio. We also saw what happened during the drought in 2004.

Would it be correct to conclude the that the provincial debt guarantee fee is a major source of comfort for all the rating agencies?

MR. VINCE WARDEN: Oh, absolutely, yes. They -- without -- not so much the fee, but the guarantee of the province, yeah.

MR. BOB PETERS: I'm sorry, did I say -- if I -- if I said the fee, I meant the provincial debt guarantee --

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: -- is of comfort to

the debt rating agencies because the province is backing Hydro's debt.

MR. VINCE WARDEN: Yes, absolutely. We wouldn't -- we wouldn't receive the favourable rating we do without that guarantee.

MR. BOB PETERS: Does the position of the debt rating agencies remain the same even if the major generation is being advanced over Manitoba Hydro's domestic requirements to serve an export load?

MR. VINCE WARDEN: They understand the fact that it's necessary for Manitoba Hydro to negotiate long-term firm contracts to -- to absorb the large quantities of generation that comes on stream when we build plants such as Keeyask and Conawapa. So -- so, yes, they're -- they're accepting the fact that the timing of those contracts and -- and the commitments we have to make won't always coincide exactly with the in-service date of those facilities.

MR. BOB PETERS: Manitoba Hydro's own board of directors hasn't sought a stronger capital structure when pre-building for export contracts, has it?

MR. VINCE WARDEN: No. But, you know, Manitoba Hydro's board of directors is -- is apprised of Manitoba Hydro's financial position every month.

They're totally supportive of the financial structure that we are -- that we have today and -- and what's required to maintain that structure over the long term.

MR. RAYMOND LAFOND: They're supportive. But there has to be quite a bit of concern with the equity rate going down to 10 percent?

MR. VINCE WARDEN: Oh, yes. I wouldn't say there -- they've absolutely expressed concern. They realize, you know, there -- there's risk associated with any investment program. And they're fully cognizant of the risks that are -- are before us.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Maybe just to put numbers on it in that last discussion with Board member Lafond, if we turn to page 223 of the book of documents, this IFF run, I'm sure, by Mr. Rainkie and his colleagues, was -- was designed to show the Board the type of rate increases that would be required in order to achieve, at this point, an 80/20 debt equity.

And if we look down to the third line from the bottom, we see that 20 percent equity ratio is -- is maintained out through the planning horizon on -- on both page 223 and 224. But if we just look to the two (2) test years, Mr. Warden, 2013 and 2014, the increase in 2013 would be as requested at two (2) point -- sorry, at three point five-seven (3.57).

But then for 2014 it goes up to close to 15 percent followed by another 15 percent rate increase before it would flatten out, correct?

MR. VINCE WARDEN: Correct, yes.

MR. BOB PETERS: Why is it that it wouldn't be feathered in, so to speak, as you did with your IFF12? Why is it that -- that it maintains that debt-equity ratio of 20 percent equity by the infusion up front as opposed to more gradual throughout?

MR. VINCE WARDEN: Well, I -- I think that was just responding to the information request. It -- it was -- I believe the information request is --

MR. BOB PETERS: No, I -- I appreciate -- I appreciate that, Mr. Warden. But wouldn't one expect that the capital structure, once it got to 80/20 in the early years, would deteriorate from that and it -- with -- without rate increases of some significance?

And it appears here, for the first ten (10) years there's really no rate increases needed after the first -- after 2015.

MR. VINCE WARDEN: Yeah, but it's got an upfront 30 -- 30 percent rate increase, so.

MR. BOB PETERS: So that -- you're just

telling the Board that's sufficient to carry it?

MR. VINCE WARDEN: Yes. Yes, that's what this -- this demonstrates, yes.

MR. BOB PETERS: And just to perhaps connect the dots to the IFF12 that Manitoba Hydro filed, Manitoba Hydro was accepting of the deterioration in the equity ratio and just used a mathematical formula to achieve a 75/25 at the end of the IFF, and that gave rise to the eighteen (18) years at 3.95 percent rate increases?

MR. VINCE WARDEN: That's right.

(BRIEF PAUSE)

MR. BOB PETERS: I suppose if we turn to page 226 in the book of documents, we'll see the same type of information, except the parameter was changed to -- to get to a 25 percent equity ratio, which is really to maintain the 25 percent equity as it currently has.

And here again, Mr. Warden, we can see that in -- in 2014 we just need a little, modest 65 percent rate increase, and that would -- that would tidy it over fairly handily for the -- for the planning horizon?

MR. VINCE WARDEN: Yes, we wouldn't have to appear before the Board again for quite a while.

MR. BOB PETERS: Well, you'd come back in 2015 to ask for a rate reduction, I would expect, of 21 percent?

MR. VINCE WARDEN: You know, this -- this was unadjusted for IFRS. And, you know, we have that in 2013/'14. In this scenario we would have the charge against retained earnings, which distorts this somewhat. And as we talked about earlier this morning, that's going to be pushed out, so.

But, yes, with -- with that writeoff to retained earnings that occurs in that year and under the scenario that was requested here, that's the kype -- type of rate increases that we would see.

MR. BOB PETERS: Your point was that the $241 million of rate-regulated assets won't be written off against retained earnings in 2014?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: But your IFF12, I believe the number was 225 million, approximately, that would be written off and recovered over the planning horizon of the IFF? That was built into IFF12?

MR. VINCE WARDEN: It was but with the

further work being done by the International Board, it looks as Mr. Rainkie had indicated earlier, it's looks like -- earliest we can expect any kind of a decision now is 2016. So we'll be -- when we come back here with IFF13, we'll be -- we'll be deferring that yet again, or we'll have to make a decision as to how we are going to handle the IFRS issue at that point in time.

We do know at this point that it won't be a charge against retained earnings in the 2014/'15 year, as we have currently in IFF12.

MR. BOB PETERS: What that really tells the Board is that if the rate-regulated assets of approximately $225 million dollars are not written off, even in 2014, following the test years, the 2.95 percent rate increase that's embedded in IFF12 could mathematically be a lower number?

MR. VINCE WARDEN: It -- it could be affected somewhat.

MR. BOB PETERS: But it would be mathematically affected?

MR. VINCE WARDEN: It would, although, you have to remember, that's being amortized over a ten (10) year period as well. So over the term of the forecast, it's already reflected.

MR. BOB PETERS: In that second-last answer, Mr. Warden, does the Board conclude that Manitoba Hydro won't seek to impose equal life grouping of depreciation in 2015?

MR. VINCE WARDEN: You know, it's -- that's a policy decision that we'll have to make, but that would be my expectation, yes.

MR. BOB PETERS: Is it also your expectation that the -- that Manitoba Hydro would not seek to remove net salvage value from -- from the depreciation expense in 2015 either?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Your -- your view is you would still tie equal life grouping with the net salvage issue together and impose them in the same test year?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Has that been a policy decision by the Board, or is that one you would recommend or where was that at?

MR. VINCE WARDEN: It was -- it would be one that we would recommend. And -- and for the reasons that we indicated earlier, absent the implementation of IFRS, we'd be looking at an accounting change with all kinds of retroactive adjustments that would be necessary if we were to do it without -- without IFRS.

MR. BOB PETERS: Can the Board take from your -- from your answers to me, Mr. Warden, that you'll be coming back to this Board following this General Rate Application with Manitoba Hydro's proposal as to how to deal with IFRS and accounting changes, going forward?

MR. VINCE WARDEN: Yes. I -- I think, again, as Mr. Rainkie indicated, this was something that was late breaking and we didn't really become apprised of, other than through the website informat -- the limited information that's available on the website. So we'll have to study that further and make a determination as to how we're going to present that, going forward.

MR. BOB PETERS: All right. I'm going to turn if I could, Mr. Chairman and Board members, over to some capital expenditure items. And we've had some discussion about this. But at page 229, under PUB Exhibit 14, found under Tab 21, it sets out one of Manitoba Hydro's responses to -- I think it's Information Request First Round 93-A, with a chart dealing with capital expenditures and the evolution of those expenditures.

Mr. Warden, you're familiar with that?

MR. VINCE WARDEN: Yes. Yes, I am.

MR. BOB PETERS: And I think mine's marked up. I'm not sure if yours is. But -- I'm not sure what's in the book.

Wuskwatim total project is now $1.771 billion. Have I got that right? I think I took that from CEF12.

MR. VINCE WARDEN: Yes, that would be including transmission, I believe.

MR. BOB PETERS: Yeah, the transmission is $329 million? Or maybe -- sorry.

MR. VINCE WARDEN: Three twenty-three (323), I think.

MR. BOB PETERS: Okay, I'll accept that. And the only -- the other ones of note, let's just go down to Conawapa. Instead of 7.771 billion, it's now 10.2 billion?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And then Keeyask has gone from five point six (5.6), up to 6.2 billion?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And I appreciate other items have changed as well; I just haven't gone through and -- and updated my notes. But those are certainly the major updates. Would that be correct?

MR. VINCE WARDEN: Yes, those would be the -- the major updates.

MR. BOB PETERS: When one looks at Wuskwatim as an example -- and I want to come to some questions on Wuskwatim later this afternoon -- the total project costs, when one follows it through -- and let's go back to CEF03, if we can, Mr. Warden.

Was the intention in '03 to provide a capital cost of the total project in-service at $988 million?

(BRIEF PAUSE)

MR. BOB PETERS: That wasn't a trick question, so maybe I've asked it wrong.

MR. VINCE WARDEN: Sorry, in -- in -- I -- I was just trying to confirm in -- in the CEF04, I believe -- oh, yes. I'll -- I'll answer "yes" to that question, and maybe you can proceed.

MR. BOB PETERS: The point I'm getting at, Mr. Warden, is what you're attempting to demonstrate in your CEF is the in-service cost of the project?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: When you snip the ribbon, that's going to be the cost that's going to be expected to be totally incurred?

MR. VINCE WARDEN: That's -- that's the objective, yes.

MR. BOB PETERS: And that contains forecasts of interest rates, forecasts of construction costs? All of those things are built into it and rolled into it?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: So when we look at Wuskwatim and only use it as an example, we can see that what was forecast in '03, some ten (10) years later that forecast was -- was considerably incorrect?

MR. VINCE WARDEN: Well, it -- it was revised upwards considerably, yes.

MR. BOB PETERS: You said it nicer than I did. And -- and not -- not being pejorative at all, Mr. Warden, but the -- there's got to be reasons that that happened?

MR. VINCE WARDEN: Yes. Yes, and with every capital expenditure forecast, if -- if a project changes, management submits a -- a justification for that change before it's approved.

MR. BOB PETERS: And some of those

increases in cost, presumably, are beyond the control of Manitoba Hydro , and there may be some that are -- that are within the control of Manitoba Hydro?

MR. VINCE WARDEN: That's fair, yes.

MR. BOB PETERS: And so when we look at Wuskwatim going from -- in my numbers, you know, from 900 million up to 1.8 billion, a doubling in cost, what lessons does the Utility learn from that exercise that it can apply going forward with its Conawapa and Keeyask projects that are coming in?

MR. VINCE WARDEN: Well, with Wuskwatim there was definitely a lot going on in the construction industry during that period of time: huge cost -- cost escalation in materials, in contracts, competition for labour, materials. So price escalation was -- was commonplace in the market over -- over that period of time when Wuskwatim was -- from the time Wuskwatim was committed to the time it was ultimately placed in -- in service.

We saw the exact opposite situation with Limestone, where -- whereby we hit the -- the marketplace just right. And rather than costing -- costing $3 billion, as was originally estimated, it came in at 1.5 billion or 1.4 billion. So it can go the other way. But as you can see from the -- what's on this page, because of the cost escalation that has been experienced, it's affected all of our projects. All of our projects have been affected upwards.

MR. BOB PETERS: Well, and I -- when I look at Conawapa as an example, Mr. Warden, in three (3) years it's gone from 6.3 billion to ten point two (10.2), which is some, I suppose, 62 percent increase in -- in costs in three (3) years.

MR. VINCE WARDEN: Yeah, some -- some of that is -- is because of changing in-service date, and so it's not totally related to cost -- cost escalation. The later, of course, the in-service date, the more it's going to cost just because it's another year of escalation added to the -- to the project cost.

MR. BOB PETERS: Well, it's another year of carrying the costs.

MR. VINCE WARDEN: Yes, and escalation on the -- on the cost of materials and input -- all the input costs would have gone up.

MR. BOB PETERS: But the -- but as I understood your previous answers, when Manitoba Hydro provides a capital expenditure forecast it takes into account a forecast for increases in labour and materials, as well as the competition or lack thereof in the -- in the construction industry?

MR. VINCE WARDEN: Yeah, that's right. And assuming it goes into service in the year in which was originally projected, that should hold. But if you delay the -- the in-service date by a year, then you've got one (1) more year of escalation that has to be added onto -- onto that project cost.

MR. BOB PETERS: When Manitoba Hydro says, "One (1) more year of escalation," you're talking about escalation in the wages of -- of labourers or the cost of materials?

MR. VINCE WARDEN: Both of -- both of those, yes. I mean, if you're -- a dollar today is not -- is going to be -- going to be a dollar -- two (2) or three (3) next year. So it's going to be likewise with all of the input costs for -- for these facilities.

MR. BOB PETERS: So the cost of delaying the project's in-service will be one (1) of the factors that isn't planned in the CEFs because you have an in-service target date.

MR. VINCE WARDEN: That's right. And that's what's not illustrated in this -- in this particular table, is that the in-service dates for many of these facilities would have changed and affected the capital cost for that reason alone.

MR. BOB PETERS: And so let's exp -- let's explain to the Board. Why does the in-service dates change for these projects, Mr. Warden?

MR. VINCE WARDEN: Well, there's a number of different reasons: the length of time -- in the case of Conawapa, the length of time it takes to get all -- go through all regulatory and other approvals, it just was not -- it's not physically possible to put it into service before 2025.

MR. BOB PETERS: And I suppose that may be a factor that Manitoba Hydro had more control over, in terms of starting its regulatory approvals earlier?

MR. VINCE WARDEN: Yes, the lead times for these projects are -- seem to be getting longer rather than shorter though. So we -- we do the best we can, in terms of coming up with those lead times. And in this instance it was longer than -- than we had estimated.

MR. BOB PETERS: And do the counterparties with whom Mr. Cormie negotiates ever request the in-service date or the commencement date of the contract be pushed back a year or more?

MR. VINCE WARDEN: Maybe I'll let Mr. Cormie answer that.

MR. DAVID CORMIE: They haven't

requested that, but Manitoba Hydro knows that the in-service dates to -- for the new generation on which the contracts are conditioned are -- are uncertain. And we negotiate the right to delay deliveries if -- if necessary.

MR. BOB PETERS: I'm sorry, I maybe didn't follow that as closely as I should have, Mr. Cormie. But does the -- the term sheets certainly don't bind Manitoba Hydro to a specific in-service date, although the -- the term sheets may target an in-service date.

Would that be fair?

MR. DAVID CORMIE: The -- the term -- the contracts envision an -- a delivery date in which electricity begins to flow. And Manitoba Hydro has the option under the contracts to delay that date if there is a delay in the -- in the start of construction of the facility for regulatory reasons, for example. If we don't get regulatory approval in time or if a transmission is not built in time, then Manitoba Hydro has the right to -- to delay the deliveries.

MR. BOB PETERS: And with -- have any of your contracts that have now been signed and are pending, the delivery dates have been pushed back a year on -- on one (1) of those?

MR. DAVID CORMIE: No, we're still intending to deliver power under the contracts that we have according to the -- to the contract. We haven't in -- we haven't exercised our right to delay, and it's -- it's still -- there's plenty of time to exercise that option, Mr. Peters.

MR. BOB PETERS: With -- Conawapa has been pushed back a year, in my terms, in the capital expenditure forecast. Have I got that right? Its now in-service date has been moved from Manitoba Hydro's fiscal '25 to Manitoba Hydro's fiscal '26?

MR. DAVID CORMIE: Yes, but none of Manitoba Hydro's signed contracts are -- require Conawapa. Only --

MR. BOB PETERS: You're saying --

MR. DAVID CORMIE: -- only --

MR. BOB PETERS: -- they'll be serviced out of Keeyask?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: And, Mr. Warden, back to you. With -- with Conawapa being deferred a year, when I look at the page 229 and I see 7.771 billion, and then going up to 10.2 billion, the one (1) year delay in in-service isn't the cause of the $2 1/2 billion of additional costs on Conawapa, is it?

MR. VINCE WARDEN: Not totally. I should be clear. Actually, between IFF11 and IFF12 there's actually a two (2) year delay, because in IFF11, although we -- we were aware that it was -- Conawapa was delayed one (1) year in that forecast, we decided -- or determ -- determine -- a determination was made that there was sufficient contingency in the forecast such that we wouldn't change the forecast at that time.

When we got to IFF12, the -- the forecast then reflected a full two (2) year delay in the -- in the estimate. So that was a portion of the delay almost -- or of the increase. The other large component of that increase though was the provision of a management reserve. So we ni -- we did not have a management reserve in -- built into the forecast before. And the concept of a management reserve is to provide for unforeseen increases.

So we go through our estimating process as we normally do. And then on top of that, which we have not done with either Keeyask or Conawapa in the past, we've added this -- this concept of a management reserve, such that it should provide for any unforeseen circumstances that might arise before the plant is actually constructed.

MR. BOB PETERS: Is this management reserve a new concept used by Manitoba Hydro?

MR. VINCE WARDEN: Yes, it is.

MR. BOB PETERS: And can you file with the Board the breakdown of that management reserve, specifically with Conawapa and with, I guess, Keeyask?

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

MR. BOB PETERS: And how much of -- how much of the additional capital cost is attributed to just the delay in in-service? Will that be shown on that information?

MR. VINCE WARDEN: Yes, we'll -- we'll take an undertaking to -- to breakdown the increase from the 7.8 billion for Conawapa to the 10.2 billion current estimate.

MR. BOB PETERS: Likewise, will you do Keeyask from 5.6 to 6.2 billion?

MR. VINCE WARDEN: Yes, we can do that, as well.

--- UNDERTAKING NO. 46: Manitoba Hydro to provide a breakdown of the increase from the 7.8 billion for Conawapa to the 10.2

billion current estimate;
and Keeyask from 5.6 to 6.2
billion; and to indicate
if, in Conawapa, there was
a two (2) year change, or
whether it was only one (1)
year

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: And was there a management reserve taken in the case of Wuskwatim?

MR. VINCE WARDEN: No.

MR. BOB PETERS: I'm just wondering, when you take that undertaking, Mr. Warden, could you just double check your in-service dates on Conawapa to see if -- if there was the change, the two (2) year change that you referenced, or whether it was only one (1) year, just check that as well, please.

MR. RAYMOND LAFOND: What is the in-service date of Keeyask?

MR. VINCE WARDEN: 2019. Yes, I can do that, Mis -- Mr. Peters. But I -- I can tell you was a two (2) year deferral in IFF12.

MR. RAYMOND LAFOND: If Keeyask is -- is -- if Keeyask is -- has an in-service date of 2019, why does it incur so many costs in 2020 to 2022; like, well over a billion dollars?

(BRIEF PAUSE)

MR. DAVID CORMIE: M. Lafond, that first unit is in-service in the fall of 2019. And the subsequent units come in over the next while. So, it -- this doesn't -- the station doesn't come all into service at one point in time; it's spread out over -- over two (2) years.

THE CHAIRPERSON: I guess a particular concern to me in this rate application is that fact that Wuskwatim came in considerably over-budget and later then expected. And I guess, you know, we can't -- in this rate application we are to some extend concerned about future costs, but clearly we're now expecting ratepayers to pay for the cost of the dam that just started operation where the costs are way higher than what had -- originally projected and -- and that included the operating costs.

So, I think we need to do some soul searching about what happened and why we are now expecting ratepayers to pay for that. I think we at least owe the ratepayers a fairly thorough explanation of what -- what happened and what, if any lessons we can draw from that ex -- exercise. Because you know, that's a lot of money off -- that's off base and we expect people to pay for that now.

And it seems to me that we -- we need to look back at what happened and -- and if only to -- to explain to Manitobans that we did the very best that we could under the circumstances. But I also think that we owe it to them to -- to be in a position to say, Okay, we've learned some lessons here and we're going to apply them in the future to make sure that we don't go off base on some of these even more significant capital projects.

So, I guess my -- I guess, you know, if we're going to be looking at -- my -- my question would be: Would it be possible, if we're going to be looking at what's happened with the projected costs for the two (2) major dams that are being planned, would it be possible also to look back and say, Okay, what happened with respect to the previous construction project? It seems to me that we should be able to examine what happened. And -- and I don't know that we're looking for detailed examination so much as we are looking for an understanding of what happened with respect to the progression and costs and the -- and the shift -- the shifting in the time-lines, all of which had a big impact in -- in the end results.

I wonder if -- could you undertake to do that please?

MR. VINCE WARDEN: Yes, Mr. Chairman. I actually thought we had something on the record in that regard, but we're having difficulty just putting our hands on it. So, we -- we -- we will undertake to provide a explanation of the escalation in costs from -- for Wuskwatim from the first estimate to the -- through to the final cost.

--- UNDERTAKING NO. 47: Manitoba Hydro to provide a explanation of the escalation in costs for Wuskwatim from the first estimate through to the final cost; and provide an explanation of how the management reserve was derived; and to indicate what level of reliability they have that the current capital estimates are going to be accurate on in-service date

THE CHAIRPERSON: Now, I realize that this is part of what you're talking about now in terms of, you know, including a management reserve and so on, but that obviously would be something that's been learned from the last exercise. So, that's the kind of thing that I -- I think I would like to have addressed if possible.

MR. TERRY MILES: I would know, Mr. Chairman, we did submit a response to an Information Request from CAC; it's Round 1 and it's Response 73C. And in there it's provided a high level description of the changes in cost. That's CAC/MH Round 1 73C.

(BRIEF PAUSE)

THE CHAIRPERSON: I don't think I've got the right one, but, nonetheless, why don't we agree that I'll take a look at what we have and then we can -- I can raise this as a topic later on.

MR. VINCE WARDEN: Yeah, that -- that...

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, Mr. Chairman, just to conclude on that, perhaps. We did look at CAC/MH-73, and I think that's probably a little bit higher level than what you were looking for. So we will undertake to provide that in more detail than what's -- what is provided there.

THE CHAIRPERSON: Thank you very much.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Warden, how did Manitoba Hydro determine that a management reserve should be taken with respect to Conawapa?

MR. VINCE WARDEN: Well, I think it's partly explained by page 229, Mr. Peters. Of course, management is very concerned as well about the escalating costs. And there was a complete re-estimate of Conawapa, as I understand. And with that re-estimate there were some un -- uncertainties that were still identified, and rather than being faced with having to continually update this estimate, it was determined that a management reserve, as is being used in other jurisdictions, is the prudent way to go with this.

So -- so yeah, that's basically what was done in terms of --

MR. BOB PETERS: And how did -- how did management set the -- the quantification of that level?

MR. VINCE WARDEN: Mr. Peters, perhaps it would be more efficient to include that in the undertaking that we have -- we've committed to.

MR. BOB PETERS: Yes, thank you, sir. Just while we're on this topic...

(BRIEF PAUSE)

MR. VINCE WARDEN: We'll -- we'll capture that in the previous undertaking that we took with respect to providing an explanation of the increases in -- in the capital cost estimate for Conawapa and Keeyask, including an explanation of how the management re -- reserve was derived.

MR. BOB PETERS: Mr. Warden, when I look at page 229 in the book of documents and I write in my IFF12 column like I have, what level of reliability does Manitoba Hydro now have that the current capital estimates are going to be accurate on in-service date?

(BRIEF PAUSE)

MR. VINCE WARDEN: We'll include that as -- as part of the undertaking, Mr. Peters.

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

Mr. Warden, I don't see any updated number on account of Bipole 3. Can the Board interpret that to mean that the most current capital forecast cost of in-service of Bipole 3 is the $3.3 billion?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And does that include mitigation and compensation, or is that just the -- the metal and the wire, so to speak?

MR. VINCE WARDEN: No, it does include mitigation and compensation as well.

MR. BOB PETERS: And does that include synchronous condensers, or not include synchronous condensers, or do we know?

MR. VINCE WARDEN: It -- it does include the con -- conversion equipment.

MR. BOB PETERS: There's been no management reserve taken for that particular capital expense item?

MR. VINCE WARDEN: No, there has not.

MR. BOB PETERS: Is it just Conawapa that has a management reserve now?

MR. VINCE WARDEN: No, Con -- Conawapa and Keeyask.

MR. BOB PETERS: All right. And the undertaking will show how big it is for Keeyask, correct?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Yeah. I don't want to go through too many of the capital expenditures, other than I want to -- there's one (1) new topic that appears, to me anyway, in the -- in the capital expenditure forecast.

And, Mr. Chairman, the capital expenditure forecast found on pages 220 -- sorry, 230, all the way through to 233 and following all the way through to 237, they've been replaced by Capital Expenditure Forecast '12 in amounts.

But there's a -- Mr. Warden, are you able to explain, or perhaps Mr. Cormie, there's a north/south alternating current line as one of the projects?

(BRIEF PAUSE)

MR. DAVID CORMIE: Mr. Peters, when -- at some point in time in the future, after Bipole 3 is built, there's still insufficient north/south transmission to serve Manitoba load on a firm basis. And so additional north/south transmission from Northern Manitoba to the south is needed and there's funds in the capital expenditure forecast for that additional transmission.

MR. BOB PETERS: $318 million, correct? Is that what I read?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: I guess I'm looking at CEF11-2, Mr. Cormie, with you, but that may have been revised in CEF12. I don't have that right in front of me, but --

MR. RAYMOND LAFOND: I'm sorry, I need to understand this. We're saying that eventually there needs to be a Bipole 4?

MR. DAVID CORMIE: Well, eventually there -- as we develop the balance of the hydro potential in Northern Manitoba more transmission will be needed. Bipole 4, whether it's DC or AC, I believe at this time it's planned to be AC transmission, not additional DC transmission. So from my understanding, we've -- once we've built Bipole 3 there will be no additional DC built.

MR. BOB PETERS: Maybe help me with

that, Mr. Cormie. As we sit here today, there is sufficient north/south transmission to serve Manitoba on a firm -- on a firm basis, correct?

MR. DAVID CORMIE: No, there's not; that's why we're building Bipole 3.

MR. RAYMOND LAFOND: But when Bipole 3 has been built, there is sufficient to take care of the two (2) next projects: Keeyask and Conawapa?

MR. DAVID CORMIE: There -- there is sufficient transmission to bring northern generation south. However, a portion of that energy will be exported, and it's subject to curtailment rights. And so if we have problems with -- with the DC system, we can curtail our exports and -- and continue to serve Manitoba load.

But as the Manitoba load grow -- continues to grow through the '20s and into the '30s, we'll have to reinforce north/south transmission further with AC upgrades so that we can continue to serve Manitoba load on a firm basis. Right now, we serve it on a firm basis because we have the right to curtail exports.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Then I'm -- I'm not

understanding a previous answer you gave me. Manitoba Hydro serves 100 percent of domestic load -- that is, not-interruptible load -- on a firm basis?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: And with the addition of Bipole 3, that will enhance the ability to serve Manitoba's domestic load, will it not?

MR. DAVID CORMIE: Yes, until we get into -- you know, I -- I'm not sure of the year; it's in the capital expenditure forecast. But at -- in -- in 20 -- just a minute. Oh, I'm -- I stand corrected. It does come in -- it is timed to come into service with Conawapa.

MR. BOB PETERS: So that means that because Conawapa Energy will be exported, you need some more reliability transmission for Manitoba's domestic load?

MR. DAVID CORMIE: Yes, as the -- as Conawapa comes into service we need more north/south transmission to -- to serve firm load.

MR. RAYMOND LAFOND: And the total estimated cost of that is three hundred and ninety-five thousand (395,000) compared to what we're talking with Bipole 3?

MR. DAVID CORMIE: It's $318 million.

Yes.

MR. RAYMOND LAFOND: I see three hundred (300) -- I see three hundred and ninety-five (395) in IFF12.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Yeah, we have -- Mr. Cormie and myself, sir, we're looking at Board counsel's book of documents which had only the CEF11-2.

But Mr. Cormie can confirm that in CEF12 the additional north/south transmission comes in at $396 million.

MR. DAVID CORMIE: Yes, I see that now, yes.

MR. RAYMOND LAFOND: Why would it be, like, 10 percent of the cost or 12 -- 15 percent of the cost of Bipole 3?

MR. DAVID CORMIE: It -- it's not a new transmission line all the way from northern Manitoba to the south. It's incremental changes to the AC network. So we do have AC transmission that -- that comes from northern Manitoba to southern Manitoba, and so these would be reinforcements.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: It's a supplement to the HVDC system?

MR. DAVID CORMIE: No, it would be a supplement to the AC system, not the DC.

MR. BOB PETERS: Well, it would enhance the AC system as it currently is, but it would be provided because the DC system isn't sufficiently sized?

MR. DAVID CORMIE: Well, the DC will be sized appropriately, but additional transmission capability will be required.

MR. BOB PETERS: And the additional transmission capability is required, but there's no new generating stations?

MR. DAVID CORMIE: No, it's about reliability.

MR. BOB PETERS: So it would bring power from Northern Manitoba to allow for exporting through Southern Manitoba?

(BRIEF PAUSE)

MR. DAVID CORMIE: I -- I don't believe so, Mr. Peters, because none of our -- our transmission system isn't designed to serve the export sales. It -- all export contracts are curtailable for -- for transmission. So none of our export sales have the same reliability requirements as the Manitoba load does.

They're not firm from a transmission perspective. They trans -- in-transmission interruptions are a reason for curtailment. So although the energy can be sold, it can't be sold on the same basis as it's sold to our domestic customers.

MR. BOB PETERS: And, Mr. Cormie, I'm -- I apologize if I'm being obtuse on this, but I had understood that Bipole 3, at least partially, was being used for reliability upgrades to Manitoba, domestic customers?

MR. DAVID CORMIE: Oh, it's comple -- it's required completely to serve Manitoba, but it creates transmission so that energy can be sold on the export market.

MR. BOB PETERS: And if reliability is enhanced through the Bipole 3 project, why are further enhancements needed of -- of the magnitude that we're talking here, $396 million?

MR. DAVID CORMIE: Because the Manitoba load continues to grow, and it will outgrow the capability of Bipole 3 to supply it on a reliable basis, so additional transmission will be required.

And, you know, given the amount of money involved that far into the future, I suspect that these are not significant projects, Mr. Peters.

MR. RAYMOND LAFOND: Can you explain to me a wee bit technically what that involves? This additional AC transmission is incremental to the three (3) lines, Bipole 1, 2 and 3?

MR. DAVID CORMIE: Yes, they will be -- it is incremental.

MR. RAYMOND LAFOND: On the three (3) lines?

MR. DAVID CORMIE: No, on the AC network, not on the DC network.

MR. RAYMOND LAFOND: And what is the AC network presently? Is it part of Bipole 1, Bipole 2, or...?

MR. DAVID CORMIE: No, the -- the -- Manitoba Hydro's transmission system can be broken down into high-voltage DC. And that's what we're all familiar with. It's been in the news. But their -- most of the transmission system throughout the province is not DC; it's AC. And there's a significant north/south transfer capability on the AC system, and -

- and we will be enhancing that under this project.

MR. RAYMOND LAFOND: In, and again, not too many words, what kind of -- what's involved with these enhancements? I mean, could you give me a wee bit of -- just for my own education here?

MR. DAVID CORMIE: Mr. Lafond, maybe we'll take that as a undertaking. We'll give you a description of what north/south transmission additions are.

MR. RAYMOND LAFOND: I'm not looking for something very lengthy. It's just something to have an idea of what this all means so I have some understanding.

--- UNDERTAKING NO. 48: Manitoba Hydro to provide a description of what north/south transmission additions are

MR. TERRY MILES: Well, it could be as simple as some additional extra lines connecting places where there's -- where there's gaps. It could be some initial infrastructure, some transformers in that -- in the north and in the south where there are bottlenecks, if you will, congestion points, as we've talked about earlier, and from the north to the south. And there's a number of places, as Mr. Cormie indicated.

We do have a -- a AC system going from the north to the south. So these increments could be part of that system. They could be part of the HVDC system. They could be incremental to a number of things. I think the key point though is that a decision has not been made as to what the projects are and when they will be made. The timing of them is with the seventh unit of Conawapa. So it is out in '25/'26, '26 time frame. So there is still time to do the studies and the analysis around that. So the specific details of what really is required will come with time, from a transmission design perspective.

I mean, I'm not a transmission design engineer, but I do understand that those detailed studies haven't been undertaken to determine exactly what would have to be done for those incremental things. But -- but it is that. It's additional lines, some additional equipment. It's not like the HVDC system, where they have a major converter station in the north and the south associated with that.

MR. RAYMOND LAFOND: So, it's essentially additional lines -- lines, additional equipment, filling in gaps, but on the current three

(3) Bipoles essentially. Attach to this or link to that.

MR. TERRY MILES: It's not attached to the Bipoles. It could be. There could be some incremental improvements in the Bipoles. There could be some incremental improvements in the AC. But the Bipoles and the AC system are two (2) separate -- they are two (2) separate systems and they operate independently.

MR. RAYMOND LAFOND: So it is, essentially, a fourth system of lines coming through?

MR. TERRY MILES: There -- there is already that AC link; but, in essence, yes. If that's the case, yeah.

MR. RAYMOND LAFOND: That's all I need. Thank you.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: I think there's going to be more specifics provided, so we'll leave the undertaking as is. And Manitoba Hydro, if they could just review it and decide if anything further is needed. Would that be acceptable?

MR. TERRY MILES: I'm not sure there's any specifics that we can provide at this time.

MR. BOB PETERS: You could check that and indicate in your response?

MR. TERRY MILES: I guess so, sure.

MR. BOB PETERS: Mr. Cormie, Manitoba Hydro expects to export Conawapa energy under firm and dependable export contract terms, does it?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: And can Manitoba Hydro export Conawapa energy without Bipole 3?

MR. DAVID CORMIE: No.

MR. BOB PETERS: Can Manitoba Hydro export Conawapa energy without the additional northwest transmission project, or do you know at this point in time?

MR. DAVID CORMIE: Yes, we can.

MR. BOB PETERS: You can export Conawapa energy without this north/south project?

MR. DAVID CORMIE: I believe so.

MR. BOB PETERS: Okay.

THE CHAIRPERSON: I'm sorry, I lost you along the way. North/south project, you were referring to?

MR. BOB PETERS: The north/south, the AC project, the one that's the $396 million, Mr. Chairman, that we were -- were talking about.

MR. TERRY MILES: Just -- just to clarify, I think if characterized in the CEF as additional north/south transmission. I think we should be careful calling it the north/south AC project. It's just additional north/south transmission. We don't want to get that in the -- on the record that it's specifically the AC line, just as nuance.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Thank you Mr. Miles for correcting me. Do you know, Mr. Miles, from your previous answer, you're telling the Board that there are really no capital project justification yet prepared for that expenditure? Maybe Mr. Warden can assist us.

I was asking Mr. Miles whether or not, in light of his previous answer that the studies haven't been done and the like, whether there is an existing capital project justification form for the additional north/south transmission?

MR. VINCE WARDEN: Mr. Peters, typically for a project to make its way into the capital expenditure forecast, there is a CPJ, or -- or a capital project justification. In this particular case, though, this has been -- and I know we don't like to use the term, but in this particular case it's been put -- put in there as a placeholder. There -- and -- and, you know, part of our undertaking will explain why that is necessary.

I do recall reading and -- and it's a very technical issue, I believe, with respect to Bipole 3, that this north/south transmission AC is required in conjunction, at some point in time. And that's about as much as I know about it. But I -- I do know there is a technical reason as to why that is required. In -- in our undertaking we will, perhaps, provide that. Well, in fact, we will provide more -- more fulsome justification for that, or expla -- explanation of that.

MR. BOB PETERS: All right. And just to test -- make sure I'm clear, I had understood from Mr. Cormie's previous answer that it was a reliability issue, as opposed to, say, a -- a quality of power issue.

Do you know that to be correct, or am I -- am I making an -- an error in my assumption?

MR. DAVID CORMIE: I think we should leave that for the undertaking, Mr. Peters.

MR. BOB PETERS: Thank you for that, sir. Would it -- maybe my last question: Would this additional AC transmission be required if Bipole 3 was on the east side of Manitoba?

MR. DAVID CORMIE: I think we'll have to leave that to the undertaking, Mr. Peters.

MR. BOB PETERS: All right. Let -- it's the same undertaking and there's been some sub-parts to it. And we'll -- we'll sort that out when we get the response. So we'll just leave it as the undertaking that was given and we'll be happy with that.

MR. RAYMOND LAFOND: Actually, I'd -- I'd like to ask two (2) more questions. I did allude to this earlier on in the hearings. I -- I had a question in regards to the timing of the projects, Conawapa versus Keeyask. And -- and I'd like at this time to rephrase this a bit differently.

Conawapa, the cost per megawatt is something like $6.2 million. I'm sorry, I have this here somewhere. Like, it's about 30 -- 30 percent less per megawatt hour to build Conawapa than both Keeyask and Wuskwatim. So I have to wonder why there could have been 66 percent more power for only 28 percent more cost?

So why would have proceeded with that type of timing? Why build Keeyask and -- and

Wuskwatim, rather than just going and building Conawapa at a much cheaper cost per megawatt hour?

(BRIEF PAUSE)

MR. VINCE WARDEN: Well, Mr. Lafond, both projects are required ultimately to serve the Manitoba load. So if we set that as -- as fundamental, then the -- the question becomes which is -- is the most manageable project to serve -- the next plant in the sequence to serve the Manitoba load?

So with a requirement in 2022, Keeyask being the smaller of the two (2) plants at 695 megawatts, that will only serve -- serve the Manitoba load for just over six (6) years. So Conawapa will be required immediately in 2025 time frame. So you could -- we could build Conawapa first and then defer Keeyask. But, you know, they're -- both plants are required for -- for Manitoba load purposes. And Keeyask better fits the export sales contracts that we've negotiated.

MR. RAYMOND LAFOND: I guess my second question is, the projections are till 2032. So that's twenty (20) years, and I -- I do see, of course, the projections for Keeyask and Conawapa. Certainly that doesn't mean that capital ends forever after. There's got to be some planning on some other projects and some costs incurred before 2032, otherwise I'm hearing that we will simply not need any other capital projects till 2042, '45, or '50, because the timeline on these are like fifteen (15) years or so.

MR. TERRY MILES: Well, our power resource plan as filed, Mr. Lafond -- goes out to 2047/'48. I think the 2000 of '12/'13, but -- the 2012/'13 plan I'm just -- happening to be looking at, goes out to 2047/'48. Now, we do look at those in terms of the planning process and -- and look out as to when we need resources.

MR. RAYMOND LAFOND: I will look at that. Thank you.

MR. TERRY MILES: Okay.

MR. VINCE WARDEN: Just to -- sorry, just a correction. I -- I think I said Keeyask would serve the Manitoba load for about six (6) years. I think it's -- it's more like nine (9) years that -- based on load growth of about 80 megawatts per -- per year, so it's closer to nine (9) years.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: I'd like to turn to

the other Bi-poles, Bi-poles 1 and 2. And in the capital expenditure forecast 11-2, that's in Tab 21, it shows that there's some major expenditures going in place with respect to Bi-poles 1 and 2.

Have I got that correct?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: And I'm not sure if I have the number correct, Mr. Cormie, but I thought from 2012 out to 2032 there's about $1.3 billion being spent on the -- on those two (2) lines, those existing to Bipole lines.

Have I got that right?

MR. DAVID CORMIE: Mr. Peters, I'm not sure if it's correct to ascribe all the work to the transmission lines then, per se, or if it's the facilities at the converter stations.

MR. BOB PETERS: Okay. And that -- that might be help -- so it might be more accurate to categorize these as converter expenses?

MR. DAVID CORMIE: Converter station expenses, yes.

MR. BOB PETERS: What were the initial in-service dates of Bipoles 1 and 2? Does anybody recall?

(BRIEF PAUSE)

MR. DAVID CORMIE: Kettle generating station initially ran AC, Mr. Peters, on the DC lines. The converter equipment came in shortly after that on Bipole 1, and Bipole 2 would have come into service in the late '70s coincident with the in-service of Long Spruce.

MR. BOB PETERS: And what would be your estimate then on the -- the Bipole 1 coming in-service even though it was used for AC out of Ket -- out of Kettle?

MR. DAVID CORMIE: You know, I -- I don't have the exact date, but it's probably around 1972 or '73 thereabouts.

MR. BOB PETERS: That's fine for my purposes and thank you for that, Mr. Cormie.

And what about the in-service dates on the converter facilities, do you know that?

MR. DAVID CORMIE: Well, those -- those were the dates that I was referring to. The transmission line went in initially and -- and it ran as AC -- as an AC line with the initial generation from Kettle, and -- and subsequently it was converted to a DC line. And in order to operate DCE then the converter facilities had to operate.

MR. BOB PETERS: Do you know the life expectancy of the upgraded converter facilities, Mr. Cormie?

MR. DAVID CORMIE: No, I don't.

MR. BOB PETERS: And what about the life expectancy of the transmission lines on...

(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, that would be indicated in our depreciation study. We'd have to dig that out just to see what the remaining useful life estimate is, but we don't have that right -- readily.

MR. BOB PETERS: No, we'll check that. And if we require it, we'll get back to the Corporation on that.

MR. VINCE WARDEN: Okay.

(BRIEF PAUSE)

MR. DAVID CORMIE: Mr. Peters, the Dorsey converter station was put in service in 1968, but it would have operated AC at that time. And -- and then Bipole 2 would have come into service in 1977, and it would have operated at DC from the get-go.

MR. BOB PETERS: Thank you for that. Has Manitoba Hydro concluded that there will be no additional energy or capacity revenue gains from these upgrades on Bipoles 1 and 2?

MR. DAVID CORMIE: Well, I thi -- I -- I think those gains are included in the -- the numbers that we attribute to Bipole 3, because the entire DC system will run more efficiently as the average loading on all -- on Bipole 1 and Bipole 2 decrease.

MR. BOB PETERS: All right. So for whatever gains there are, they've been just attributed for -- to Bipole 3 as a matter of convenience?

MR. DAVID CORMIE: Yes, the incremental capacity that Bipole 3 supplies relieves Bipole 1 and 2, and that -- and the overall efficiency gains are shown as additional capacity and energy available to serve load.

MR. BOB PETERS: The issue of Pointe du Bois is one that has been raised and questions posed. I should just indicate at this time, with the concurrence of my colleague, Ms. Ramage, that over the holidays -- I think, more accurately last week or this last weekend -- additional questions came from -- on behalf of the Board were -- were posed as pre-ask questions related to Point du Bois.

And I don't propose to go into those on the record at this point in time. I would accept those as responses in writing when Manitoba Hydro gets to them, unless there's some issues at this point in time.

MS. PATTI RAMAGE: I can only advise the questions only came to my attention this morning, so we haven't had an opportunity to fully review them to -- to determine how they'll be responded to or -- or exactly how long it'll take to respond to them.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: All right. Thank you. I would turn -- and we've gone through quite a bit on the power resource plan already, as it turns out. But on page 246 of the book of documents, the last page in Tab 22, there is a supply/demand balance chart that has inferentially been referenced by Mr. Warden and, I think, by the Chairman and Board member Lafond.

First of all, the purpose of the supply/demand information is to provide a general indication as to when Manitoba Hydro will be either short on energy or short on capacity. Would that be -- would that be a fair conclusion?

MR. TERRY MILES: Yes, that would be a fair conclusion, yes. Sorry.

MR. BOB PETERS: And in the -- Manitoba Hydro filed as Exhibit 11 an updated power resource plan, and that's one that Mr. Miles referred to just a few minutes ago. But when we look at page 246, and it's not in colour, but it depicts items that are circled, in terms of dependable energy.

And the suggestion is that in 20 -- in 2009/'10, Manitoba Hydro could see itself short of dependable energy in the year 2022/'23, Mr. Miles?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And then when it was updated by the 2010/2011 power resource plan, the energy shortage -- or dependable energy shortage jumped a year earlier, as early as 2021/'22?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And then in the 2011/2012 power resource plan, the dependable energy started surfacing in 2020 and 2021, correct?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: Now, the Exhibit 11 that's been filed, the dependable energy shortage doesn't occur now until 2022/'23, if I've got that right?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: In terms of looking at winter peaking capacity, as opposed to energy, capacity was a concern in the 2009 power resource plan out in the year 2025, correct, Mr. Miles?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: There was -- it shows a shortage of 53 megawatt hour -- megawatts, sorry, of capacity?

MR. TERRY MILES: Yeah, that's correct.

MR. BOB PETERS: Likewise, in the intervening power resource plans, that winter peaking capacity shortage and shortfall came forward. And in 2011/'12, it was evident in 2021/'22?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And under the new power resource plan, the winter peaking shortage gets pushed out to 2024/'25. Have I got that right?

MR. TERRY MILES: I think it's '25/'26 on my --

MR. BOB PETERS: Okay. One of us is right. Let's just...

MR. ANTOINE HACAULT: Page 17.

MR. BOB PETERS: Okay, sorry about that. It's '25/'26. Can you indicate, Mr. Miles and

Mr. Cormie, if we were short that capacity this year for some reason that Manitoba Hydro didn't forward plan for, how would you meet that? What would be your options?

MR. TERRY MILES: One of the things that we do incorporate into the -- into the supply demand when we do the power resource plan, is a 12 percent -- there's a 12 percent capacity reserve. So that does allow for, as we move forward, if there is a year out in the future that we are short out in time. You know, one (1) year, two (2) years, as we move out. For example this year, say, that was -- that was the case. So from a planning perspective we make sure that we have the system resources in -- in place to do that.

From a -- I guess at that -- at that time, then, I guess there are potential to settle, if -- if that is required and we are in a position where we need that capacity and we have the weather that requires that. I believe in the short term, really short term, if it was just sort of the operating time frame that's there, there are provisions that we are able to do to get that capacity from the marketplace, et cetera, depending on how much it was. But some of the minor shortfalls that are here are probably -- are probably -- it's reasonable to consider that.

What we do consider is when there is -- as we go out in the planning horizon, and you'll see as we go out in time, you'll see the -- it's not in colour in the -- in the book of documents, but in the power resource plan itself, it's in red. And we like to think of a -- a -- you know, recurring shortfall in capacity or energy out in time.

You might go out in time in -- in the near term and be at one (1) or two (2) years. And you might get one (1) year that's a shortfall, and then the next year it isn't and so on. So we typically plan for recurring shortfalls over the -- over the long term.

MR. BOB PETERS: When you say that one (1) of your options is -- well, one (1) of the -- one (1) of the options is you've -- you've built in a capacity reserve and that's what would be utilized, because that capacity reserve is -- is Manitoba Hydro's capacity reserve; it's not a MISO requirement, is it?

MR. TERRY MILES: No, that's a Manitoba Hydro system reserve. That's correct.

MR. BOB PETERS: All right. And then another option is you could purchase either the energy, the dependable energy, or you could purchase the capacity from the market?

MR. TERRY MILES: That would be

correct.

MR. BOB PETERS: And the line items on this table, Mr. Miles, do not include firm export contract energy, do they?

MR. TERRY MILES: They do not. This is solely meeting Manitoba load requirements, I believe. No, actually, there is firm --

MR. BOB PETERS: What -- what I'm suggesting is that if there were no firm exports, there would be more surplus. Maybe I worded that wrong.

MR. TERRY MILES: Yeah, these -- these do include our firm commitments, and that's Manitoba load and firm contracts. If there was no firm contracts...

So you're -- you're suggesting, Mr. Peters, that if there were no firm contracts, that these numbers could be lower? That's not necessarily the case, because without the firm contracts, we don't have the firm imports associated with those. And in many cases there's offsetting -- actually, in a lot of our contracts there's offsetting imports and exports.

MR. BOB PETERS: So your -- your cap -- your ability to serve on the exchange level would be impacted when you have a diversity agreement, that may impact and show up as a -- as a negative number in your capacity, for example, that is presently met through diversity?

MR. DAVID CORMIE: Yes, that's correct, Mr. Peters. Right now we have 500 megawatts of seasonal diversity. So that -- that defers the need to have additional capacity built in Manitoba.   So you can't walk away from the export if you -- unless you're prepared to walk away from the import.

(BRIEF PAUSE)

MR. BOB PETERS: Is it -- is it correct that the power resource plans assume no new generation for each specific plan?

MR. TERRY MILES: There is a -- in the power resource plans, there is a -- it's a table that has no new generation, which doesn't add any new generating resources out in time. It has existing contracts, signed contracts, and existing contracts out in time. So -- and the resources that are committed to you at the time.

So the table that we are looking at here wouldn't have, say, Keeyask and Conawapa committed out in -- in time. There's no new resources.

MR. BOB PETERS: I'm sorry, it includes or excludes them?

MR. TERRY MILES: It excludes them.

MR. BOB PETERS: And so --

MR. RAYMOND LAFOND: I'm -- I'm, therefore, looking at the power resource plan, page 35 and -- pages 35 and 36, the demand peak load.

MR. TERRY MILES: Mr. Lafond, could you please tell me what year of the power resource plan that you have? Just at the bottom it should 2011/'12 or 2012/'13, of the page, each page.

MR. RAYMOND LAFOND: 2012/'13.

MR. TERRY MILES: Okay, thank you.

MR. RAYMOND LAFOND: And it's page 35 -- I'm looking at pages 35 and 36 of your Exhibit 11, which I think you referred to earlier.

MR. TERRY MILES: Okay, I -- I have it here.

MR. RAYMOND LAFOND: And I guess if we look at the second page, just -- not for a lengthy discussion, but just to put things in perspective. When I look a that and I look at the peak demand and what's coming in and over the dec -- up to 1947/'48. I see that there is a substantial production from the single-cycle gas turbine plant.

Is this all existing, or is some of this additional?

MR. TERRY MILES: No, this is existing.

MR. RAYMOND LAFOND: Okay, thank you.

MR. TERRY MILES: Now, the pages that you're looking at are alternative plan 1, which has -- just -- just to note, there are in the back of -- there's tables -- there's different -- there's tables for the different development plans that are listed in the power resource plan.

MR. RAYMOND LAFOND: Okay.

MR. TERRY MILES: So the tables that we're looking at right now, at the top left, it says, "Alternative development plan 1." So that's -- that's a plan that has Keeyask and a small interconnection. And then beyond Keeyask, when we talked about -- I think Mr. Warden alluded to needing new resources out in the '27/'28/'29 time frame, those new resources in this particular plan have been -- or the requirement has been met with...

(BRIEF PAUSE)

MR. RAYMOND LAFOND: I don't mind looking at alternative plan number 2 if you prefer.

MR. TERRY MILES: Yeah, what -- what

we're looking at here is, actually, this is the capacity table. So this is indicating that we have capacity being utilized by the thermal resources. Those are the existing thermal resources that you see under "Manitoba thermal plants." Is that what you are referring to?

MR. RAYMOND LAFOND: Yes.

MR. TERRY MILES: Okay, that's correct then.

MR. RAYMOND LAFOND: Now, can I conclude from this that essentially after Conawapa and, of course, some rerunning at Kelsey and Pointe du Bois, which we've talked about, there are essentially no more additional generation required, or new generation required, until 1947/'48? And of course, that assumes that the contracted exports are all over? In other words, we have not negotiated new contracts?

MR. TERRY MILES: That's -- that's not correct. After Conawapa, that's in this...

(BRIEF PAUSE)

MR. TERRY MILES: So after Conawapa in this plan, there'll be -- if we go -- I can take you to another -- another page in the table here. But there will be some thermal resources that -- new thermal resources that will have been added after Conawapa for -- for Manitoba load growth.

MR. RAYMOND LAFOND: So -- so under plan alternative 2, when I look at the "new thermal plants" line, it's not -- it's all new? It's not existing?

MR. TERRY MILES: No, if you -- I'm looking at page 36. If we look at page 36 --

MR. RAYMOND LAFOND: Sure, okay.

MR. TERRY MILES: -- you'll see starting in 2040/'41. And there's -- under, "New thermal plants," there's a line, "SCGT." And you'll see two hundred and forty-six (246). You'll see several of those. Those are 246 megawatt simple-cycle generating units that are put in place out in time.

MR. RAYMOND LAFOND: So that would be, essentially, the only new additional generation station besides, of course, the -- the Pointe du Bois fixing and Kelsey rerunning?

MR. TERRY MILES: That's correct, in this particular plan, yes.

MR. RAYMOND LAFOND: I don't think it's very different from plan number 2 except that on plan number 2, what I don't understand, there are no contracted exports, but there are some on plan number 1?

MR. TERRY MILES: That's correct. Plan number 1, with Keeyask in place and the small -- on the interconnection, we have the contracts associated with -- with that. With Conawapa in place with the alternative 2 plan, we have no currently negotiated sales contracts or -- in -- in place for that.

It doesn't mean there won't be any at the time. But right now, in the plan itself it's assumed that there's no contract specifically associated with that.

MR. RAYMOND LAFOND: I think I -- I missed something here. There are some negotiated, fixed, firm contracts for exports under plan 1 but none under plan 2?

MR. TERRY MILES: That's correct.

MR. RAYMOND LAFOND: Aren't we talking about existing contracts?

MR. TERRY MILES: Okay, let me -- let me correct that. I guess that's beyond...

MR. DAVID CORMIE: Well, the existing contracts expire. And they're not renewed because we don't have -- we don't have a transmission line built in over -- over which to export the -- the additional surplus.

MR. RAYMOND LAFOND: I'm trying to understand the reasoning why they are included under alternative 1 and not under alternal -- alternative 2 if there are existing firm export contracts.

MR. TERRY MILES: The existing firm export contract -- they are existing firm export contracts under alternative 2. Those are in place until such time as we don't have the resource to serve those contracts those contracts when those contracts do -- do expire. So those will continue out to a point in time.

Yeah, okay. Thanks. And they go out to -- contracted exports, under alternative 1, go out to 2034/'25.

MR. RAYMOND LAFOND: '34/'35, yes.

MR. TERRY MILES: That's correct. And...

MR. RAYMOND LAFOND: They stop in '25/'26 under proposed plan alternative 2?

MR. TERRY MILES: That's correct.

MR. RAYMOND LAFOND: What I don't understand, if they are firm contracts in place, how can we assume they're not there under alternative 2?

MR. TERRY MILES: You mean beyond

'24/'25?

MR. RAYMOND LAFOND: Yes.

MR. TERRY MILES: Beyond '24/'25, we don't have the firm surplus associated with those. And those aren't negotiated contracts yet. Right now, we have term sheets in place or contracts in place that are negotiated. They're signed. And they extend out in time.

So for this plan that we have, we're assuming that if there's firm under available under the plan itself, we will still assume that we can make some of those sales out in time if that is available in time, any surplus that is there. But right now, the contracts are set to -- to expire at that point, in '24/'25.

MR. RAYMOND LAFOND: So the difference, going out to '35/'36 or thereabouts, is just projected? It's -- these aren't signed contracts?

MR. TERRY MILES: That's correct. And there won't be as much surplus available under alternative 2 as there was under alternative 1.

MR. RAYMOND LAFOND: And why is this again?

MR. DAVID CORMIE: Monsieur Lafond, the -- the arrangement we have with Minnesota Power is conditional on the construction of Keeyask coming into service in 2019, and the sale starts in the summer of 2020 and it's conditional on having an new interconnection at that time. If Manitoba Hydro were to choose not to build Keeyask those contracts disappear. The only contracts that will remain are the existing sale agreement with NSP that expires in 2024/'25.

So the alternative development plan doesn't build a transmission line, doesn't provide new hydraulic generation to the market in time to meet these customers' needs. And so the alternative development plan doesn't show any pro -- any contracts, because we don't have any customers who are -- have shown any interest in contracting that far out in time.

If -- were we to build Conawapa in 2028, there would be plenty of time to negotiate something associated with that. But we will have lost the opportunity to engage Minnesota Power; they would have done something else to provide them with new resources. And the Wisconsin transaction would -- would not occur and Northern States Power would have replaced its purchases from Manitoba Hydro that expire in 2025 with some other -- other resource and so we would be -- kind of starting from scratch under the alternative development plan.

So we don't have any -- it -- it shows up as surplus, but we don't have a con -- we don't have customers. We've let those customers know that we're not capable of meeting their needs and we may at some point in the time -- may at some point in the future be able to come back to them, but we will have lost the opportunity to engage them now.

MR. RAYMOND LAFOND: So can I conclude in an oversimplistic fashion that you do have these contracts; however, it's pending construction of new facilities otherwise the contract does not come into effect?

MR. DAVID CORMIE: That's correct. They -- they're all conditional on Manitoba Hydro choosing -- electing to -- to build and getting regulatory approval for Bi-pole 3, Keeyask, Conawapa, and the new interconnection.

MR. RAYMOND LAFOND: So, again, in an oversimplistic fashion, the only new construction being looked at are thermal plants between now and 2047, assuming no exports -- not -- not in the current -- present, but no exports by the time we get to 2035 or '40?

MR. TERRY MILES: I'm not sure I -- I

understood that. But you mean beyond the hydro resources that we're developing, the other resources that we're considering in the plans are thermal resources, that's correct in these plans, yeah.

And in part it's because the time-frame out in the future that we've put them out there and the resources to -- to fulfill the plan and meet the load to the lowest capital cost in -- in part, they don't necessarily provide the most -- the overall most value, as such. But out that far in time, as Mr. Cormie indicated, we would look at that closer to the date as we have the last number of years with Keeyask and Conawapa, as things have changes over the last three (3) or four (4) or five (5) years.

MR. RAYMOND LAFOND: Thank you.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Miles, Board Member Lafond is on -- if he turns to page 17 of Manitoba Hydro Exhibit 11, he's going to see the most current supply/demand balances for the last three (3) years that -- that I've initially included at page 250 -- sorry, at page 246 of the book of documents.

Is that correct?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And the supply/demand balance assumes that there are no new resources added to the system over the years depicted.

Is that also correct?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And are Manitoba Hydro's, Mr. Cormie, diversity contracts conditional on firm export contracts being in place?

(BRIEF PAUSE)

MR. DAVID CORMIE: The 350 megawatt seasonal diversity contract that was recently signed with Northern States Power is the stand -- is a -- is a -- was one (1) of the five (5) contracts that were signed. The 150 megawatt seasonal diversity contract that we have Great River -- with Great River Energy that expires in 2014, we expect to roll that transaction over, and it won't be tie -- it -- it will be -- it will be part of a similar diversity arrangement. But they're not -- they're not -- only the NSP is conditional upon the package. The Great River Energy is not conditional on a -- seasonal diversity and -- contract is not conditional on any other transaction.

MR. BOB PETERS: And, Mr. Miles, what you're showing the Board on -- on page 17 of Exhibit 11, or on page 246 of Board counsel's book of documents, is when there will be a dependable energy shortfall and when there will be a dependable capa -- or, sorry, there'll be capacity shortfall, based on Manitoba Hydro's most current forecast load growth?

MR. TERRY MILES: That's correct.

MR. BOB PETERS: And to the extent that those assumptions are incorrect, then the information on this table would likewise be incorrect, one (1) way or the other?

MR. TERRY MILES: Say to the extent that they change, I guess, from year to year.

MR. BOB PETERS: All right. Perhaps you worded it better than I did. And when we talked about the table on page 246 of Board counsel's book of documents, the only export contract that's considered in arriving at these figures would be the -- the NSP 375/325 (phonetic) arrangement, would that be correct?

MR. TERRY MILES: No, that's not correct.

MR. BOB PETERS: All right. Which other ones are included?

MR. TERRY MILES: It includes all

existing contracts that we have. It includes the GRE -- oh, in the 2011, page 246, it would include the -- all the existing contracts that we have in place that extend out into that -- that time-frame, so our signed contracts.

MR. BOB PETERS: It -- it includes the ones with Minnesota Power and Wisconsin Public Service?

(BRIEF PAUSE)

MR. TERRY MILES: No, it does not include those -- yeah, you're correct.

MR. BOB PETERS: Okay. Thank you.

MR. TERRY MILES: Because those are tied to the new generation that we have.

MR. BOB PETERS: I missed your last comment, Mr. Miles?

MR. TERRY MILES: I just said those are tied to the new generation.

MR. BOB PETERS: Right. And, likewise, that additional 125 megawatt sale to NSP is tied to new generation, and therefore not included in these -- in this chart?

MR. TERRY MILES: That's correct.

(BRIEF PAUSE)

MR. BOB PETERS: I'm not sure if you can answer this as you sit there, Mr. Miles, but focussing on test year 13, in -- on page 256, why did the surplus energy decline as much as shown? If we pick the 2012/'13 year and go down, it goes from a surplus of 2,155 gigawatt hours down to one thousand eight hundred and eighty-eight (1,888). And then it drops further to one thousand eight hundred and twenty-six (1,826).

Are you following me, sir?

MR. TERRY MILES: You had said two fifty-six (256), but it's two forty-six (246); is that correct? You're on page 246?

MR. BOB PETERS: I'm on page 246, you are correct.

MR. TERRY MILES: Okay. And so 2012/'13, is that where we are?

MR. BOB PETERS: Yes, I was just picking that year and then working down the column on the various power resource plans.

MR. TERRY MILES: Am I -- going from 2009/'10, 2010/'11, 2011/'12, that's changes in Manitoba load growth. That would be reductions in

Manitoba load growth primarily, I believe.

MR. BOB PETERS: And what about in 2013/'14? Again, the -- the drop in surplus energy, is that attributed to only Manitoba load growth, or is that as a result of some other resource not being available?

MR. TERRY MILES: You know, my back row has just advised me there is a bit of a change, as well: different wind assumptions between 2009/'10 and 2011/'12. I believe there's less wind in 2000 -- in the forecast in 2011/'12 then there is in '09/'10, which would reduce the surplus dependable energy available.

So, increasing load growth would reduce the surplus, and then the reduction in the potential wind would reduce that further.

MR. BOB PETERS: If we stay on the 2009/'10 line of energy and go over to 2014/'15 and the year following that, there appears to be a significant increase in surplus energy going from 1,231 gigawatt hours up to 3,175 gigawatt hours.

Can you readily explain that Mr. Miles?

MR. TERRY MILES: I'm sorry, I don't see those numbers. Are we still on the same table?

MR. BOB PETERS: I'm at -- yes, I'm on

page 246 still.

MR. TERRY MILES: Okay.

MR. BOB PETERS: And I'm on the 2009/'10 line, but under fiscal '15 and fiscal '16. And I'm seeing the dependable energy increase.

MR. TERRY MILES: Yeah, that's the NSP self-supply under the new contract.

MR. BOB PETERS: I'm sorry, the NSP self-supply?

MR. TERRY MILES: That's the NSP supply. That comes from NSP, yeah.

MR. BOB PETERS: And just help me with that. What's the additional incremental supply that we expect from NSP?

MR. DAVID CORMIE: Mr. Peters, under the existing contract it expires in 2015. And when we go into the new contract, the new contract has some additional energy available under adverse water conditions, and we were able to reduce our export obligation in the winter due to our call option. And so that -- that, in affect, the -- our ability to buy from NSP more then offsets our energy obligation to them, and so that frees up surplus energy in the Manitoba Hydro system.

MR. BOB PETERS: Okay. I want to

conclude my questions in this area, if I can, before I request the afternoon recess, just to talk about the Brandon Coal Unit 5. And we've talked about it already. So, this is a plant that was commissioned in approximately 1958, would that be correct, Mr. Cormie?

MR. DAVID CORMIE: The station was built in that time-frame; however, unit 5 came into service 1969.

MR. BOB PETERS: Maybe explain the time dely for --

MR. DAVID CORMIE: Unit 5, that meant there were four (4) units prior to that unit; it's one (1) to four (4). And when I was a little boy, my family lived in Brandon and my dad worked on that, so I'm -- I was -- I was covered in coal dust all the time. But yeah, those -- those small units have been retired from service and removed and -- but the number 5 coal unit still is available and is still operating.

MR. BOB PETERS: And so it's economic life span for unit 5 would be fifty (50) years? Do you know? Or do I have to go to the depreciation study to check that?

MR. DAVID CORMIE: Yeah, I think you're right, Mr. Peters. It's in the order of fifty (50) years.

MR. BOB PETERS: And since 19 -- since 2010, since January of 2010, Brandon unit 5 is only to be used for emergencies as defined in the provincial regulations.

Have I got that right?

MR. DAVID CORMIE: In addition to emergencies, we are authorized to operate the station to maintain proficiency. And so each year we schedule generation in order to ensure that the facility is functional and that the staff is trained and competent to operate the station safely, so that if an emergency were to occur, it can operate as -- as needed.

MR. BOB PETERS: All right. So in addition to emergencies, Manitoba Hydro can make sure it has the necessary skills to fire it up and use it if and when needed?

MR. DAVID CORMIE: That's correct.

MR. BOB PETERS: And the emergencies are defined in regulation -- and I don't want to get too legalistic here -- but it's -- it's really drought or interruption of firm supply for Manitobans?

MR. DAVID CORMIE: yes, it -- it says, "emergency and drought operation," Mr. Peters, in the legislation.

MR. BOB PETERS: Okay. And Manitoba

Hydro, each year, has to submit a report to the Minister if it wants to fire it up for emergency or drought reasons.

Have I got that right?

MR. DAVID CORMIE: Each -- each year we provide the minister with a forecast of our anticipated operations, yes.

MR. BOB PETERS: And that tells the minister whether Manitoba Hydro anticipates having to use Brandon unit 5 to meet domestic load?

MR. DAVID CORMIE: Generally that forecast, because we don't anticipate any emergencies and we -- and we can't anticipate emergency drought conditions, generally is a forecast of the generation needed to maintain proficiency.

MR. BOB PETERS: So the report you're telling the Board that gets filed just indicates to the government how often or for how long Manitoba Hydro expects to -- to fire up Brandon unit number 5 for proficiency reasons?

MR. DAVID CORMIE: Yeah, it -- it's a schedule by month for the year showing the en -- the -- the number of hours that it will run and the number of -- of gigawatt hours of generation that the station will burn coal.

MR. BOB PETERS: In Manitoba Hydro's application, Mr. Warden, for April 1st, 2012, interim rate increases, there was a suggestion that Manitoba was experiencing low precipitation levels in the province.

Do you recall that?

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, Mr. Peters, at the time the application was filed that was the case. Yes.

MR. BOB PETERS: Did that result in a report to the minister that Brandon unit 5 may be needed in 2012?

MR. DAVID CORMIE: No, it didn't, Mr. Peters.

MR. BOB PETERS: Why -- why didn't it?

MR. DAVID CORMIE: Because even under the worst -- our worst water flow assumptions Brandon was not necessary to operate.

MR. BOB PETERS: The Board understands from the Power Resource Plan that Manitoba Hydro intends to decommission the Brandon coal unit in approximately 2019/'20?

MR. TERRY MILES: I don't think we've explicitly said "decommission". I think we don't expect -- we're not counting on its operation at this time or from a planning perspective beyond 2019/'20, so its fate beyond 2020 -- 2020 is still, I guess, under consideration in terms of options as to what -- what to do with that plan. But from a planning perspective, we're not counting on the coal generation at unit 5 beyond 2019/'20.

MR. BOB PETERS: I'm just wondering, in light of that answer, Mr. Miles, Mr. Warden had told the Board that in his financial report for the last year-end there was an asset retirement obligation set up for Brandon coal unit 5, if I understand that correctly.

Does that mean that even though the ARO is set up, that the plant may not be decommissioned at that time?

(BRIEF PAUSE)

MR. TERRY MILES: I understand that the ARO was set up for later than 2019/'20.

(BRIEF PAUSE)

MR. BOB PETERS: We'll -- we'll check that date in the financial annual report.

(BRIEF PAUSE)

MR. BOB PETERS: And I'm seeing it. It's -- 2024 is the -- is the date in which it could be decommissioned. Yeah, page 73 of the annual report under, "Note 15," if those who are following it want to check that.

The point I'm coming to, Mr. Warden, Mr. Miles, is that there's no mandatory, prescribed sunset date on Brandon unit 5 in the legislation to Manitoba Hydro's knowledge at this point in time? Would you be aware of that?

MR. TERRY MILES: Under provincial legislation it's -- it's -- it affects our operations under emergency conditions and drought. Under federal legislation there is actually legislation, the new federal coal regulation that has come out that does affect the operation of Brandon unit 5 beyond 2019. It's actually January 1st, 2020, and it reduces the operation considerably. As -- as a --

MR. BOB PETERS: I'm not sure the Board is going to want to hear some -- some legal argument, but Ms. Fernandes was kind enough to confirm the regulation issue. But it's -- my understanding is, the regulation is not yet enacted.

Is that Manitoba Hydro's understanding, or do you -- are you even aware of that?

(BRIEF PAUSE)

MS. PATTI RAMAGE: We're going to have to get back to you on that, Mr. Peters. But it is what it is.

MR. BOB PETERS: Okay. I -- I can provide you a copy at the break, Ms. Ramage, if you want.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: But do you know what the intensity of the carbon output is of the Brandon plant? Is it -- is it less than 420 tonnes of CO_2 per gigawatt hour of -- of energy?

(BRIEF PAUSE)

MR. DAVID CORMIE: It's probably double that, Mr. Peters.

MR. BOB PETERS: Is there, under the existing -- under the regulation that -- that I am suggesting is not yet enacted, is there an opportunity that it may -- Manitoba Hydro may be able to keep the facility as an emergency facility? Or are you not aware of that?

MR. DAVID CORMIE: We -- we believe it would be cost prohibitive to continue to operate the station.

MR. BOB PETERS: Cost prohibitive in what way, Mr. Cormie?

(BRIEF PAUSE)

MR. DAVID CORMIE: To get the emissions down to -- to below the four twenty (420), Mr. Peters. So there would have to be something done to remove the carbon from the emission stream.

(BRIEF PAUSE)

MR. BOB PETERS: I take it, Mr. Cormie, that matter's been studied to some extent already by Manitoba Hydro?

MR. DAVID CORMIE: Well, I believe the

four twenty (420) is the emissions that you would get from a modern combustion turbine. So it would make sense for Manitoba Hydro to -- to replace the station with a -- with a new facility that does it directly, rather than as a -- by -- by modification to an ancient plant that has a limited life span. So, yes, we have studied that.

MR. BOB PETERS: And I wonder if the shortest way to circumvent the questions, Mr. Cormie, is to provide the Board with the study that Manitoba Hydro has as to whether or not Brandon coal can be utilized as a stand-by unit?

MR. TERRY MILES: Mr. Peters, we -- we do not have a study at this time. We're studying the impact. The regulation just came out, so we are reviewing the implications to us in terms of what that means from operation as is, or whether operation under some other format or with other emission controls, et cetera.

MR. BOB PETERS: Do you know the capacity factor of -- of the Brandon coal plant?

MR. TERRY MILES: The actual operating capacity factor?

MR. BOB PETERS: Yes, is it -- is it operated at 9 percent capacity factor or less, which I think is the number under the le -- under the regulation?

(BRIEF PAUSE)

MR. TERRY MILES: I guess typically the -- the capacity factor at Brandon is -- is less than that 9 percent, but the legis -- the regulation limits the actual operation of that plant to that under its current -- current conditions.

MR. RAYMOND LAFOND: Page 89 of your annual report says that thermal production is .22 percent, so therefore one-fifth of 1 percent.

Is that what we're looking for?

MR. TERRY MILES: That's, I believe, the percent of energy supply in the system, as opposed to the capacity factor of the plant itself, so.

MR. BOB PETERS: I think with that response, Mr. Chairman, I'm going to move to a new area after the break, so this might be an opportune time for an afternoon recess.

MR. RAYMOND LAFOND: Can I ask two (2) questions before we break? Talking about the Brandon coal plant, what also comes to mind is the fact when I look at your resource plan in the long -- very long term we're looking at a single cycle gas turbine generation plant as opposed to a combined cycle.

And from the little I know is that combined cycle is much more efficient and also much gentler on the environment, so why would we be looking at a single-cycle gas turbine plant?

MR. TERRY MILES: Depends on the need out -- out in time. So whether it's simple cycle or combined cycle is a function of how often you expect the plant to operate. Yeah, a combined cycle is more efficient if you're running it at a -- at, you know, 40 to 60 percent of the time, but if we need it less amount of the time -- so, if we have average water conditions as such, even out at that point in time we may not need the -- that particular plant to run very often.

So, out in time and because it's -- it's far enough out in time, and we're just looking at the capital cost and operations, we're -- we're looking at that, so as we got closer to that point in time we'd more specifically define what the system would need and make the decision as to whether it's a simple cycle or a combined cycle out in time. But that far out in time in the planning horizon it's not having a significant implication on our decisions, if you will, for that.

MR. RAYMOND LAFOND: And that's because the cost, the capital cost, of a combined cycle plant is substantially more than a single cycle one?

MR. TERRY MILES: Typically larger capital cost with the benefit of a more efficient operation, so lower fuel cost, lower variable cost, yes.

MR. RAYMOND LAFOND: My next question is: If we're looking at the gas -- the gas turbine plant in the very long term, why do we not consider that also in the short term?

And let me explain. For instance, we're always looking at being able to meet peak demand. And building hydro dams is very expensive just to meet several days of peak demand or -- or thirty (30) days of peak demand when we could have a gas turbine plant that would take care of the peak demands for the thirty (30) or forty (40) days required throughout the year and only build the hydro dams when we get to a certain level of usage of the -- of the thermal plants and then build a hydro dam and simply park it for a while and -- and use it for emergency purposes.

And there are other advantages such as security, because you can essentially build it in the backyard of the City of Winnipeg. So what's the response to that? It seems to be good for the future, but not good for the present?

MR. TERRY MILES: I think we look at the resources we have available to us at the various time frames. I think in the present we look at the resources we have, the economics around the resources that we have. And our analysis has shown to date that, sort of the path we're taking has been -- has been the path to go ahead with.

If load grows we always keep those resources in our -- in our back pocket. So, for example -- and we keep our studies -- you know, we try to keep them as current as possible as we need to. If the load grows quickly and we need to install a gas resource, if you will, something like that, you can install them quickly, they have a much shorter time frame with them that's there. And our hydro resources do have some lead time to them, so we can't get them in necessarily in certain time frames. So if load grows faster than expected, we can put those types of resources in -- in place that are there.

It has been, I think, more recently in our analysis we're -- we're looking more so at those with the cost of gas and the high cost of hydro and that, and we keep doing that, that's -- that's an annual process that we look at all those things. So I think the -- the short answer is, is that I believe we do factor those in -- into our -- into our work when we look at our long-term resource plans.

We also have in the short term the ability to do things like import and that, we have our -- our inter-ties with -- with the US at which point we don't have to invest any capital dollars in necessarily and we can rely on that back and forth and we do use that as a thermal resource in our system right now. As we go out in time, I mean, that changes and we look at the benefits of that as well. So I think that's -- that's -- it's not that we don't consider them.

MR. RAYMOND LAFOND: I hear this though I can still not reason why it would be so -- if it would be economically viable to build a hydro plant which, essentially, would operate -- or would be needed only for forty (40) or sixty (60) days of the year as opposed to a gas turbine plant.

MR. TERRY MILES: I guess with that in mind, if we build a hydro plant in the surplus capacity, we have the ability to make the long-term firm sales associated with them. I think that is a true benefit of the hydro resources that are there. And I don't think -- you're not afforded the same value under the resource like that as you are with the -- with the simple cycle unit or -- or a gas unit like that.

MR. RAYMOND LAFOND: I guess that's for the NFAAT. But that's assuming that exports are generating margins at -- of profit over the cost?

MR. TERRY MILES: We're continuing to do our analysis on those, yes.

THE CHAIRPERSON: Okay, thank -- thank --

MR. VINCE WARDEN: If I might just add, Mr. Lafond, if you're -- if you're only going to look at it from a peak building for the next -- to serve the next peak requirement, if -- then you would never -- you would never build another hydro plant. You'd always keep building for that next one (1) year of load growth with -- and filling that in with -- with gas combustion turbines.

So there -- there's no doubt that building hydraulic is building for the very long term.

MR. RAYMOND LAFOND: No, but I think -- I -- I hear you. However, I'm not sure about that conclusion in the sense that you would build a gas plant which is much less expensive and use it to -- to the point whereby when you start using it too much, then you do buy that hydro plant, and there -- you do build that hydro plant.

And, therefore, from day 1 it's already using quite a bit of capacity. And you can shut down the turbine plants and simply wait until you need it eight (8), ten (10, twelve (12) years later as opposed to a hydro dam, which, I mean, the costs are fixed.

THE CHAIRPERSON: I would think we should take ten (10) minutes and have a coffee or a drink or something. Thank you.

--- Upon recessing at 3:14 p.m.
--- Upon resuming at 3:31 p.m.

THE CHAIRPERSON: I believe we're ready to resume the proceedings. Ms. Ramage...?

MS. PATTI RAMAGE: Yes, thank you, Mr. Chair. We have two (2) more undertakings to file this afternoon. The first is Undertaking number 26. And that was the provision of the approximate capital cost of a 250 megawatt CCT versus the 250 megawatt SCCCT. And that undertaking number 26 we suggest be marked Manitoba Hydro Exhibit 61.

--- EXHIBIT NO. MH-61: Response to Undertaking 26

MS. PATTI RAMAGE: The next is Manitoba Hydro Undertaking number 37, using Pointe du Bois as an example, what kind of premium would be paid for reconstructing on the same site as a generating station that was previously constructed. And we're suggesting that be marked at Manitoba Hydro Exhibit Number 62.

--- EXHIBIT NO. MH-62: Response to Undertaking 37

MR. RAYMOND LAFOND: Exhibit 62, I'm sorry, I was distracted here, is the PUB/MH-1I-29? No, don't think so.

MS. PATTI RAMAGE: No. Exhibit 62 is Underterky -- Undertaking number 37, dealing with the premium --

MR. RAYMOND LAFOND: Oh, 37.

MS. PATTI RAMAGE: -- paper.

MR. RAYMOND LAFOND: Oh, yeah, I found it here.

(BRIEF PAUSE)

MR. RAYMOND LAFOND: Had it combined with 61.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Thank you, Mr. Chairman. I would like to briefly, and this time I mean it, turn to Tab 23 of the book of documents. And on page 248 there is a schedule about payments to the province and municipalities. I believe much of this has been in some way discussed, canvassed, or reviewed.

And, Mr. Warden, this sents -- sets out not only the historical, but the forecast payments that will be made to the province and municipalities by Manitoba Hydro, correct?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And to some extent this schedule might change, but probably marginally, in light of IFF12? Would you agree with that, or do you think there's going to be any significant changes if -- if it was redone pursuant to IFF12?

MR. VINCE WARDEN: Well, the most significant change would be in the -- because there has been some shifting in -- in borrowing associated with Conawapa primarily. The guarantee fee could -- could change, going forward. Capital tax, likewise.

MR. BOB PETERS: Are we talking a significant amount?

MR. VINCE WARDEN: Probably not real

significant, no.

MR. BOB PETERS: All right. And when we go across the top headings, the water rentals -- and there is an -- there is, on page 251 of the same tab, a -- an additional information request that provides the detailed calculations.

But the source of Manitoba Hydro's information is -- is based on the calculation methodology that's prescribed by the Water Power Act?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And it depends on the actual hours generated in any particular year as to what the water rental will be?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: And when we get into the future, past the two (2) test years, Mr. Warden, Manitoba Hydro is assuming average water conditions.

So the fe -- the water rental rate will -- will be based on -- on that estimation?

MR. VINCE WARDEN: Will be based on the actual water conditions of -- of the day? Yes.

MR. BOB PETERS: Yes.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: The debt guarantee fee -- and Mr. Schulz was -- reminded us that there was, and there is on page 249, a detailed method for calculation that I don't propose to go through.

But suffice it to say that the provincial debt guarantee fee will increase in proportion to the debt that Manitoba Hydro has guaranteed by the province?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: The sinking fund administration fee, I wasn't quite sure on this one, but this appears that Manitoba Hydro pays the province to administer the sinking fund?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And in some years you're paying -- is it just a rounding error, that it rounds to either a million or to zero?

MR. VINCE WARDEN: It -- it is. It's just rounding that makes it appear as though we're not paying anything.

MR. BOB PETERS: The capital tax might be an interesting one, Mr. Warden. This capital tax that is charged is a provincial tax that's being phased out for all provincial corporations except Crown corporations?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: Has it been phased

out, do you know? To your knowledge, has it --

MR. VINCE WARDEN: I -- I believe it has, yes.

MR. BOB PETERS: And in terms of the -- the payroll tax, again a function of Manitoba Hydro's wage and benefit payments to its employees, its O&M costs?

MR. VINCE WARDEN: Yes. Yes.

MR. BOB PETERS: The provincial mitigation or settlement obligations have various items inserted, including in 2013 there's a -- a $9 million obligation that -- that jumps out. And the footnote to that suggests that there's only 9 million left to be paid of the -- of the previous obligations that Manitoba Hydro undertook?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: Manitoba Hydro pays taxes to the City of Winnipeg for property taxes?

MR. VINCE WARDEN: We do, yes.

MR. BOB PETERS: And in municipalities, it's gifts in lieu of taxes?

MR. VINCE WARDEN: Grants in lieu of taxes, yes.

MR. BOB PETERS: Grants in lieu of -- sorry, grants in lieu of taxes. I was trying to deduce

whether it is -- it is more than coincidence that the -
- the provincial payment as a percentage of gross
revenue, you know, is in that 12 to 15 percent,
sometimes 16 percent range.

Is that more than a coincidence, or is
that just -- is that predetermined that that would be
the target range for the...

MR. VINCE WARDEN: Mr. Peters, there's
-- there's no predetermined target range for that
percentage. So, yes, coincidence, I would say.

MR. BOB PETERS: And when we look at
provincial payments as a percentage of gross revenue of
whether they're, you know, close to 15 percent, would
you agree that that's akin to a dividend to the
province?

MR. VINCE WARDEN: Well, it's never
been referred to as a dividend. Other utilities in
Canada do have specific dividend provisions that are
made to the province. These are payments -- payments -
- we -- we always referred to them as payments to the
province. And to the extend that, you know, you had
payments and dividends together, it's akin, akin to a
dividend. But -- but I'd hate to label it that,
because it's not that.

MR. BOB PETERS: All right. Fair

enough. Is Manitoba Hydro aware of any of these current payments being increased or decreased in the years ahead?

MR. VINCE WARDEN: No.

MR. BOB PETERS: No discussion with Manitoba Hydro respecting that?

MR. VINCE WARDEN: With the province, no.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Warden, Mr. Rainkie was kind enough to update us about the IFRS update. Have you any update for us respecting the non-controlling interest line, the last line on the IFF to talk about? I had understood that that was a matter that was the subject of further negotiations if it were.

MR. VINCE WARDEN: Yes. The -- the most I can tell you at this time, Mr. Peters, is they're discussions. Negotiations are ongoing, further meetings scheduled for this week.

MR. BOB PETERS: Would it be fair, Mr. Warden, that the arrangement and agreement with the Wuskwatim Power Limited Partnership was to some extent a blueprint for Manitoba Hydro related to it's Keeyask development?

MR. VINCE WARDEN: Yes. Yes, that's fair. It was considered to be a model that we would consider using for -- for future development projects.

MR. BOB PETERS: Is it still the model to be considered for future development projects?

MR. VINCE WARDEN: No. No, I think, based on the experience we've see with Wuskwatim, some unforeseen circumstances that have necessitated renegotiation, so. So, no, it's not a model we would want to prescribe to for those other facilities.

MR. BOB PETERS: Well, can I pin you down on what was the unforeseen part of the circumstances?

MR. VINCE WARDEN: Well, it's more so on -- on the revenue side. The revenue -- the sharing of revenues, in accordance with the formula that was -- was developed, have not materialized so -- or revenues have not materialized as forecasted.

MR. RAYMOND LAFOND: By "revenues", we are talking of net revenues or net income from the generation of that plant?

MR. VINCE WARDEN: We're talking about export revenues.

MR. RAYMOND LAFOND: The gross revenues, rather than net income or net revenue after expenses?

MR. VINCE WARDEN: Yeah, yes, yes. It's -- it's the gross revenues from the export market.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: I'll follow that up further Mr. Warden, but help -- help me with the question and the answer that you just provided to Board member Lafond. WPLP is being paid based on the formula that was in the agreement. Would that be correct, to start with?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: And the formula that was in the agreement was going to pay WPLP on an assumed basis that some of the energy would be pursuant to a firm, dependable contract?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And some of it would have been on the opportunity market, some of that would have been on peak, some would have been off peak?

MR. VINCE WARDEN: Correct.

MR. BOB PETERS: Whether or not factually the energy was sold that way, WPLP was going to be paid as if it was sold that way?

MR. VINCE WARDEN: No. No, it was -- it was to be paid based on the actual revenues derived on the market. So the firm -- the firm part of that did not change materially, but the -- the opportunity revenues, of course, have changed significantly.

MR. BOB PETERS: Well, there was no firm long-term contract for the Wuskwatim Power though.

MR. VINCE WARDEN: No, but it was based on firm -- long-term firm contr -- existing long-term firm contracts that we would have had that --

MR. BOB PETERS: And that's my -- maybe I'm not asking it right or understanding it, Mr. Warden. But WPLP is getting paid as if some of their energy was sold for five (5) cents a kilowatt hour on the export market.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And they're getting paid as if some of their energy was sold for three (3) cents and for some of their energy sold at two (2) cents.

MR. VINCE WARDEN: In effect, yes.

MR. BOB PETERS: But we know that, in my round numbers, that all of their energy is being sold at approximately two and a half (2 1/2) cents a kilowatt hour?

MR. VINCE WARDEN: Well, you have to make some assumptions --

MR. BOB PETERS: And I do. I make some pretty bold ones that --

MR. VINCE WARDEN: Yeah.

MR. BOB PETERS: All I'm suggesting is if there are no firm long-term contracts, all Manitoba Hydro can do is sell it as, essentially, opportunity energy -- whether that's firm, whether that's not firm -- and maybe get the average between two (2) and three (3) cents on it. And I said two point five (2.5) cents a kilowatt hour.

MR. VINCE WARDEN: Well, I -- I think you're, though, assuming that all Wuskwatim output is being sold on the ex -- export market and...

MR. BOB PETERS: You're going to correct me on that assumption?

MR. VINCE WARDEN: I'm looking to my cohorts here to say that's not the case.

MR. DAVID CORMIE: Well, I -- I think we went through this before Christmas, and that was the issue of whether Wuskwatim is needed to serve Manitoba load now and whether it's appropriate to evaluate it at the margin or as a -- as part of the average supply portfolio that Manitoba Hydro has. And so it's -- it's an issue of -- of debate, how you want to -- how you want to evaluate the energy.

MR. BOB PETERS: Well, I thought Mr. Miles showed us the supply balance showing that we -- we really don't need Wuskwatim this year in 2013.

MR. DAVID CORMIE: Oh, we do. We made the decision we -- to build it. Had we not built it, we would have been short this year. And subsequent events, such as the addition of wind generation, has created surpluses that have -- have created the -- the surpluses that are shown. But we -- we need -- we need Wuskwatim this year to serve the domestic load --

MR. BOB PETERS: All right.

MR. DAVID CORMIE: -- and our -- and our firm export contracts.

MR. BOB PETERS: Are you able to sell all of the Wuskwatim output that is not used domestically on the export market?

MR. DAVID CORMIE: Yes.

MR. BOB PETERS: And it's being sold on the export market in the opportunity market?

MR. DAVID CORMIE: Yeah, but so is the surplus that's being generated by the other generating stations being sold on the export market. Limestone is producing surplus energy that's going to the export market.

MR. BOB PETERS: And that's because there's no long-term firm agreement respecting that output?

MR. DAVID CORMIE: No. Well, our hydro system, by definition, produces 40 percent surplus. And so 40 percent of every generating station on average has surplus -- is surplus. So for that reason, it's not fair -- it's not appropriate, from -- in my perspective, to allo -- to charge a generating station as being all surplus. It provides dependable and surplus, and the allocation of revenue should reflect that.

MR. BOB PETERS: Well -- and I -- I won't get into the debate on the record, in terms of you -- it will be a matter for, I suppose, your counsel to provide an argument.

But in -- in terms of paying WPLP, on what volume are they getting paid?

MR. DAVID CORMIE: Well, the volume that they're getting paid is based on the production of the plant.

MR. BOB PETERS: And it that going to be full production?

MR. DAVID CORMIE: Full production for this year?

MR. BOB PETERS: Well, I realize you've staged the in -- the in-service dates, but --

MR. DAVID CORMIE: Well, yeah, for every megawatt hour, they're getting -- they're getting paid, but -- and -- and the formula is based upon the -- the market price for electricity right now.

MR. BOB PETERS: Okay, for every megawatt being generated, they're getting paid. Are they getting paid as if that energy was sold as firm long-term contract energy, or are they getting paid as though it was opportunity energy?

MR. DAVID CORMIE: Because there were no firm contracts signed subsequent to the date that the partnership chose, there are no firm exports going to the partnership right now. But any new firm export sale contracts will attract the firm rate associated with that.

MR. BOB PETERS: Does that also apply to the NSP arrangement that comes in, in 2015?

(BRIEF PAUSE)

MR. DAVID CORMIE: Yes, it does.

MR. RAYMOND LAFOND: For clarification purposes, the 40 percent referred to was 40 percent of revenues or 40 percent of production, kilowatt production?

MR. DAVID CORMIE: Appro -- approximately 40 percent of production at every generating station in an average-water year is surplus. Only 60 percent of the average is -- is dependable energy.

MR. RAYMOND LAFOND: But exports would make up for -- wou -- would they make up 40 percent of what's used in Manitoba or 40 percent of the total generation, of which 40 percent would be exported or extraprovincial and 60 percent would be within?

MR. DAVID CORMIE: Assuming that all -- all surplus is exported, it will make 40 percent of -- 40 percent of production will go to the export market.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Warden, just help me with some of the -- the details. The -- as I understood it, Nisichawayasihk -- I'll say NCN from here on -- could have subscribed for up to 33 percent interest in -- in the generating station?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: And did they in fact do that?

MR. VINCE WARDEN: They are on that path. They have not absolutely committed to that yet.

MR. BOB PETERS: And Manitoba Hydro, as the limited partner, would hold the balance?

MR. VINCE WARDEN: Yes, that's right.

MR. BOB PETERS: I had understood that NCN had to make their election and the matter had to close when the first unit came in service, which I thought was in July of 2012, from the previous evidence.

Have I got that right, that the closing took place in July of 2012, or was supposed to?

MR. VINCE WARDEN: The -- the first unit was in June, the end of June 2012. And -- and there -- the provision whereby they would have to de -- elect as to their percentage ownership has been extended to July of 2013.

MR. BOB PETERS: What level of ownership does NCN have currently?

MR. VINCE WARDEN: Well, the assumption is that it will be 33 percent, so.

MR. BOB PETERS: But at this point, it's factually zero?

MR. VINCE WARDEN: No. No, actually, they -- they've been provided advances from Manitoba Hydro so -- so as to maintain their 30 -- 33 percent level.

MR. BOB PETERS: So their 33 percent level would be based on the CEF12 numbers, in terms of what their contribution should be?

MR. VINCE WARDEN: Well, it would be based on the actual expenditures for the generating facility. So if CEF -- if -- if the costs come in exactly as in accordance with CEF12, which we do expect it will be close now, then, yes, it will be -- ultimately be based on CEF12.

MR. BYRON WILLIAMS: Would it follow then, Mr. Warden, that Manitoba Hydro has advanced to NCN 33 percent of the costs, as depicted on CEF12, for Wuskwatim?

MR. VINCE WARDEN: No, NCN has put in some of their own -- their own funds. So Manitoba Hydro has made up the balance by way of equity loans to NCN to -- to bring it up to 33 percent.

MR. BOB PETERS: How much money has NCN put up of their own money?

MR. VINCE WARDEN: At this point in time, it's approximately $14 million.

MR. BOB PETERS: And Manitoba Hydro's equity loans are in what approximate amount?

MR. VINCE WARDEN: In the order of a hundred million dollars, to date.

MR. RAYMOND LAFOND: What is your definition of a equity loan versus a loan?

MR. VINCE WARDEN: Well, it -- it is just that, the -- the per -- the amount required for NCN to maintain 33 percent equity interest in the -- in the partnership.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Just help me -- and I'll -- we'll get to some of the documents, and that may cause me to rethink my questions. But if it's one-third (1/3) of the level of ownership, then they're going to -- then the -- NCN is going to be required to contribute one-third (1/3) of the capital costs?

MR. VINCE WARDEN: Well, not really. It -- the generating station itself is financed 75 percent debt, 25 percent equity. So their 33 percent would be applied to the 25 percent equity portion.

MR. BOB PETERS: All right. Yes, I'm standing corrected. So they're -- they're paying one-third (1/3) of the 25 percent equity and Manitoba Hydro is paying the balance of the 25 percent equity?

MR. VINCE WARDEN: Yes, that's right.

(BRIEF PAUSE)

MR. BOB PETERS: Does NCN pay interest on the loan for Manitoba Hydro?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Do -- does NCN have to pay interest on the loan when WPLP is operating at a loss for the first number of years?

MR. VINCE WARDEN: To the extent that there are cash calls to maintain that equity -- required equity ratio, yes, they would pay interest on those cash calls.

MR. BOB PETERS: And those cash calls would be advanced by Manitoba Hydro?

MR. VINCE WARDEN: Yes, they would.

MR. BOB PETERS: Has that happened?

MR. VINCE WARDEN: I should say the agreement is -- provides for that to happen, but that has not happened yet, no.

MR. BOB PETERS: That's still a matter of negotiations?

MR. VINCE WARDEN: Yes, I expect

negotiations will alter that somewhat.

MR. BOB PETERS: If -- the agreement as structured, Mr. Warden, if interest wasn't paid on the loan, would the equity share decrease?

MR. VINCE WARDEN: Yes. Yes, there would be -- ultimately their -- their share would decrease, yes.

(BRIEF PAUSE)

MR. BOB PETERS: Is Manitoba Hydro prepared to advance all of the rest of the outstanding monies to ensure that NCN has a one-third (1/3) equity interest?

MR. VINCE WARDEN: No. That is -- that is the issue we're facing, because those advances would be of an order of magnitude that would put the partner in an almost impossible situation to repay those advances.

MR. BOB PETERS: So the -- the rough calculations of this plant would require just over $400 million of equity to be contributed, to keep a 75/25 debt-equity structure. And if NCN is to contribute one-third (1/3) of that, they're -- the expectation would be they would, under the current arrangement, fund $140 million. Is that approximately...?

MR. VINCE WARDEN: Those numbers are approximately correct, yes.

MR. BOB PETERS: And of that 140 million the -- the NCN counterparty has advanced 10 percent of that, or 14 million.

MR. VINCE WARDEN: To date, yes.

MR. BOB PETERS: And Manitoba Hydro has advanced to NCN another hundred million?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And so the balance of 26 million is the matter in -- in discussion?

MR. VINCE WARDEN: Well, no, the agreement provides that NCN has to put in a minimum amount of cash. So they -- they -- you know, they would not be able to -- if -- if they wanted to acquire 33 percent, there's a certain minimum threshold they must invest to achieve that.

MR. BOB PETERS: What's Manitoba Hydro's maximum contribution to that equity loan?

(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, we're -- actually, we would be very close to the maximum at this point in time. I believe, subject to check, the agreement provides that NCN must contribute a minimum of $33 million of their own cash by the date of declaration of their interest. So at a hundred million, we're -- we're pretty much at the maximum now, in accordance with the agreement.

MR. BOB PETERS: And is Manitoba Hydro aware of the source of that $33 million of cash that has to be contributed by your counterparty?

MR. VINCE WARDEN: Well, we've been having some discussions with them and there is a -- yes, we're -- we are aware where they -- that they do contemplate getting the -- the funds from a trust -- the trust agreement that's currently set up.

(BRIEF PAUSE)

MR. BOB PETERS: The way the agreement is structured, Mr. Warden, should NCN choose to fund no more money, their 33 percent interest would be reduced. Is that -- is that the consequence?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Okay, and Manitoba Hydro would pick up the balance?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Mr. Warden, in the book of documents, starting on page 256 is the WPLP IFF11-2. And the Board should be aware, and may have had on their chair a copy of Manitoba Hydro Exhibit 34, which is an exhibit which was filed before we recessed for Christmas. And Mr. Rainkie, I think, provided us with a projected operating statement for WPLP consistent with IFF12.

MR. DARREN RAINKIE: I recall that, Mr. Peters. I'm trying to locate it in my paper. I started losing the paper war about three (3) or four (4) hearing days ago.

MR. BOB PETERS: Do you need a copy? I have an extra, Mr. Rainkie. Or else if you -- if you can't locate one --

MR. DARREN RAINKIE: I think Mr. Warden located one right now, Mr. Peters.

MR. BOB PETERS: All right. I just want the Board and -- and let me understand, the IFF, Mr. Warden, that you tasked Mr. Rainkie to prepare is prepared in the accordance with the current agreement as signed as between Manitoba Hydro and WPLP?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And you've cautioned the Board that they shouldn't -- this may not be the reality that goes forward, because there may be some renegotiation?

MR. VINCE WARDEN: I probably even stated it stronger than that, Mr. Peters. It won't be the reality.

MR. BOB PETERS: And when we look at the financial ratios on either page 2 of 7 of Manitoba Hydro Exhibit 34, or we can look at page 256 of Board counsel's book of documents, there's an effort to hold the -- the debt-equity ratio at 75/25 at some point in time, correct?

MR. VINCE WARDEN: Yes, there is provision for the debt-equity ratio to deteriorate to a maximum debt ratio of eighty-five (85) for the first ten (10) years of operation.

MR. BOB PETERS: And that's shown, to some extent, on -- on both of these documents?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: My question is that -- let's look particularly on -- on Manitoba Hydro Exhibit 34 on page 2 of 7, when the debt ratio was held at 85 percent for the first ten (10) years. And I see above it, the net income is -- is negative.

Who's paying the cash call to keep the debt -- to keep that -- that debt ratio at eighty-five

(85)?

MR. VINCE WARDEN: Well, that is -- that is one (1) of the major issues. Manitoba Hydro would be advancing funds to NCN in order for them to maintain their -- their ratio. And those cash calls would be significant.

(BRIEF PAUSE)

MR. BOB PETERS: If there was a cash call, Mr. Warden, what percent of that cash call is Manitoba Hydro's responsibility to meet?

MR. VINCE WARDEN: It would be -- excuse me. Assuming that NCN has a 33 percent ownership, it would be 67 percent of that total.

MR. BOB PETERS: And to calculate the significant cash call that you -- that you referenced, would we need only look to the net income line and do the calculation as to what additional amount of -- of revenue or income would be needed to keep the net income line positive at least at an 85 percent capital structure?

(BRIEF PAUSE)

MR. BOB PETERS: Let me rephrase the question. I may have asked it incorrectly. If we're looking at Manitoba Hydro Exhibit 34, page 2 of 7, and we see on the bottom line of financial ratios a point in time when 85 percent is maintained. If we look above that 85 percent number, and let's pick 2015 as the year, there's a $65 million loss.

Would -- would it be correct in my way of thinking that the cash call that year would be $65 million?

MR. VINCE WARDEN: No, it would be in excess of $65 million, because zero net income would not maintain the debt ratio at that level.

MR. BOB PETERS: All right. You'd have to -- you'd have to factor in the previous losses and -- and make those good before you can --

MR. VINCE WARDEN: Yes, there's a compounding effect.

MR. BOB PETERS: All right, I -- I was -- I see that now. Thank you.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Warden, on -- we had gone through, before the afternoon recess, that the capital cost of Wuskwatim was approximately $1.8 billion?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And then when I look at the IFF11-2, on the balance sheet on page 4 of 12 in my book of documents -- it'll be found on page 258. If you can -- I'll just let you get oriented to page 258, Board counsel's book of documents, which is Exhibit PUB 14. It's found under Tab 24.

MR. VINCE WARDEN: Yes, we have it here.

MR. BOB PETERS: The plant in-service is shown as $1.337 billion.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And I'm wondering why that isn't the full $1.8 billion?

MR. VINCE WARDEN: Yeah, the -- if you look under "Current and other assets," the transmission line is included as part of other assets. So that's...

MR. BOB PETERS: Does the end -- does the WPLP ownership extend to the necessary transmission for Wuskwatim?

MR. VINCE WARDEN: No. No, the ownership only pertains to the generating station.

MR. BOB PETERS: And then why would

transmission -- transmission show up as a current asset if it's not owned by the partnership?

MR. VINCE WARDEN: Well, it's really intended to show under "Other assets". And in -- in determining the debt-equity ratio, that -- that's excluded from the calculation. So it's here to indicate that those costs are to be recovered over the -- over -- through the income statement. So it's kind of a -- a reconciliation, so to speak, between the balance sheet and the income statement, because the income statement reflects the costs of transmission.

(BRIEF PAUSE)

MR. BOB PETERS: And if I -- where -- where will I find that transmission charge in the operating statement -- or that transmission revenue, I suppose?

MR. VINCE WARDEN: The -- the charge would be under "Depreciation and amortization." So the cost of -- of the transmission, the -- the tariff, so to speak, for the use of that transmission would be recovered through the "Depreciation and amortization" line.

MR. BOB PETERS: All right. So the

"Current and other asset" line that you've shown us on
the balance sheet, is that solely transmission?

MR. VINCE WARDEN: I'm sorry, Mr.
Peters, would you just repeat?

MR. BOB PETERS: Yes, sir. I'm looking
at the "Current and other asset" line that you drew our
attention to on the balance sheet.

MR. VINCE WARDEN: Yeah.

MR. BOB PETERS: I'm on page 258. I'm
just wanting to find out if that relates solely to
transmission, or is there some other current or other
asset included in that -- in that amount.

(BRIEF PAUSE)

MR. VINCE WARDEN: If you'll just give
us a second, I'll confirm that, Mr. Peters.

(BRIEF PAUSE)

MR. BOB PETERS: It wasn't meant as a
trick question. I -- I go back --

MR. VINCE WARDEN: Yeah. No, I --

MR. BOB PETERS: -- to your CEF and I
see that transmission was two ninety-eight (298) on

your CEF11.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: So I suspect that "Current and other assets" is transmission only.

MR. VINCE WARDEN: It -- it is. We just had that confirmed.

MR. BOB PETERS: Yeah, okay. Thank you for that. On the liability side of the balance sheet -- and I'm looking on page 258 -- we see that the long-term debt was at $998 million for what is a $1.8 billion asset capital project.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: When I look at the updated Exhibit 34, that amount has been increased somewhat considerably.

(BRIEF PAUSE)

MR. BOB PETERS: And the plant in-service is -- I'm sorry. The long-term debt of a -- of a billion dollars against an asset or a capital project of one point eight (1.8), where's the rest of the -- of the debt?

(BRIEF PAUSE)

MR. VINCE WARDEN: Well, it looks like between the presentation and 11-2, and the Exhibit 34, there -- there's a change in presentation such that the long term debt includes the transmission as well.

MR. BOB PETERS: Should it?

MR. VINCE WARDEN: Yes, yes, that's the case. So that -- that does include -- and it's just a presentation difference here, really. But it -- it's -- the same principle applies. The -- the financing is 75 percent debt for the generating facility with the transmission going in as -- as the difference.

MR. BOB PETERS: So the long-term debt should be 75 percent of the -- of the in-service asset?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: And it's not depicted that way on IFF11-2, but it is on IFF12?

MR. VINCE WARDEN: Well, it should be on 11-2 as well. The only difference, I believe, is that whereas 11-2 segregates out the -- the transmission line separately, the transmission line debt is included under long-term debt on Exhibit --

MR. RAYMOND LAFOND: If I can intervene, essentially un -- under page 258, long-term debt does not -- it is eight (8) -- nine hundred and ninety-eight thousand (998,000), but there's a lot of current and other liabilities of three twenty-seven (327), which have, essentially, been reduced by a few hundred million dollars on the page 4 of 7 of Exhibit 34.

MR. VINCE WARDEN: Yeah, so it's been consolidated into one line, yeah.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Thank you for that. Mr. Warden, WPLP does not use the transmission for free, does it?

MR. VINCE WARDEN: No. No, in fact --

MR. BOB PETERS: Is the -- is the -- sorry.

MR. VINCE WARDEN: No, I was just going to say the -- the transmission co -- the cost of transmission is totally recovered from WPLP over its service life.

MR. BOB PETERS: Is the cost of transmission equal to the depreciated -- the annual depreciation amount --

MR. VINCE WARDEN: Plus the --

MR. BOB PETERS: -- or is there a tariff?

MR. VINCE WARDEN: No, it's equal to

the depreciation plus the related financing costs.

MR. BOB PETERS: And, again, that's shared between WPLP and Manitoba Hydro based on their interest, their equity interest?

MR. VINCE WARDEN: That's right.

MR. RAYMOND LAFOND: Would it also include operating and maintenance costs --

MR. VINCE WARDEN: Yes, it would.

MR. RAYMOND LAFOND: -- of that transmission line?

MR. VINCE WARDEN: Yes, it would.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: When we look at Exhibit 34, Mr. Warden, still on the balance sheet, and we look at that long-term debt item that you've confirmed includes the transmission debt, it appears to remain relatively constant going out into the future.

Is -- does that suggest it doesn't get paid down?

(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, the -- the assumption that is used here is this -- we take a thirty (30) year debt for -- to finance the -- the project. And so it would remain constant throughout the period that we're reviewing on the -- on this particular schedule, on the balance sheet. So there would be no paydown in that thirty (30) year period.

MR. RAYMOND LAFOND: Is that project the thirty (30) debt would all be fixed interest rates, or partly floating?

MR. VINCE WARDEN: It would be all fixed.

MR. RAYMOND LAFOND: At what rate?

(BRIEF PAUSE)

MR. VINCE WARDEN: Yeah, there were -- you know, there were various tranches of debt taken out during construction so there's -- the rate would be in and around 5 percent, 5.5.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Is the debt ever paid off, Mr. Warden? I didn't follow that answer you gave me. In thirty (30) years it appears that it stays constant but is the debt ever paid off?

(BRIEF PAUSE)

MR. VINCE WARDEN: I think it would be not too dissimilar from Manitoba Hydro's debt. There is -- because we're looking at a facility that has a hundred (100) year life, there would be an assumption that the debt would be refinanced upon -- at the end of that thirty (30) years.

MR. RAYMOND LAFOND: Can I go back to my previous question, the interest rate of 5 to 5 1/2 (5.5) percent, would that include the provincial guarantee fee?

MR. VINCE WARDEN: Yes, it would.

(BRIEF PAUSE)

CONTINUED BY MR. BOB PETERS

MR. BOB PETERS: Sorry, the debt doesn't get paid off over the term of the agreement? It's interest only, is that what I'm understanding?

(BRIEF PAUSE)

MR. VINCE WARDEN: You know, I'd have to look at the covenants on that, Mr. Peters, to see actually when -- there'd -- there'd be provision for refinancing at year thirty (30) but at what point the debt would be considered repaid, I'd -- I'd have to look into that.

MR. BOB PETERS: You'll undertake to -- to advise the Board with respect to the debt on the WPLP arrangement?

MR. VINCE WARDEN: Yes, yes. We'll undertake to look at what provisions are made for repaying the debt associated with the WPLP.

--- UNDERTAKING NO. 49: Manitoba Hydro to advise the Board as to what provisions are made for repaying the debt associated with WPLP

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Are you able, by looking at the operating statement and the balance sheet, Mr. Warden, to indicate on what number depreciation expense is based? Asked another way.

Is it based on the $1.8 billion major capital project or is it based on the $1.3 billion value, excluding the transmission?

MR. VINCE WARDEN: No, the transmission would be included in the depreciation expense. Depreciation and amortization, as well as in finance expense. And to a smaller extent, lesser extent, in operating and administrative expense.

MR. BOB PETERS: But finance costs are only calculated -- I thought that it was only 1.3 billion out of a $1.8 billion project?

MR. VINCE WARDEN: No, no. The finance expense would be applicable to the cost of financing the transmission line as well.

MR. RAYMOND LAFOND: The -- the cash flow generated from the depreciation and net income when it does happen, would it essentially all be used to reduce debt or is a portion going back to the equity holders?

MR. VINCE WARDEN: Mr. Lafond, that's just something that we're going to have to confirm with that undertaking. We'll -- we'll do that.

(BRIEF PAUSE)

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Warden, when the Board sees the partnership capital declining on the balance sheet, is that to reflect dividends paid by WPLP?

(BRIEF PAUSE)

MR. VINCE WARDEN: No, Mr. Peters, dividends would not be affecting the partner's capital. That would be ref -- reflecting the losses that are -- that they would be diluting the -- the losses would be diluting the partner's capital. So -- so that's what we'd be seeing with that partner's capital declining.

MR. BOB PETERS: I thought that might have been a dividend to reflect an advance on expected net income?

MR. VINCE WARDEN: An advance by the partnership?

MR. BOB PETERS: Yes. Or Manitoba Hydro.

MR. VINCE WARDEN: Yeah -- no, that -- any advances that would be provided prior to the partnership being able to sustain a dividend would be advanced by Manitoba Hydro in accordance with the agreement. And there'd be a requirement for the partners to repay any of those advances.

(BRIEF PAUSE)

MR. RAYMOND LAFOND: I'm sorry, I'm not sure I follow this. If I look at, for instance, 2032, the partnership is generating an income of $74 million, yet its capital only comes up by -- sorry, it goes down by $7 million. So something has to be happening because net income is added to partner's capital, so then it has to be a distribution, in my opinion. So maybe that could be part of the undertaking.

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, Mr. Lafond, I think what's happening there is once you get in -- once we get into profitability, then -- then in fact the dividends are paid from the partnership. I think, in a response to Mr. Peters's earlier question through, the -- the question wa -- at least how I interpret it was that when the partnership is -- is not profitable, is there a provision for dividends to be paid. And, yes, there is, but they're in the way of a loan, a dividend loan, which must be repaid later.

So that was -- that was not the reason for the partner's capital declining in the -- in the early years.

MR. RAYMOND LAFOND: So the dividend would be paid in years of losses and -- which would reduce the capital, partner's capital, but it would become a loan fro -- or -- or monies borrowed from the partners?

MR. VINCE WARDEN: No, it would be a loan from Manitoba Hydro.

MR. RAYMOND LAFOND: Yes. Sorry, yes.

MR. VINCE WARDEN: Yeah, that's right.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Warden, I suppose dealing with Manitoba Hydro Exhibit 34 and looking at the -- the operating statement prepared in accordance with the current agreement, we see a $43 million loss in the first test year of 2013, and a $74 million loss in 2014, correct?

MR. VINCE WARDEN: Correct.

MR. BOB PETERS: Those losses that are shown here are flowed through to Manitoba Hydro's operating statement and Manitoba Hydro's net income?

MR. VINCE WARDEN: Well, they're -- the operations of the -- the partnership are consolidated into Manitoba Hydro's financial statements, yes. And -

- and --

MR. BOB PETERS: So these losses reduce the net income of Manitoba Hydro?

MR. VINCE WARDEN: To the extent that the losses are real, but that gets back to an earlier discussion. This is based on the formula for deriving the revenues. Now, they -- they're -- the question is whether some of those rev -- some of the revenues, if you were to attribute them to Wuskwatim as to where those kilowatt hours actually flowed, the revenues could be different than what is displayed here.

This is just based on the formula in accordance with the agreement. So the --

MR. BOB PETERS: But wouldn't -- let me ask it this way though, Mr. Warden. I had thought -- and maybe Mr. Cormie will jump in here, that the revenues attributed to the partnership would be deemed to be more than what would actually be realized by Manitoba Hydro.

MR. VINCE WARDEN: No. No, that's not the case. The revenues that are attributed to the partnership I'm not -- I don't want to say they're less, but they're different than -- than what would be recorded in the consolidated financial statements of Manitoba Hydro. This -- this statement would be used to determine the non-controlling interest line on Manitoba Hydro's consolidated financial statements.

(BRIEF PAUSE)

MR. RAYMOND LAFOND: Can I -- I think the comment you made has added an -- another question for me. The partner's capital between 2013 and 2014 does reduce by about the $74 million net deficit or -- of operation, but the following year there's a $65 million loss, but the partner's capital only reduces by about $20 million.

In that in regards to revenue allocation because of the agreement, or is that really because the dividend has been paid and it becomes a load due to Manitoba Hydro?

MR. VINCE WARDEN: The -- it's a little bit complicated because the partner's capital is comprised of the two (2) partners, NCN and -- and Manitoba Hydro. So Manitoba Hydro would be putting the funding necessary to maintain its 67 percent equity level, whereas the other partner wouldn't necessarily be doing that. So it gets a little bit --

MR. RAYMOND LAFOND: So what I'm hearing is there would be some added capital contributions by Manitoba Hydro over the years?

MR. VINCE WARDEN: Yes, absolutely. Yes.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Warden, I still need help, but if you could turn to Exhibit 34 and we look at the operating statement. And let's pick the first test year, 2013. Revenues are attributed at $26 million and that's -- that's to represent the revenues from the sale of the electricity that flows out of Wuskwatim generating station?

MR. VINCE WARDEN: In accordance with the formula, yes.

MR. BOB PETERS: That's not in quarter -- not in accordance with what factually occurs?

MR. VINCE WARDEN: That's right.

MR. BOB PETERS: Manitoba Hydro doesn't -- does it record factually what happens with the electrons that come out of that --

MR. VINCE WARDEN: No.

MR. BOB PETERS: So you have to make some assumptions?

MR. VINCE WARDEN: No, we -- we -- it -- the revenue -- we know how much the rev -- or the --

the production is, it's metered, and then we assign revenue based on -- on the formula in the agreement, so.

MR. BOB PETERS: And -- and I had understood and -- and I'll have to re-read what Mr. Cormie told me, but on peak, the partnership gets paid Manitoba Hydro's average price on long term dependable sales and imports. That's for on-peak energy?

MR. VINCE WARDEN: Yes, long term. Now, that's contracts negotiated since 2006. So --

MR. BOB PETERS: But it doesn't apply to any of the on peak Wuskwatim energy? Does that definition apply or not apply factually to the Wuskwatim arrangement?

MR. DAVID CORMIE: It would apply to the -- to the -- to any new contract that was signed subsequent to 2006. And -- and there aren't any and there won't be any until -- until 2015 when the -- the NSP sale extension occurs, or if we were to negotiate a new contract between now and that -- that date. So, it's -- it's -- the revenue formula is reflecting just the opportunity rates now.

MR. BOB PETERS: So, even if energy was sold from Wuskwatim on-peak, the partnership only received off-peak opportunity prices?

MR. DAVID CORMIE: It's on-peak and it's opportunity prices.

MR. BOB PETERS: I think what you're telling -- telling the Board, Mr. Cormie, is that whether it's on-peak or off-peak, it's -- the formula is now turning out a number that's the same because there are no long term firm contracts?

MR. DAVID CORMIE: Yes.

(BRIEF PAUSE)

MR. BOB PETERS: And so, Mr. Warden, when we look at the operating statement and we see $26 million of revenue for the 2013 year, that's pursuant to the formula, what does Manitoba Hydro say it factually was in 2013?

MR. VINCE WARDEN: We don't.

MR. BOB PETERS: Because it's not over, or because you can't --

MR. VINCE WARDEN: No, no, no. Because it's -- we don't attribute revenue specifically to a generating station; it just comes in as part of the generation mix that's available for sale on the markets that we sell into.

MR. BOB PETERS: And the cost that you

show as expenses on the operating statement, those are real costs that Manitoba Hydro has -- has incurred?

MR. VINCE WARDEN: Yes, they are but, again, as defined within the agreement.

MR. BOB PETERS: All right. So the operating and main -- operating and administrative expense shown at $6 million, that doesn't contain all of Manitoba Hydro's O&M expenses?

MR. VINCE WARDEN: Well, it's definitely intended to, but there is a -- it's prescribed how cost will be allocated. But the intention is to capture all the costs of operating the -- the generating station.

MR. BOB PETERS: Well, against that intention and if that's carried through then the expenses are real; whether cash expenses are not, they're real expenses?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And so, the loss -- are you saying the loss isn't real? The $43 million isn't a real loss?

MR. VINCE WARDEN: Well, it's real in accordance with the agreement.

MR. BOB PETERS: And what is it in reality?

MR. VINCE WARDEN: Well, I'm saying that we -- we don't attribute revenue specifically to a generating station. So you can make different assumptions and say, Well, all this went to the domestic market and we're getting seven (7) cents per kilowatt hour for this rather than two and a half (2 1/2) or three (3) cents, so -- but it depends on your assumptions.

MR. BOB PETERS: Or it all went to the off-peak opportunity market and you got two (2) cents.

MR. VINCE WARDEN: But we know that's not happening because Mr. Cormie this -- you know, some of it's being used domestically, so.

(BRIEF PAUSE)

MR. BOB PETERS: Just before I leave those cost items, Mr. Warden; head office costs and overheads are not included in the amounts that are charged through to the partnership?

MR. VINCE WARDEN: There is provision in the agreement for some overheads, Mr. Peters, but I'm not sure that we specifically identified those to be head office costs. But there -- there is provision for administrative costs.

(BRIEF PAUSE)

MR. BOB PETERS: Let's turn while we're on this subject to page 268 of the book of documents, please. That's found under Tab 25, Mr. Warden.

This is a response that Manitoba Hydro provided to CAC in its interrogatory in the First Round, number 15A. Do you have that?

MR. VINCE WARDEN: Yes, I do.

MR. BOB PETERS: And this is to estimate the impacts of Wuskwatim on net income, the discussion we were just having. And if I read the Information Request correctly, Manitoba Hydro is suggesting in this response that under IFF11-2 in 2012/'13 the impact on the -- on net income was $106 million, related to Wuskwatim?

(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, I'm not sure where you're getting the 106 million from?

MR. BOB PETERS: I'm sorry. I'm on page 268.

MR. VINCE WARDEN: Oh.

MR. BOB PETERS: And I'm looking at the

column for IFF11-2 on the right-hand side of the page.

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

MR. BOB PETERS: And so on the first test year, there's $106 million of expenses attributed to Wuskwatim, and there's 117 million attributed in the second test year?

MR. VINCE WARDEN: Yes, I see that.

MR. BOB PETERS: Those, again, are real costs that will be impacting Manitoba Hydro's net income?

MR. VINCE WARDEN: Yes, they will.

MR. BOB PETERS: And what I note on this sheet, Mr. Warden, is that the projected capital costs -- and let's stay with IFF11-2, shows $1.672 billion?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: But the finance expense is not calculated based on $1.672 billion, is it?

(BRIEF PAUSE)

MR. VINCE WARDEN: It should be, Mr. Peters. Oh, I'm -- I'm sorry. The -- in this particular -- yes, it's -- it's based on one point six seven two (1.672) less internally generated funds that -- that we assumed for the project.

MR. BOB PETERS: Okay. What was the amount of internally generated funds? Or maybe we -- we can come to that in the -- the information.

But what -- what you're showing here is that on the $1.672 billion of in-service costs as forecast in IFF11-2, Manitoba Hydro has deducted an amount that it notionally attributes from internally generated funds that have been previously talked about in these proceedings?

MR. VINCE WARDEN: Correct.

MR. BOB PETERS: Manitoba Hydro doesn't track it, per se, but it's a notional calculation.

Would I have that right?

MR. VINCE WARDEN: That's right.

(BRIEF PAUSE)

MR. BOB PETERS: If we turn, Mr. Warden, to page 274 of the book of documents. We see a response to PUB Second Round Question 50B. And I take it this is the notional calculation as to the internally generated funds that Manitoba Hydro -- I'll use the word "notionally" again -- attributes to the

Wuskwatim project?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And in this particular case, the -- if we go down to line item number 9, Manitoba Hydro has determined that the total surplus cashflow from operations that it can attribute to Wuskwatim capital is $481 million?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: And that only leaves then the 1.2 billion for financing by way of the long-term debt?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Ang, again, Manitoba Hydro doesn't do this calculation for each of its projects. This was done after the fact, making some assumptions as contained in this chart?

MR. VINCE WARDEN: That's correct.

MR. BOB PETERS: All right. Is the same formula used for all other major capital projects? Can you indicate that, Mr. Warden?

MR. VINCE WARDEN: No. No, there's really no reason to do that for the other projects. This is -- we're doing this for Wuskwatim just because of the nature of -- of this project.

MR. BOB PETERS: Can the Board expect

that Manitoba Hydro is going to keep a separate financial statement for the Keeyask project and the Conawapa project if Manitoba Hydro goes into partnership with anybody on them?

MR. VINCE WARDEN: Yes. Yes, we would.

MR. BOB PETERS: And so for those projects you'll have to do another calculation akin to the one you did on Wuskwatim here to determine what --

MR. VINCE WARDEN: No --

MR. BOB PETERS: -- internally generated funds are going to be allocated?

MR. VINCE WARDEN: No, this was really done more so for -- for this forum. It has no impact on the -- on the partnership.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Warden, I'm not going to prolong it on the record, but back on page 268, to the extent that the expenses are shown here are -- for Wuskwatim, under IFF11-2, are greater than what's shown on the WPLP IFF12, those additional costs again flow to Manitoba Hydro and are impacting on Manitoba Hydro's net income?

MR. VINCE WARDEN: Yes, to the extent that the -- the expenses are greater than what is provided for in the agreement, then that would -- that would flow to Manitoba Hydro. I'm just trying to think of a circumstance where that would occur though, because the agreement was structured so as to capture all the costs of operations.

(BRIEF PAUSE)

MR. BOB PETERS: Mr. Warden, I'm just trying to sort out a discrepancy here on the operating statement at Manitoba Hydro Exhibit 34. Costs are shown at $69 million in the first test year, and then on page 268 of Board counsel's book of documents they're shown as $106 million.

And I'm just wondering what number was embedded into IFF12 put together by Manitoba Hydro?

MR. VINCE WARDEN: Sorry, I'm -- I'm -- I didn't follow that, Mr. Peters. I wonder if you could just state that again.

MR. BOB PETERS: Yes, I will. If you have Manitoba Hydro's Exhibit 34 at hand. And I look to the 2013 test year, and I see ex -- I see expenses of about 69 million shown.

MR. VINCE WARDEN: Yes, I see that.

MR. BOB PETERS: And when I go to page 268 of Board counsel's book of documents I see a number that's $106 million for those expenses and I'm wondering why the two (2) don't correlate.

(BRIEF PAUSE)

MR. VINCE WARDEN: We're look -- yeah, we're looking at IFF11-2, I believe, on page 268 versus IFF12. And there was a different phasing in of -- of the -- of the units that assumed in IFF11-2 that didn't occur, so -- so IFF12 updates for that, so I think that the -- the major difference.

If you look at the first full year of in-service on Exhibit 34, so -- so the total is 118 million there for the first full year of in-service. And if you look at -- compare that to 2013/'14 the first full year of in-service, 117 million, so they're almost identical.

MR. BOB PETERS: So the explanation is simply the staging of the in-service of the units?

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Thank you. Mr. Warden, I think you and Board member Lafond were on this point and I'm -- if you're still on Exhibit 34 and we turn to the operating statement for -- let's pick 2023. On 2023 I see a forecast net income of $2 million.

MR. VINCE WARDEN: Yes.

MR. BOB PETERS: Now if we flip to the -- let's flip to the balance sheet and let's look at 2022 and 2023, respecting partner's capital. And partner's capital goes from $177 million in 2022 up to $322 million one (1) year later with a net income of $2 million. And I'm not following how that -- how that happens.

(BRIEF PAUSE)

MR. VINCE WARDEN: Yes, Mr. Peters, Mr. Rainkie just pointed out that's the year in which there's the 85 percent equity -- or debt ratio that is -- converts to 75 percent debt rate -- debt, so there's a -- an infusion of capital required in that year.

MR. BOB PETERS: Should I expect to find that on the cash flow statement, Mr. Warden?

(BRIEF PAUSE)

MR. VINCE WARDEN: I would think you could expect to see it there, but I'm --

MR. BOB PETERS: So that's going to be part of your undertaking, is that what you're telling me? You're going to -- you're going to help explain that to -- to me and set me straight on that?

MR. VINCE WARDEN: Yes, we will.

MR. BOB PETERS: Okay. I think -- I think, Mr. Chairman, this might be an appropriate time to -- in addition to the previous undertakings, Mr. Warden is going to provide an explanation to the Board as to the partner's capital line item on the balance sheet, and I have highlighted two (2) years for him to focus on, 2022 and 2023. And we'll -- we'll have a better understanding once he answers that question. Thank you.

--- UNDERTAKING NO. 50: Manitoba Hydro to provide an explanation of the partner's capital line item on the balance sheet, focussing on 2022 and 2023

MR. BOB PETERS: And with that, Mr. Chairman, subject to any questions the Board may have, I will stand down and I will remind the Board that tomorrow morning we will have new witnesses before the Board relating to Manitoba Hydro's rates, and I believe also a little bit on the diesel issue, if -- to the extent there's questions. Thank you.

THE CHAIRPERSON: If there is no business to attend to, then I would adjourn the proceedings, and we'll see some of you tomorrow morning at nine o'clock. Thank you.

--- Upon adjourning at 4:54 p.m.

Certified Correct,

____

Cheryl Lavigne, Ms.

2

D