MANITOBA PUBLIC UTILITIES BOARD

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

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

HELD AT:
Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
June 7, 2011
Pages 7622 to 7878

APPEARANCES

Bob Peters		)Board Counsel
Anita Southall	(np)	)
Patti Ramage		)Manitoba Hydro
Marla Boyd		)
Byron Williams		)CAC/MSOS
Myfanwy Bowman	(np)	)
Antoine Hacault		)MIPUG
Michael Anderson	(np)	)MKO
William Gange	(np)	)RCM/TREE
Delanie Coad	(np)	)SCO
Denise Pambrun	(np)	)City of Winnipeg
Gavin Wood	(np)	)Independent Experts
David Forsyth		)Gerdau

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--- Upon commencing at 9:34 a.m.

THE CHAIRPERSON: Okay. Good morning, everyone. Welcome to Mr. Matwichuk and Mr. McCormick. Sorry, it's just early morning. So this morning we have CAC/MSOS's witnesses, Mr. Williams. And then we'll have Mr. Singh swear the witnesses in.

MR. BYRON WILLIAMS: Yes, Mr. Chairman, certainly. And then I'll have some preliminary matters before we get to their qualifications.

CAC/MSOS PANEL:

GREG MATWICHUK, Sworn

JOHN MCCORMICK, Sworn

MR. BYRON WILLIAMS: Yes, and good morning, Mr. Chairman and Mr. Vice-Chair. Are -- the first order of business is just to distribute three (3) matters which we intend to have marked as exhibits. And I -- I did want to note, and I'm certainly prepared to speak to this more, but that there is some updates and new information in the slides of Mr. -- Mr. McCormick.

But I've had the opportunity to speak to My Learned Friend, Mr. Hacault, and my understanding is that he has no objection, and also with My Learned

Friend, Ms. Boyd, who I -- I'm quite confident Hydro will have some quibbles with the interpretation of the material, but my understanding is that they have no objection to it being admitted.

So I wasn't going to foist it upon the Board until I'd taken the opportunity to speak with My Friends. And my understanding is that they don't have any objections. If they do, speak now or forever hold your peace.

With that, Mr. Chairman, I'd like to ask Mr. Singh to provide the Board with the direct evidence of Mr. Matwichuk, which we'd suggest be marked as CAC/MSOS-29, and it's a beautiful blue colour. Mr. Matwichuk wishes to assure you that that is not a reflection of his own political views or the -- the -- it's -- you know, Albertans seem to like dark blue, for some reason.

--- EXHIBIT NO. CAC/MSOS-29:

Direct evidence of Mr. Matwichuk

MR. BYRON WILLIAMS: There's also a one (1) page document titled, "Evidence and Information Request Errata of Mr. McCormick," which we'd suggest be marked as CAC/MSOS number 30.

--- EXHIBIT NO. CAC/MSOS-30:
Evidence and Information Request Errata of Mr. McCormick

MR. BYRON WILLIAMS: Mr. McCormick advises me that his legal counsel distributed the second-last version of it as -- as opposed to the last version, so there will be one (1) additional errata that he will bring to your attention.

And, Mr. Chairman, the third document we would draw to your attention is -- and ask that it be marked as Exhibit 31 is the presentation of Mr. McCormick, dated June, 2011.

--- EXHIBIT NO. CAC/MSOS-31:
Presentation of Mr. McCormick, dated June 2011

MR. BYRON WILLIAMS: Is that satisfactory, Mr. Chairman?

THE CHAIRPERSON: Yes.

MR. BYRON WILLIAMS: And, Mr. Chairman, just for the Board's information, if you're -- if you're looking for the -- the new things that are not on the record I'll just provide you with the page numbers. And, as I said, these were provided to counsel in advance. The pages that this new information appears on are pages 25.

MR. ROBERT MAYER: Okay. Which one are we dealing with now?

MR. BYRON WILLIAMS: Sorry, Mr. Mayer -- Mr. Vice-Chair. It's the presentation of Mr. McCormick, number 31, sir. And the new information, just for the Board's information is on page 25, and pages 44 through 49.

THE CHAIRPERSON: 40 -- 45 to 49, is that what you said?

MR. BYRON WILLIAMS: I misspoke, Mr. Chairman: 44 through 49.

(BRIEF PAUSE)

THE CHAIRPERSON: Very good, sir.

MR. BYRON WILLIAMS: And just -- we're hoping to minimize the paper shuffling. Our expectation is that the direct of Mr. McCormick will take -- excuse me, Mr. Matwichuk will take most of the morning. When -- when Mr. McCormick's evidence is up there are two (2) -- this is -- this is probably something persons could do at the break, there are two (2) information requests that one might want to have reference to.

And this is for Mr. McCormick's evidence which will come later. That is PUB Hydro 1-35E, 1-35E. And secondly, PUB/CAC-1-13 Exhibit 1 to that response, Exhibit 1. And again, that will come up a bit later in the day.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: And, Mr. Chairman, and Mr. Vice-Chair, we're -- we're now prepared to proceed with qualifications of the witness.

EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS (QUAL):

MR. BYRON WILLIAMS: And good morning, Mr. Matwichuk and Mr. McCormick.

MR. GREG MATWICHUK: Good morning, sir.

THE CHAIRPERSON: I think everyone's read the qualifications if you want to move to the areas of expertise that they want -- you wish them to be qualified for it might speed things on a bit.

MR. BYRON WILLIAMS: Mr. Chairman, great minds think alike. That's exactly where we're going to -- to start. Mr. Chairman, we seek to qualify Mr. Matwichuk as an expert in regulatory accounting with a particular focus on revenue requirement analysis, regulatory principles, regulatory risk assessment, rate making forecasting, and regulatory mechanisms/solutions, which may be used to address issues ariding -- arising from the preceding areas.

And in terms of Mr. McCormick, we seek to qualify him as an expert in capital markets, including such areas as debt financing, equity financing, business evaluation for the purpose of financial decision making, and modelling for the purpose of financial decision making.

THE CHAIRPERSON: Thank you, sir. Mr. Hacault, does your -- do you have any comments?

MR. ANTOINE HACAULT: No objections.

THE CHAIRPERSON: I don't see Mr. Gange here. Maybe I'm missing someone. I don't see Ms. Pambrun. Ms. Boyd.

MS. MARLA BOYD: Thank you. We have no objections.

THE CHAIRPERSON: Mr. Peters, any comments?

MR. BOB PETERS: No objections. Certainly, sir, I could also indicate Mr. Gange did tell me yesterday and I forgot to pass on that he would not be attending today as his clients take no issue with the evidence being presented by these witnesses.

RULING (QUAL):

THE CHAIRPERSON: Very good.

MR. ROBERT MAYER: They take no issue with the evidence being presented by these witnesses?

MR. BOB PETERS: I -- I'm thinking as to what Mr. Gange told me and I believe that's exactly what he told me.

THE CHAIRPERSON: Mr. Williams...?

MR. BYRON WILLIAMS: I was wondering if Mr. Peters could get that in writing from Mr. Gange, Mr. Chairman.

EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Before proceeding with the direct of Mr. Matwichuk, and then subsequently Mr. McCormick, there's a couple of preliminary steps.

Mr. Matwichuk, you are responsible for the evidence marked as CAC/MSOS Exhibit number 6, titled "Manitoba Hydro General Rate Application for Rates Based on the 211 -- 2010/'11, 2011/'12 Test Years - Direct Evidence of Greg Matwichuk."

Is that correct, sir?

MR. GREG MATWICHUK: Yes, sir.

MR. BYRON WILLIAMS: And you were also responsible for Information Responses PUB/CAC/MSOS/Matwichuk number 17 through 24.

Would that be correct, sir?

MR. GREG MATWICHUK: Yes, that's correct.

MR. BYRON WILLIAMS: And you were responsible, sir, for the Information Responses MIPUG/CAC/MSOS/Matwichuk 1-1 through 1-3.

Would that also be correct, sir?

MR. GREG MATWICHUK: Yes, that is correct. Thank you.

MR. BYRON WILLIAMS: And can you confirm that material was prepared under the direction -- under your direction, care, and control, sir?

MR. GREG MATWICHUK: Yes, it was.

MR. BYRON WILLIAMS: And to the best of your knowledge are there any material errata and/or updates in your evidence that you wish to bring to the attention of the Board?

MR. GREG MATWICHUK: None, that I'm aware of.

MR. BYRON WILLIAMS: And so you're prepared to proceed?

MR. GREG MATWICHUK: Yes, sir.

MR. BYRON WILLIAMS: And before we get to you, Mr. McCormick -- my apologies to the court reporter. I can also indicate, Mr. Chairman and Mr. Vice-Chair, that Ms. DeSorcy has joined the crowd today.

Mr. McCormick, you're responsible for the written evidence marked as CAC/MSOS Exhibit number 5, written evidence of John D. McCormick on behalf of CAC and MSOS, dated December 10th, sir?

MR. JOHN MCCORMICK: While I don't know the exhibit number off by heart. Yes, I did write evidence dated December 10, filed in this proceeding.

MR. BYRON WILLIAMS: Thank you for that, sir. And you were also responsible for the preparation of responses to PUB/CAC/MSOS McCormick Information Requests 1 through 16.

Would that be correct, sir?

MR. JOHN MCCORMICK: Correct.

MR. BYRON WILLIAMS: And that material, both the written evidence and the information responses, was prepared under your care and control, sir?

MR. JOHN MCCORMICK: Yes.

MR. BYRON WILLIAMS: And are there any material errata and/or -- errata that you wish to bring to the Board's attention?

MR. JOHN MCCORMICK: We --

MR. BYRON WILLIAMS: And I direct the

Board's attention to CAC/MSOS Exhibit 30.

MR. JOHN MCCORMICK: I prepared Exhibit 30. What you see is a preliminary draft. There is one (1) correction which I would like to add to Item number 2 in the Revision to Evidence, which refers to page 59.

The additional information which does not appear on the printed sheet that you have, is that the number seven three five seven (7357) should be seven three seven five (7375), and the number one three zero (130) should be one four eight (148). And with that amendment to the errata sheet, the evidence, to the best of my knowledge and belief, is correct.

MR. BYRON WILLIAMS: Mr. McCormick, perhaps just for my benefit, could you repeat the page number, sir.

MR. JOHN MCCORMICK: The page is 59 in Item number 2 on the Revisions to Evidence. And the number seven three five seven (7357), where it appears in the table following line 3 should be seven three seven five (7375), and the number one thirty (130), which appears in that table, should be one forty-eight (148).

MR. BYRON WILLIAMS: Thank you for that. And Mr. Matwichuk, we're now ready to proceed with your -- your evidence. And just to the Board before we proceed, we expected that the Board would try to ex --

expedite the qualifications and we understand that totally.

Mr. Matwichuk will give you just a -- a brief introduction of himself which will just take a few minutes and will not be nearly as extensive as qualifications.

And with that, Mr. Matwichuk, I'd ask you to proceed.

MR. GREG MATWICHUK: Thank you, Mr. Williams. Good morning, Mr. Chairman and Mr. Vice-Chairman, the Board staff, and all other parties. It's good to be back here in Winnipeg and I'm grateful for the opportunity to appear once again for this tribunal, and to present and discuss issues that are of significance to this jurisdiction and, more specifically, with respect to Manitoba Hydro and its ratepayers.

I've had the good fortune of being asked to appear before you on behalf of the Consumers Association of Canada Manitoba, and the Manitoba Society of Seniors. For those who've not seen me in some time, I'm -- or for those who I have not had the pleasure of meeting, I thought I might provide you with a brief background.

As a chartered accountant, I have had the good fortune of providing written and oral testimony with various issues of revenue requirement, cost responsibility, risk, regulatory principles, regulatory accounting, to name a few. That testimony has been in various jurisdictions, including this Board and other provincial and federal reg -- regulators. In that milieu, I have worked in a variety of regulated industries: electricity, gas distribution, oil and gas pipelines, as well as telecom.

I am fortunate to have appeared before this Board on a number of occasions. That was principally dealing with Centra Gas, the revenue requirements, and the impact of the -- on the gas ratepayers of the purchase of it by Manitoba Hydro. I've had the opportunity to work with a number of Manitoba counsel on a variety of other proceedings, providing advice and input to their cases before this Board. In consulting my CV, you will see that I have worked with Ernst & Young, were there for six (6) years at Ontario Hydro at the time, a vertically integrated utility, was a client, and involved audit, accounting and regulatory issues in which I was intimately involved in.

Since that time, I've represented a large municipality, the City of Calgary, and I have advised two (2) regulatory boards on electricity rate-related matters. I have represented industrial power consumers in Alberta, and various anti-poverty and consumer groups in various jurisdictions across the country, including before regulatory tribun -- tribunals, as well as some large private industries, particularly on pipeline matters.

In all, Mr. Chairman, I have been blessed with the opportunity to be a student of regulatory matters and regulatory risk and ratepayer impacts for in excess of twenty-seven (27) years. My CV is Attachment 2 in Exhibit CAC/MSOS Exhibit 6.

Turning to my evidence, there are four (4) key components of coverage and how they are considered in the evidence and in my recommendations in written and oral testimony. First, Mr. Chairman, I wanted to consider who are the domestic ratepayers, and how are they impacted by Manitoba Hydro decisions and forecasts?

Second, I wanted to consider risks. In this and previous proceedings, there exists an extensive record of framing and chronicling risk, as well as quant -- attempts at quantifying financial consequences of risk. I do not intend to venture into that realm; the record is plentiful on that score. Rather, in terms of risk, my focus is on how the risks and rewards in running a utility like Manitoba Hydro play into the role and the consequences of being a domestic ratepayer.

Thirdly, the focal point of my evidence is a rate stabilization mechanism, and I've addressed it here as an RSM, as I will throughout the rest of this direct. In my evidence, I had given it the moniker of an RSR, but I have tried to clarify that it is not a reserve, it is not a fund, and we will -- we will deal with that shortly. But the fundamentals for it are based in risk and who bears the risks.

Finally, the fourth area that I'd like to deal with is -- is a secondary focus, and that is out of Manitoba Hydro's historical references to certain financial targets.

At the heart of my evidence are the Manitoba Hydro export forecasts, the significant variances, the impact on the income statement volatility, and how the RSN -- RSM can help overcome these gaping variances to the benefit of ratepayers.

I would like to get right to the point, if I may, and that means addressing forecasts, specifically export revenue forecasts, export revenue variances, and the RSM. We'll then turn to the four (4) components I mentioned on the previous slide, and then examine the fundamentals that lead to the RSM.

You'll see in -- in this graph, Mr. Chairman -- I'll address the red line shortly, but to give it some context, in my evidence I noted that there are large variances between forecast export revenue and actual export revenue. And from this graph you can see that the variance was significant, or has been significant, and was as high as 48 percent of forecast and on average over 22 percent off the mark.

The red line represents the variance, the difference between the forecast and actual. That's the variance I'm talking about for export revenue over the period 2001 to 2009. You may observe that variances are both positive and negative, around zero, but predominantly above the zero line, i.e., positive variances or actual export revenue exceeds forecast. And --

MR. ROBERT MAYER: Sir, we are to assume, therefore, that zero doesn't mean they made no money, zero is what they forecasted to make.

Is that correct?

MR. GREG MATWICHUK: Yes, it's the variance off the forecast, that's correct, Mis -- Mr. Mayer. Yes, that -- that is a -- it is a difference between what Manitoba Hydro actually ended up exporting in terms of dollar revenue versus what they had included in the forecast when they established domestic rates, so you've got it.

Now, if forecasting of export revenues was closer to actual, as one would expect for most costs and most revenues in a utility in a cost of service environment, the red line that you see there would rather hover just above or below, to your point, Mr. -- Mr. Mayer, would just hover above or below the zero line.

Just over the period 2001 to 2009, the net positive export variance, i.e., the cumulative over the period which you see before you, was 441 million. That means that export revenues were under forecast by 441 million during that period.

Let's contrast the export revenue variances with domestic revenue variances. You can see by the green line in this slide that the actual domestic revenue is much closer to forecast. The variances are much smaller for domestic revenue than they are for export revenue.

The average variance for domestic revenue is under 3 percent for this period. The level of the variance is not only more desirable, but it's what one would expect for forecasting in a cost of service environment, particularly for a mature utility.

Export revenue forecasting, as we saw in the previous slide and on this one, is 22 percent off the mark versus 3 percent off the mark for -- for domestic.

The point is, Mr. Chairman, prospective rate making and the cost of service model relies on reasonable forecasts.

In regulated utilities when forecasts are not within close proximity of actuals, regulators have access to and do use tools to deal with such wide variances. One (1) such tool is an RSM. In this slide we compare the export revenue variances that you've se -- seen in the previous two (2) slides, the red line, to refunds that might be generated under an illustrative example for a recommended RSM, and that's the blue line.

And this is a graph that was taken directly from a response to an -- an IR. Pardon me. And the wide export variances on the red line, the RSM takes those wide variances and the RSM represented by the blue line and delivers to the ratepayer the amounts of those variances that are smoothed out over time, and the smoothing dulls the one (1) year spike, for example, of the drought year such that the refund situation remains in place throughout the period.

So you can see what precipitated the recommended RSM. And those are the wide export variances. Having addressed the forecasts, the variances and the RSM tool, let's now turn to the fundamentals underlying the evidence.

In respect of the first component of the four (4) that I intended to address in my evidence, the domestic ratepayers, let's move to who are the domestic ratepayers. Let's consider the overall role they play. We will turn to their role, why their role is relevant to RSM evidence and we will move on to how RSM can assist the Board.

As promised, let's examine electricity ratepayers in Manitoba. As you know, Manitoba Hydro is a Crown corporation, and is a ubiquitous monopoly service provider across the Province.

Manitoba residents are generally domestic ratepayers. For Manitoba Hydro the shareholders, the Province of Manitoba, which in turn is answerable to the residents, generally speaking the taxpayer public, and the ultimate owners are the shareholder, or share -- yes.

Un -- as such, the shareholders and the domestic ratepayers are essentially the same group. For the purpose of this evidence it is assumed that the two (2) are essentially the same group. And the public domestic customer owners are referred to in this evidence as the domestic ratepayers. In reviewing the record I found that Doctors Kursi -- Kubursi and Magee appear to hold a similar view.

And until rebuttal evidence I had not previously observed Manitoba Hydro's declaration of ratepayer risk, but now I see that Manitoba Hydro has agreed with this view. And together with Doctors Kubursi and Magee it would appear there would be some consensus on that point. If during our discussions I default to the term simply ratepayer, I'm intending to indicate domestic ratepayer.

If we examine in terms of who bears the risks, Mr. Chairman, if we examine an investor owned utility, an IOU, the at-risk parties are the shareholders. If the investor owned utility should fail to meet its financial expectations, essentially for whatever reason, the shareholders are at risk for suffering diminished value to their holdings in that company.

As noted in the previous slide, for Manitoba Hydro the shareholder is the province of Manitoba, which in turn is answerable to the residents, generally speaking, the resident taxpayer public and the -- are the -- and the ultimate owners are the shareholders. And as such, should Manitoba Hydro fail to meet it's financial expectations, the resident ratepayers of Manitoba are the at-risk parties.

Having defined the domestic ratepayer as the domestic customer owners who bear the residual rights and obligations, the key regulatory issue in this context, sir, is that domestic ratepayers essentially bear all of the risks of Manitoba Hydro's operations and financial consequenches -- consequences of those risks.

I intend to briefly discuss two (2) key principles of risk and reward. First, symmetry of risk in reference to both the downside risk and the upside risk. Second, I intend to address the investor perspective, a fundamental relationship of risk and rewards.

Manitob -- Manitoba Hydro forecasts, as we discussed earlier, play a large role in the risk and reward scenario for domestic customer ratepayers. My evidence define the downside and the upside risk.

The downside risk is that possible single-event outcomes with lower worth than expectation, and that's the key, Mr. Chairman, lower worth than expectation. The upside risk, conversely, is the possible single-event outcomes with higher worth than expectation.

As my former stats and econometrics professors used to say, in an economic or statistical measurement a risk is a variation around the mean or, alternatively, in the context of a distribution of possible outcomes, the spread of actual outcomes around the expected outcome, as measured by the variance of the standard deviation. Therefore, in both -- in the context of both the upside and the downside risk the spread in a distribution is both above and below the mean average of the distribution.

To date the record of this proceeding appears to have been dominated by the concern for those items below the mean, such as the risks that might adversely affect net income or net revenue, and those are things like drought and reduced export demand.

Generally the fundamentals of risk can be captured in terms of both negative and positive outcomes. While I don't want to ignore the downside risk, I'm hoping to shine the light of context on the upside risk in this hearing.

In the case of Manitoba Hydro, the converse of lower than expected revenues is higher than expected revenues. And again, that's the variance between the expected and the actual results.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. Matwichuk, if I could just stop you here for a moment.

Certainly from a ratepayer expected -- perspective one can understand why they might care about lower than expected revenues. Speaking exclusively from a ratepayer perspective, how can a -- why -- why, if at all, would a ratepayer be concerned about higher than expected revenues driven by variances from export forecasts?

MR. GREG MATWICHUK: Well, I'm about to launch into that Mr. -- Mr. Williams.

MR. BYRON WILLIAMS: Clever segue?

MR. GREG MATWICHUK: Yeah. But broadly speaking you will see that ratepayers have an interest because of the risks that they bear on the downside risk.

And as we observed in the graphs near the outset, history appears to show greater volatility from forecast in export revenue than it does from domestic revenue. We've also observed that export revenue variances have been more positive than negative and that's in line with the common expectation in this proceeding that there will be a drought approximately once every ten (10) years.

Now, let's speak about risk in a regulatory context. Generally, risk can be framed that the outcome will be different than expected. In the regulatory context the risk is that the actual result will be different from that amount forecast for the purpose -- that was used for the purpose of setting domestic rates. Domestic rates are set to be -- are intended to be set based on what is reasonably expected, and we -- we saw that on the green line with respect to domestic revenue, that's it's fairly close to what was expected.

A risk to Manitoba Hydro domestic ratepayers is that the actual avenue -- revenue will be greater or lower than what domestic rates are forecast to generate. If the actual domestic revenue is less than forecast then domestic rates were too low. If the actual domestic revenue is greater than forecast then the domestic rates were too high.

While actual amounts can and do differ from forecast for a variety of reasons, and the im -- impact all costs and revenues, the evidence is focussed on revenue variances, and more specifically export revenue variances. So with higher earnings in -- this is getting back to your question, Mr. Williams, it represents a lost opportunity through transparency and -- an explicit refund. A subsequent rate increase should be a bit lower so that a citizen ratepayer has the money in his jeans so that he or she can, for example, purchase a bus pass rather than find alternative transportation.

While not attempting to be comprehensive, some examples of downside risk include water levels, export demand, or export prices that are lower than expected, and import prices that are higher than expected, or a combination of those. Conversely, some examples of upside risk or opportunity include water levels, export demand, and export prices that are higher than expected, and import prices that are lower than expected, and, again, with a potential combination of those.

Currently, if domestic rates end up being too low, Manitoba Hydro might return to the regulator and cres -- request higher domestic rates in the name of improving its equity position. So, under current circumstances, following a sharp or precipitous decline in export revenues, ratepayers may be relatively confident that a rate increase is coming, but in contrast, given the sudden rise in export revenues, ratepayers likely won't have the same level of confidence of a rate decrease.

If domestic rates end up being too high, Manitoba Hydro could, using its own discretion, employ the additional equity from higher domestic rates to incur costs -- or to make use of that newly found equity, or simply bank it, so to speak. That level of discretion is asymmetrical, and that's part of the issue, Mr. Chairman, and it's squarely the concern regarding the potential for misaligned risk tolerances articulated by Doctors Kubursi and Magee.

My evidence discusses how the RSM mechanism can overcome that potential, and for the potential for Manitoba Hydro to unilaterally exercise its discretion on enhanced equity.

As the second of the two (2) fundamentals of risk I noted on an earlier slide, I simply wanted to make mention of the investor perspective. And it's very simple and very fundamental, Mr. Chairman: An investor who bears a risk should see a clear and explicit opportunity of return. An investor who bears a risk should see a clear and explicit opportunity for a return.

With the foregoing as a backdrop, there are four (4) summary findings with respect to the recommended RSM. First, domestic ratepayers essentially bear all the risks of Manitoba Hydro's operations and financial consequences of risks of actual export revenues less than forecast. Domestic ratepayers are entitled to an explicit reward for the risks they bear when export revenue is greater than forecast. This finding is consistent with the principle that any investor has to bear -- who has to bear a risk should see a clear and explicit opportunity for return.

Thirdly, Mr. Chairman, domestic ratepayers have not explicitly benefited through rates from rewards of export revenue risks they bear. In response to bearing that risk, ratepayers should receive the benefits that accrue from actual ex -- net export revenue exceeding forecast. And, finally, Mr. Chairman, a rate stabilization mechanism would allow domestic ratepayers to explicitly benefit from the risks that they bear.

So, if I may, I would like to turn to the logic for an RSM, and to do that, I would like to address it from the following perspective. First, we need to address how domestic rates are established for Manitoba Hydro. Second, we should consider how actual events unfold relative to forecast. And, third, we'll consider where revenue volatility exists and where it manifests.

So far -- so, first, Mr. Chairman, how, generally speaking, are domestic rates determined in this jurisdiction? Well, we start with a formalized mechanism which we all know and are very familiar with, is the revenue requirement, or the cost of service. It's a forecast of costs and a very formalized mechanism.

Second, there's another formalized mechanism which is known as the prospective cost of service study, or the PCOSS, and this where costs from the total revenue requirement are shared by rate class, and there is a cost reduction from the assumed and -- i.e., the forecast net export revenues. And then, from there, we proceed to another mechanism that is the rate design exercise.

Manitoba Hydro's mandate requires adequate power to meet the needs of domestic ratepayers. Cost of capacity above that need is placed at risk in a competitive export market, and that risk is born by domestic ratepayers. Manitoba Hydro is not simply permitted to use its own discretion in setting its own cost of service, it's own cost acal -- allocation or its rate design.

They come before you, Mr. Chairman, where the revenue requirement, cost allocation, and rate setting mechanisms are both formalized and transparent. Now, I understand that the forecast revenues are based on -- the forecast export revenues are based on median water flows. That is the current standard.

Given that domestic ratepayers essentially bear all the risks, ratepayers bear the financial consequences of forecast error associated with export revenue. Forecast export revenues are determined by for -- export revenues after deduction of specifically assigned and allocated costs, and this is part of the prospective cost of service study we were mentioning earlier.

We recognize that ratepayers do have some benefit from forecast amounts of export revues, but there are no explicit benefits to domestic ratepayers for export revenues greater than forecast. There are explicit and immediate mechanisms to determine domestic rates through revenue requirement and the PCOSS. That includes forecast export revenue but no explicit and immediate mechanism to determine benefits to domestic ratepayers for export revenues greater than forecast.

As we'll discuss later, the RSM offers that mechanism. In comparing actual and forecast of export revenues, inevitably actual revenues will be greater or lesser than forecast.

Although not possible, but conceptually, Mr. Chairman, if you can imagine, if you will, if one had perfect foresight, forecasts would be the actual results and domestic rates would collect the actual amounts. But as we all know, there is no perfect foresight in utility forecasting.

But indulge me for a moment, Mr. Chairman. Conceptually, conceptually only, if for forecast -- if for export revenue forecasts equalled actuals, what we experienced during the last decade, ratepayer rates would have been lower with the perfect foresight, if we had forecasts that were used in determining rates that were the actual amounts.

THE CHAIRPERSON: Have you taken into account the various financial tests that have been applied and accepted with respect to Manitoba Hydro?

MR. GREG MATWICHUK: Yes, sir. What the -- simply what this means is we would have had higher amounts for export revenue to offset the revenue requirement because it's just a matter of a forecasting exercise, are we close or are we -- are we far away.

And this evidence just simply states that forecasting export revenues is extremely difficult, and we recognize that. It's not saying Manitoba Hydro is not doing its best in its forecasting. It's just suggesting this is the nature of the beast, that there are wide variances. And because of those wide variances, this is an opportunity to look at a specific mechanism.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. Matwichuk, just to follow up on the Chairman's question if I interpreted it correctly, and I just -- he'll correct me if I'm not. Can't it be argued that positive export variances from forecast have enabled the Corporation to buy down or to -- excuse me, to increase its retained earnings, have less debt, and -- and less financial -- financing costs, debt financing costs?

MR. GREG MATWICHUK: I think, Mi -- Mr. Williams, what you're getting at is that it has allowed Manitoba Hydro to move towards its target of debt-equity. Is that...

MR. BYRON WILLIAMS: Yes, and I -- I'm suspecting the Chairman might have been getting at that point as well.

MR. GREG MATWICHUK: yes. And, again, this is something that I'll be addressing shortly. But essentially, Mr. Williams and -- and Mr. Chairman, that the issue of debt-equity is that if that is a target that the Board wishes to continue with, it can help, but then it gives rise to many other issues including intergenerational equity and intergenerational inequity.

MR. BYRON WILLIAMS: Mr. Matwichuk, I'm going to -- I don't want to interrupt your flow too much, but ultimately there is -- if -- if the Corporation has certain financial targets, which the Board, for rate setting purposes, wants to en -- endorse, is there any reason why your RSM mechanism cannot work with them?

MR. GREG MATWICHUK: And again, Mr. Williams, thank you for that, and -- and we -- we will get to that in this presentation, but given your question, the -- the answer is clearly yes. And, Mr. Chairman, this -- this RSM mechanism can work whether there is a target or not. And you will see -- we'll go -- we'll walk through the mechanics so -- in order to demonstrate that.

MR. BYRON WILLIAMS: And I apologize for the interruptions.

MR. GREG MATWICHUK: No. Thank you, Mr. Williams. But getting back to export -- actual exports and forecast exports, if we had the perfect foresight, if actual rev -- export revenue is greater than forecast, then domestic rates were too high. If actual revenue is lower than forecast then domestic rates were too low.

It -- it's the same principle that applies with the domestic revenue. Now we turn our conceptual minds to historical empirical data. When we look over the past decade, actual export revenues actually were materially greater than forecast export revenues. So there was a significant forecasting error in export revenue. And again, I'm -- I'm not attempting to draw out fault of Manitoba Hydro. It's just the simple fact. As we saw, the forecasting error was much less on domestic revenue. So this is not a pejorative term, it's just simply a reflection of the facts.

With that history in mind, and with the perfect foresight, assuming that we had it, if the forecast revenues matched the actual export revenues, then domestic rates would have been lower than they have been.

The point is, Mr. Chairman, with better expert forecasts domestic rates would have been offset by higher forecasts of export revenues than those that were historically included in rates, particularly over the past decade.

Given that dom -- domestic ratepayers bear the risks of Manitoba Hydro decisions, operations and actions, i.e., domestic ratepayers are the at-risk parties, domestic ratepayers bear all the financial consequences of risk that the actual export revenues will vary from forecast export revenues. So domestic ratepayers bear that risk.

We can recall the adverse water conditions of 2004 and the export losses were followed by a Manitoba Hydro requested rate increase to supplement fallen retained earnings, i.e., the rate increase when actual export revenue was below forecast. This is an example where the domestic ratepayer was experiencing and realizing the financial consequences of downside risk. Earlier we discussed the risk has both downside, i.e., the lower water levels, for example, and the upside, higher water levels.

Ratepayers who bear the financial

consequences of risk are entitled to rewards on the upside. Just as Manitoba Hydro advanced applications for rate increases when export revenues were lower than forecasts, i.e., lower amounts in existing rates due to low water conditions, symmetry of risk and reward suggest that domestic ratepayers should similarly benefit when actual export revenue is above forecast.

And to put it in more -- in simple terms, an increased bill in the face of bad times suggests a decreased bill as a result of good times. Based on the history, the capital, the expenditures, the operations and so on, it is fair to say that there appears to be a general commitment in Manitoba Hydro to exporting power. Assuming a general commitment to exporting power it is essential to understand how domestic ratepayers are involved and ensure they are impacted appropriately.

If the goal of participating in export power is to provide benefits to domestic ratepayers there should be an explicit and transparent mechanism where one can observe, directly identify the benefits, quantify them, ensure -- and ensure that they are explic -- explicitly delivered to domestic ratepayers.

MR. BYRON WILLIAMS: Mr. Matwichuk, just to stop you for a second. Doesn't the cost of service study do that for forecast revenues?

MR. GREG MATWICHUK: And just to summarize the previous slides, Mr. Williams, unfortunately it does not because the cost of service study provides its best forecast of both domestic revenue and export revenue, as well as all the costs. And while the domestic revenue is -- is fairly close to forecast, the export is not and therefore this wide divergence does not have a direct accounting to what the ratepayers are entitled to.

MR. BYRON WILLIAMS: So it's the variances from forecasts that you're saying are not accounted for?

MR. GREG MATWICHUK: That's correct.

Currently, Manitoba Hydro does not make use of an explicit, immediate, and formalized regulatory mechanism to adjust domestic bills when the actual amount of export revenue differs from forecast. And the forecast you'll recall, Mr. Chairman, is what was used to establish domestic rates. Therefore, there is no explicit benefit to domestic ratepayers from better than expected or forecast export revenue.

Now having spoken of the risks, who bears them, the benefits, and the absence of a formalized mechanism to pass them on to ratepayers, those who bear the risks, I will now turn to a brief discussion of the volatility of export revenues.

The volatility of export revenues is manifest through net income. It's been reported in this proceeding, and I quote:

"The primary source of net income variability relates to the substantial level of hydrology risk that is present in Manitoba Hydro's operations."

And that comes directly out of the National Bank financial report.

Secondly -- and again, I'm quoting:

"Manitoba Hydro has a very large position in power exports. As such, earnings derived from electricity exports are one of the most critical factors influencing corporate financial performance."

And that, Mr. Chairman, comes out of the ICF report.

In the period 2005 to 2010 cumulative actual net income of 1.44 billion was greater than the cumulative forecast net income of 663 million. So the difference, the variance there was 777 million, so over that period net income was 117 percent greater than forecast.

MR. BYRON WILLIAMS: And you're speaking of export revenues in the -- in that context, sir?

MR. GREG MATWICHUK: I'm -- yes, but I'm speaking of where it's manifest, and that it's manifest in net income. And I'm -- so the -- the variance that I'm talking about there, Mr. Williams, is strictly related to net income.

From 2001 to 2009 actual export revenue exceed forecast export revenue by 441 million. In my evidence I noted that consistently underestimated net income was a significant regulatory issue for Manitoba Public Insurance. And -- and I believe that was in proceedings, both in 2001 and 2010. The underforecast net income suggests that GRA's have either overstated costs or understated revenues, or both.

In my analysis and in my evidence the export revenue is a significant component of that variance and that suggests material amounts were not included in forecasts for -- to offset domestic rates and therefore domestic rates were essentially too high.

Now I recognize the difficulty in forecasting water levels and the resulting variances between forecasts and actual results. There is no question, but it does lead one to question the long-term forecasts, say, beyond 2012 and 2013. They may not be very reliable, and promises of lower rates or lower pace of rate increases ten (10) to twenty (20) years from now. I would suggest that those need to be examined with a healthy degree of scepticism.

Variability of water flows may have greater financial consequences with expansion: greater capital, greater interests costs, greater exposure to ratepayers. The concern is elevated by problems with experience of short -- shorter-term forecasts. Expansion means more debt, more debt means more risk to the domestic ratepayers.

If we're not forecasting export revenues with the same reliability of -- that we are with domestic revenues, then with longer-term hori -- time horizons and, therefore, more uncertainty, brings into serious question the reliability of long-term forecasts.

Domestic ratepayers do not currently have an explicit, formalized mechanism to obtain rewards of Manitoba Hydro risk taking. More immediately, a rate stabilization mechanism can assist with handling those variances resulting from risk taking.

I'd now like to turn to a discussion more directed at the RSM itself. In the context of Manitoba Hydro and its ratepayers, a rate stabilization mechanism provides a formal, explicit and immediate mechanism to allocate benefits and costs to ratepayers when actual revenues vary from forecasts, whether that's up or down.

The Manitoba Hydro circumstances lend themselves to an RSM. There are significant variances from forecasts, observed volatility in export revenue, and we have forecasts that are subject to known contingencies, but with uncertain timing and impact. So we -- we understand the contingencies we face, but we have great uncertainty with respect to the timing and impact of those.

Another way to look at -- at this is from the perspective of the National Energy Board, and they have established criteria for setting up a deferral account, and they have three (3) criteria. The first is absence of control -- that is, the level of a cost of revenue is outside of management's control. Well, export revenue is subject to a host a uncontrollable factors: water levels, level of demand in the export market, level of prices.

The third (sic) criterion is the inability to reasonably forecast. The question is: Is management unable to reasonably forecast the level of costs or revenues?

MR. BYRON WILLIAMS: Mr. Matwichuk, did I miss the second criteria?

MR. GREG MATWICHUK: I'm at the second criterion.

MR. BYRON WILLIAMS: Okay.

MR. GREG MATWICHUK: It's the inability to reasonably forecast, and -- and we'll see -- I'm returning to this slide, Mr. Chairman, just to demonstrate again that domestic revenue, represented by the green line, there's a reasonable opportun -- a reasonable ability to forecast it. But with respect to the fore -- forecasting of export revenues, that is a more difficult exercise.

And the third criterion that the NEB has is -- is materiality: Are the balances likely to be material? And, Mr. Chairman, there's just no question. In respect of export revenue, we're dealing with tens and perhaps hundreds of millions of dollars.

An RSM would direct the significant returns from exports, where there are export revenue variances, to domestic ratepayers who bear the risks associated with exports.

So now I'd like to turn to retained earnings, and -- and Mr. Williams helped -- helped me understand that retained earnings may be an important issue. Now, it suggests that -- Manitoba Hydro suggests that retained earnings is able to deal with forecast variances, and I'm going to suggest to you, Mr. Chairman, that retained earnings is not an appropriate vehicle to deal with significant variances in actual exports from those forecasts used in a rate setting format.

Rate retained earnings is simply an historical accounting of cumulative net income, which is a mix of many factors. And as we know, it's not a cash balance that can be accessed, rather it's an amount supported by other things, and -- and particularly with respect to Manitoba Hydro, largely by capital investment in its infrastructure. It's not accessible liquidity. It's not supported by liquid instruments, such as GIC's. Rather it's supported by mortar and wires and other such.

It's an accounting creation, but it's an accounting creation that was not designed -- not originally intended for domestic ratepayer protection, so it wasn't designed for that.

It does not appear that rate retained earnings have been used to provide a level of certainty associated with explicit ratepayer protection. Certainly that would provide transparency of export revenues. And, again, I return to the issue of transparency we obs -- where we could observe and identify and return it to the ratepayer.

Now I'd like to turn to how the RSM

functions. When the actual export revenue is greater than forecast there would be a refund to ratepayers. When actual export revenue is lower than forecast there would be a recovery from ratepayers. And those differences are amortized over a reasonable period, say five (5) years, to help promote attributing the differences to the ratepayer who paid for the service together with the smoothing of the individual impacts.

Now, Mr. Chairman, this slide is a -- is directly from a response to an IR from the PUB, and PUB CAC/MSOS/Matwichuk-22, Attachment 1. I had to check that small writing with my aging eyes. It shows the working mechanics of an RSM, and, at the Board's request, uses the data from Table 3 of my evidence.

And with your indulgence, I -- I recognize there are a lot of numbers on this table, but I'd like to take -- walk you through a few examples to greater elucidate the mechanics. And -- sorry, I'm just experiencing technical difficulties here.

(BRIEF PAUSE)

MR. GREG MATWICHUK: Bear with me. I'm almost there. There we go.

MR. BYRON WILLIAMS: We're simply doing

this to build drama, Mr. Chairman.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Do you want me to point, Mr. Matwhichuk?

MR. GREG MATWICHUK: No, it's okay. All right. Yeah. This will be a very brief change of seats. This will be a very brief change of seats. Mr. Chairman, let's begin with 2001, and, again, this is data from the Table 3 in my evidence which used the available data on the record from 2001 to 2009, and it is a typical way of demonstrating how a deferral account works.

So in the first year we begin with a zero balance because nothing has happened. But in the first year at line 2 there's a -- there's a variance, and this was taken from the data from the record, that the actual export revenue was in fact greater than forecast by 78 million.

So if we slip down to line 4, that was the variance for the year, and, therefore, the balance of the variance for the year before any amortization. Given that we need to quantify -- identify and quantify these in a particular year, we have to wait until the sub -- a subsequent year to be able to amortize them.

So there is zero amortization at line 7. And therefore, the balance at the end of year 1 is in fact the same as the variance in the export revenue. So the balance at the end of the year is the 78 million. Which then, if you go back up to line 1 in 2002, ends up being the opening balance for that year.

Then significantly in 2002 there is again a positive variance, where actual export revenue exceeded forecast export revenue of 197 million. Now together with the prior years variance, they total at line 5 the 275 million.

And here we see our first amortization at line 7. And that is taking the 78 million from the prior year and amortizing it over five (5) years. And that's why they're in that box together. You'll see the five (5) years going across 2002 through 2006, the 16 million is one fifth (1/5) essentially, of seventy-eight (78), rounded. So that 16 million then goes to line 16 where that is a refund to domestic ratepayers. And that 16 million then comes off the net balance at line 5 of 275 million to now be 259 million going forward.

So in 2003 we have that opening balance of 259 million at line 1. And then at line 3 in 2003 we experienced where actual export revenues were -- was indeed less than forecast export revenues, $56 million.

So that 56 million is netted against the opening balance to arrive at two (2) thou -- 203 million. Then we proceed down to line 7 and we see the amortization is continuing from the original year, 2001, and now we're introducing amortization of the variance from 2002 going forward of 39 million. You'll see it proceeds over five (5) years.

And we work through the mechanics down and the balance at the end of the -- or now the net refund is a combination of two (2) amortizations, the sixteen (16) and thirty-nine (39) to be 55 million. And the end of the year we have a balance of 148 million.

We carry that forward up to line 1 again. And 2004, which we all recognize, was a year of a drought and forecast export revenue was not attained, and actuals was much lower, and therefore we have to reflect, for symmetry purposes, Mr. Chairman, that there was a negative variance.

So down below again, lines 7 through 9 we see the amortizations of prior years. And then significantly you will note at the bottom the net refund is still in place from the amortization mechanics. And the balance at the end of the year has now turned negative. But that negative balance, when it carried forward in 2005 is offset by the positive export variance that we experienced in 2005.

THE CHAIRPERSON: Sir, I -- just to help you out, I -- we -- we certainly have your point and understand exactly what you're doing.

MR. GREG MATWICHUK: Okay. Very good, Mr. Chairman. Thank you.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: I have one (1) question about this table, Mr. Matwichuk. Just -- and I realize that this is an illustrative table responsive to a -- a request by the PUB. If we -- you'll agree with me if we look at the 2004 year, in addition to significant variances from forecast -- negative variances from forecast exports, there was also a negative variance in terms of power purchase or im -- imports of power, you recall that, sir?

MR. GREG MATWICHUK: Yes, that's correct.

MR. BYRON WILLIAMS: And that's not displayed in this calculation you've presented here?

MR. GREG MATWICHUK: That -- that has not been included in the calculation. But in my evidence, Mr. Williams, and Mr. Chairman, my definition of net export revenue ultimately to be used for this mechanism does include the -- the netting of power purchases because it's the definition from the prospective cost of service study.

MR. BYRON WILLIAMS: Thank you.

MR. ROBERT MAYER: One (1) other --

MR. BYRON WILLIAMS: Thank you.

MR. ROBERT MAYER: -- one (1) other item on that, sir. Where have you shown the 2003 unexpected domestic revenue, which is clearly shown on your chart and which I clearly remember granting to Manitoba Hydro by way of two (2) interim unexpected rate increases.

MR. GREG MATWICHUK: Sorry, Sir, you're talking about the unexpected revenue from domestic revenue in 2003. And this -- this evidence has assumed, sir, that for domestic revenue purposes that we don't need a -- a mechanism for domestic revenue because over time it seems to even out very close to the forecast. Whereas for export revenue, we don't -- we're not seeing that -- we're not seeing that measure of precision, if I can put it that way.

Does that help you, Mr. Vice-Chairman? Okay. Thank you.

So, what I'd like to turn to next, is again, an illustrative example of what the -- the effect might be on a monthly bill. So the monthly bill hopefully is -- we'll keep it in a very simple example of the basic charge of six eighty-five (685) -- six dollars and eighty-five cents ($6.85), the energy charge assuming consumption of a thousand kilowatt hours and -- and again, I'm -- I'm thinking of a residential bill here, Mr. Chairman. A thousand kilowatt hours at a rate of six dollars and sixty -- or sorry, six point six-two (6.62) cents on top of the basic charge of six eighty-five (6.85) would give us sixty-six dollars and twenty cents ($66.20) for -- for a current month total of seventy-three dollars and five cents ($73.05).

And then through the RSM there would be an adjustment on the bill to be given a -- an appropriate name, and I've just selected for this illustration an "Export Revenue Normalization," and that would show either a reduction or an increase, but typically as we've seen from -- from the data on the previous slide it would be a reduction. And the net -- it would show it then therefore a net total monthly of sixty-eight-o-five (68.05) after that reduction.

MR. BYRON WILLIAMS: Mr. Chairman, just time-wise we're making actually better practice than -- better time that we -- we did yesterday, perhaps because Mr. McCormick's not heckling as much as he did in our practice run.

I wonder if -- if -- looking at the time which is quarter to eleven (11), if the Board would -- would wish us to finish up this subject, which I -- I think would take us another fifteen (15) or -- or so minutes, or if the Board would like a break at this point in time?

THE CHAIRPERSON: We'll -- he -- he might as well continue.

MR. GREG MATWICHUK: Thank you, Mr. Williams. Thank you, Mr. Chairman.

So I'd like to speak to the benefits and support for the recommended RSM. And as you've heard me say it is a formalized mechanism and it is a transparent mechanism. As such, it provides an explicit link between the variances from export revenues generated under existing domestic rate assumptions and the risks borne by the domestic ratepayers.

Further, in terms of benefits and support for the -- for the RSM. And thirdly, in preference for this model over a general reliance on retained earnings, an RSM provides the transparency that would otherwise not be available.

Fourth, it is a tool for the regulator rather than an instrument for the company to engage in activities within its discretion.

An RSM will ensure there is symmetry in

handling through domestic rates the fluctuations in export revenues. That was fifth.

The sixth is it will remove the discretion, potentially involving other priorities and place it squarely where it belongs.

Seventh, an RSM can help all parties, including the regulator, and it can avoid surcharges in setting up the mechanism, unlike reserves which rely on surcharges to get them going, Mr. Chairman, and it avoids the surcharges that were suggested by Doctors Kubursi and Magee.

Eighth, it is relatively straightforward and administratively easy to implement.

And, finally, ninth, there is no segregation of existing retained earnings in the recommended RSM as in some RSM models, and, Mr. Chairman, I'm sure you and the Vice-Chairman are familiar with MPI's segregation.

I'm sorry, I have a couple of others I'd like to address, is that there's no need to set a target or manage the fund relative to the target. There's no funding or additional financing required by the province, and, Mr. Chairman, this is something that I -- I wish to emphasize, and you'll see later in the presentation, is that it's used in other jurisdictions.

So what are the outcomes of the RSM? In the end, there is a matching of benefits with risks. The recommended RSM uses the financial gains and losses from events that were not forecast to ensure that the domestic ratepayer is explicitly -- or the domestic ratepayer explicitly receives the benefits of favourable events in the same manner in -- as they bear losses from unfavourable events.

A second outcome is smoothing. Financial -- the financial gains and losses, i.e., the variances, are amortized over five (5) years, so the rates are kept relatively stable, and that you will see in the graph that I presented, the comparison of the variances with the line that represented the RSM result.

Third, it mitigates against the potential for moral hazard. RSM mechanisms' simplicity and transparency alleviates the need for Manitoba Hydro to exercise discretion with respect to the use of financial impacts of events where actual net export revenues are greater or less than the forecast net export revenues.

THE CHAIRPERSON: Staying on moral hazard again, maybe you could define it a little bit more broadly.

MR. GREG MATWICHUK: Okay. Mr. Chairman, there are a couple of perspectives on that. One is the perspective that was advanced by Doctors Kubursi and Magee, and -- and I noted that in my evidence. But, more broadly, it refers to the potential for Manitoba Hydro to undertake activities that may not be in the interest of ratepayers, and that -- that's the more broad definition of it.

THE CHAIRPERSON: In -- in short, you're suggesting, for example, if -- if a -- if a plan was undertaken that didn't work out as expected, there'd be a continual reminder of that in the bills of the customers.

MR. GREG MATWICHUK: There would be, sir.

Now, Mr. Chairman, as I referred to earlier, RSMs do currently exist. They can found in regulated entities such as hydro-electric utilities, water utilities, gas LDCs, otherwise known as local distribution companies, and, as you're quite aware, insurance companies. Examples that I -- some of the examples that I referred to in my evidence was Gaz Metro, which is a distribution compan -- gas company in -- in Quebec, and that -- their mechanisms is very similar to the one that I'm recommending in terms of their mechanism is very much weather-related. Hotter and colder weather can generate greater or less -- sorry, I should say reverse, lesser or greater gas requirements, and their -- their -- they set up a -- an RSM specifically for that.

And the other exam -- one (1) of the other examples I referred to was Seattle Li -- light -- City & Light, which is a hydro-electric company, but they set up a fund balance with -- with targets, and that's certainly not the approach that I'm recommending.

THE CHAIRPERSON: Sir, I think we'll take our break now before you go on to the targets. And just for the benefit of those assembled, it's our tentative plan to continue for how long it may take to work through CAC/MSOS's witnesses today, the original direct and all the cross-examination and the redirect.

So if we go by 4:30, so be it. So we'll take the break now.

--- Upon recessing at 10:54 a.m.
--- Upon resuming at 11:15 a.m.

THE CHAIRPERSON: Okay, away we go. Mr. Williams...?

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Yes, Mr. Matwichuk, when we were last speaking I think you had our rapt attention at page 52 of your PowerPoint presentation.

MR. GREG MATWICHUK: Thank you, Mr.

Williams and Mr. Chairman. I -- I will pick it up at slide 52. And I'd like to discuss in brief certain Manitoba Hydro financial targets and recognizing that there are -- there is some history associated with -- with these targets, and those being retained earnings, debt-equity ratio, and interest coverage ratio.

First, lest -- let's consider retained earnings. Manitoba Hydro contends that the benefit of a 75:25 debt-equity ratio is to provide a level of equity sufficient to withstand the financial impacts of risk, such as severe drought, significant infrastructure damage, loss of access to export markets, variability in earnings during a period of system expansion, and other adverse events, while alleviating the need for sudden large compensating rate increases.

Mr. Chairman, what I have indicated in my evidence is that retained earnings is really not a strong indicator that an entity can withstand adversity. Equity's not a pool of cash. And, as noted earlier, it's an historical accounting of accumulation of net income. And in the case of Manitoba Hydro, that is largely invested in infrastructure capital, not liquid assets.

The distinction was aptly demonstrated when businesses, more generally, who were flush with earnings, i.e., retained earnings, but had compromised cash flow sometimes were -- was the precursor to their demise.

For example, in the US we are all familiar with Enron, and in that case, had high retained earnings but was unable to withstand the crunch that it bore at the time. In Canada, Pacific Natural Gas, PNG, a regulated gas utility, has bo -- had -- had relatively high retained earnings but fell into financial difficulty.

PNG, as the result of the loss of one (1) or two (2) major industrial customers, their cashflow dried up. Despite a healthy retained earnings, PNG was unable to withstand adversity without significant rate increases.

It's my understanding, Mr. Chairman, that there's no statutory requirement for a retained earnings level. Manitoba Hydro suggests retained earnings are in effect internally-restricted form of self insurance and rate stabilization.

I am unaware of any internal restriction Manitoba -- Manitoba Hydro is open to allocate retained earnings at its discretion. Based on the record, there has been no reliable formal transparent mechanism to use retained earnings as a vehicle to protect against rate increases.

Manitoba Hydro's target for debt --

MR. ROBERT MAYER: Whoa, whoa, whoa, whoa, whoa. There was another line on that -- on that statement.

MR. GREG MATWICHUK: Pardon me.

MR. BYRON WILLIAMS: Mr. Vice-Chair might be interested in that line.

MR. ROBERT MAYER: What's this about province place on Manitoba Hydro at a higher risk when legislates distribution of funds. What are we talking about?

MR. GREG MATWICHUK: In 2003, Mr. Vice-Chairman --

MR. ROBERT MAYER: There was a one (1) time dividend legislated, that was it, at which, of course, all of it was never carried through. Are you suggesting that there's something in the works we don't know about?

MR. GREG MATWICHUK: No, Mr. Chairman, there's -- there's nothing in the works that you don't know about. It -- it's something that was clearly disclosed. And as you're referring to, was a one (1) time element in legislation. And that was a $200 million distribution.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. -- Mr. Matwichuk, just -- just -- it's on your slide, so the Vice-Chair might appreciate what you -- I think a bit more description of what you meant by the point there. Not that I'm welcoming it, but we're trying to be responsive to the...

MR. GREG MATWICHUK: Yes, Mr. Williams, and -- and Mr. Vice-Chairman. The point is -- is simply this, that if retained earnings was a measure of the ability to withstand adversity, one has to wonder whether the province would have put the Corporation in peril by reducing the retained earnings by $200 million and there -- therefore the debt-equity ratio.

MR. BYRON WILLIAMS: And, Mr. Matwichuk, just to finish up on the point and then we'll -- we'll certainly let the Vice-Chair intervene, but I'm going to help -- hope I get to the point first. Is your point then that the fact that the province felt confident enough to distribute funds, a suggestion that retained earnings is not the be all/end all that -- that -- that some may attribute to it?

MR. GREG MATWICHUK: Well, I certainly wasn't privy to the legislation or -- or what -- more specifically what led up to the legislation. But from the appearance of what did take place is that the province had the confidence in the Manitoba Hydro to be a vibrant ongoing business even after the distribution of $200 million and its inherent impact on retained earnings.

MR. ROBERT MAYER: The legislation is tied directly to export profit. And if it didn't materialize in that piece of which -- of it which didn't materialize reduced the amount of money that was actually intended to be distributed. It was tied directly to export revenues at the time. I now understand that you are referring, in fact, to the one (1) time piece of legislation that -- which hasn't come around since?

MR. GREG MATWICHUK: Yes, that's right, Mr. -- Mr. Vice-Chairman. It was simply that one (1) time that the -- the Mani -- the province exercised its entitlement as a shareholder, I might add.

MR. BYRON WILLIAMS: And, Mr. Vice-Chair, I do apologize for interrupting your question. I was just hoping to get Mr. Matwichuk to your point.

MR. GREG MATWICHUK: So turning to slide 55, the Manitoba Hydro's target, as I understand it was 75:25 and it has been that target for a number of years.

As I understand the record from this current proceeding, and according the Manitoba Hydro, the quote that I'm reading from is that:

"The target was revised to 75:25 except
during years of major investment in
generation and transmission system."

And that is -- close quote -- and was apparently to accommodate a shift in management emphasis.

I'm not aware of any data --

MR. ROBERT MAYER: Mr. Matwichuk, that's not exactly accurate. We've been told for years that the debt-equity tar -- target did not include major new generation that was always considered part of something they were going to have to do.

MR. BYRON WILLIAMS: Mr. Chairman, Mr. Vice-Chair, I think we may be confusing two (2) different subjects. And with the -- for the purposes of clarity, I think that you -- you may be referring to the target for internally-generated capital.

Whereas -- I -- I'm going, you know -- and certainly the record may correct me, but I'll suggest that the debt-equity target and this exception to it was brought in within the last two (2) or three (3) years, that would be my -- my understanding, sir.

MR. ROBERT MAYER: You may be right.

MR. GREG MATWICHUK: And -- and Mr. Chairman and Mr. Vice-Chairman, I was -- I was quoting the record from Manitoba Hydro response to an IR.

THE CHAIRPERSON: Just continue, Mr. Matwichuk.

MR. GREG MATWICHUK: Thank you, sir. I'm not aware of any data on the record or outside evidentiary record to find a meaningfully -- support a particular debt-equity ratio for Manitoba Hydro

On slide 56, continuing on with the debt-equity ratio, one might expect that if the market considered -- and this is the capital markets, considered debt-equity ration of such importance, the market would also expect the debt guarantee fee to drop as a result of an improved debt-equity ratio. We can observe that the debt -- debt guarantee fee has not changed with an improved debt-equity ratio.

Attractive financing rates for Manitoba Hydro do not appear to depend on the achievement of internal financial targets. Manitoba Hydro appears to be voluntarily moving off the 75:25 to a debt-equity of 80:20 in the years to come. Yet, Manitoba Hydro previously claimed that 80:20 diminishes its ability to mitigate risks such as drought.

Now what I'm suggesting, Mr. Chairman, is that I'm not observing any magic to any particular debt-equity ratio. In a drought retained earnings is -- does not appear to be a tool to deal with adversity. We're looking for a tool to be able to recognize the need to have the ability to borrow.

Now we acknowledge that debt and debt costs are significant. And we need to look at what influences the debt costs. Manitoba Hydro suggest that debt-equity is important for determining its ratings from credit rating agencies. Credit ratings, Mr. Chairman, as you are probably well aware assess credit-worthiness. And credit-worthiness is essentially whether the issuer of debt has the capacity and the willingness to meet its financial commitments as they come due.

So, the capacity to meet the financial commitments as they come due. This is a very important definition. Only 4 percent of Manitoba Hydro debt is not issued by the province, the rest is issued and/or guaranteed by the province for which Manitoba Hydro pays a one hundred (100) basis point debt guarantee fee. The Manitoba Hydro credit ratings, they are based primarily on the relationship with the province, debt issued by the province, and the debt guarantee. And this, in itself, is acknowledged by both National Bank Financial and Manitoba Hydro itself.

Another important aspect to the credit ratings, Mr. Chairman, is that only the DBS -- DBRS reports on Manitoba Hydro report on the long-term debt. Both S&P and Moody's only report on Manitoba Hydro's short-term debt.

So S&P and Moody's are not reporting on the long-term credit-worthiness of Manitoba Hydro. So when there is a reference to credit ratings in this proceeding, we must be careful to understand that only one (1) of the three (3) agencies is reporting on the long-term creditworthiness of Manitoba Hydro.

If we may, let's -- let's turn to some empirical data. The debt component of the debt-equity ratio has varied significantly as -- by as much as 26 percent, and what I mean by that, that is to say that it has been as high as 88 percent and as low as 73 percent, i.e., the debt component. But credit ratings have not been downgraded. They have not been downgraded during that time, nor have the province's debt -- credit ratings.

The -- the high of 88 percent was in 1997. In 2002, the debt component was 77 percent. So that was in 2002. After the 2004 drought, debt was back up to 87 percent. It would appear that there is very little or no correlation between debt-equity ratio and credit ratings. There does not appear to be a case for debt-equity being a determinative factor in credit ratings.

I'd now like to turn to interest coverage ratio.

THE CHAIRPERSON: Mr. Matwichuk, I'm certainly not making an argument or anything of that particular nature, but the -- there's been a lot put on the record about the specific reports by the various rating agencies, and they rely, of course, a lot on the -- the Crown itself, the province, but they do talk about the evidence of the target of the 75:25 and indications of rate increases in tough times and things like that. So they do take into account the -- the ability, for example, in the case of a monopoly, a regulated monopoly, rate changes, so it's not like they don't -- it's not like the -- the rating agencies do not comment on Manitoba Hydro, because they do. They -- no, I'm saying it's not that they do not -- it's a double negative. They comment on Manitoba Hydro in the --

MR. GREG MATWICHUK: Yes, sir, they -- they do comment on Manitoba Hydro as an entity, and -- and in those comments, they make what I would call -- when I -- I've read those reports, going back probably a decade, and when I read those parts -- reports, it is more of a passing reference to a number of statistics which include retained earnings, yes. They also include things like cashflow, they also include things like return on equity, but when you read the reports, very much up front in the report, the primary reference is to the relationship with the province and the -- and the debt guarantee itself.

THE CHAIRPERSON: I'm not disagreeing with you. In fact, I -- if anything else I drew out -- what I wanted to hear was the fact that you had -- you'd read those reports.

MR. GREG MATWICHUK: Yes, sir, I have. Thank you.

In terms of slide 60, interest coverage ratio, Manitoba Hydro has been operating with a target of one point two (1.2) times interest coverage. Now, I was -- I'm unaware of evidence to quanti -- quantify that one point two (1.2) times as a reasonable target, and I also understand that there's no particular statutory requirement for a target, nor a requirement for -- statutory requirement for over one point zero (1.0) times. And I'm not suggesting necessarily that Manitoba Hydro be restrained to one point zero (1.0) times, but I do note, historically, actual interest coverages indicate actual revenues based on domestic rates, collected amounts greater than cost.

Interest coverages of slightly above one point -o (1.0) times would provide some cushion or income for a debt holder, but the guarantee fee does already exist. So from a ratepayer perspective there is somewhat of a redundancy in the protection there.

So turning to slide 61, financial targets such as interest coverage and debt-equity do not appear to be definitive in the credit ratings. And while, as you mentioned, Mr. Chairman, they are mentioned in they -- the -- the credit rating reports, they -- they are mentioned with probably thirty (30) other statistics. The primary criterion as I read those reports is the relationship with the province.

I would now like to turn to the Manitoba Hydro rebuttal and certain assertions contained therein. The Manitoba Hydro rebuttal, as it relates to my evidence, on the rebuttal pages 2 to 13, and this is with all due respect, contains inaccuracies and perhaps some inadvertent mi -- mis-characterizations.

And so, Mr. Chairman, I urge the Board in their attempts to understand my evidence and anything that I authored that they refer to the documents that I authored, where those documents have extensive quotes, not paraphrasing, and, likewise, extensive footnoting. But I certainly welcome any questions.

Now, rather than responding to the Manitoba Hydro rebuttal on a line-by-line basis, what might be more productive is responding to a couple of issues, but rest assured that simply not responding to some of them does not -- is -- isn't intention -- intention to suggest that I agree, although I think I already noted there -- there is one (1) matter on which Manitoba Hydro and I agree.

I would like to address five (5) matters addressing -- in -- in -- arising from the Manitoba Hydro rebuttal, and those are reasons for an RSM, benefits from an RSM, current uses of an RSM, RSM mechanics, and the debt-equity ratio.

Manitoba Hydro suggests that an RSM is not needed since the cost of service model and retained earnings are working for ratepayers. And I believe, Mr. Williams, this will help answer one (1) of your earlier questions. So with respect, again, I disagree with Manitoba Hydro's suggestion.

The cost of service model would work well if Manitoba Hydro had more accurate forecasting of export revenues. There is no question. Manitoba Hydro accuracy of forecasting export revenues is on average, as we saw, out by more than 22 percent over the years 2001 to 2009.

I'm not aware of another regulated entity where actuals vary so significantly and continually from forecast and there is simple reliance on cost of service without the use of another tool.

RSMs, or more broadly, deferral accounts, as I mentioned in the context of the National Energy Board, are used when forecast accuracy is below that of other costs or revenues. Mr. Chairman, you and your colleagues have embarked on a comprehensive assessment of risk in this proceeding. There appears to be consensus that ratepayers bear the ultimate risk of Manitoba Hydro actions and operations. Forecasts of export revenue are a source of significant risk to ratepayers. An RSM mechanism can ameliorate the ratepayer risks.

Now, a second item out of the Manitoba Hydro rebuttal suggests that there are no additional benefits of an RSM. And it may come as no surprise I respectfully disagreed with that suggestion. I think if one looks closely, the benefits to -- for the ratepayer are greater than the current circumstances in relying on retained earnings. As notice -- no -- noted, export revenue forecasts are a source of ratepayer risk being addressed here in this evidence.

The benefits of an RSM are many, and we walked through a number of them on previous slides. And just to reflect on those benefits, an RSM creates an explicit link between export variances and the risk borne by ratepayers. RSM is a formalized mechanism, just like revenue requirement and prospective cost of service study. RSM provides transparency versus what some may refer to as a bit of a black box in the retained earnings. The mechanism of an RSM is straight forward and easy to understand and implement. The recommended RSM involves no funding, nor targets are required.

Manitoba Hydro suggests in -- in their rebuttal, that RSM and deferral accounts are, and to use their term, "archaic", and quote, also, "not employed." The facts show otherwise, Mr. Chairman.

As noted in my evidence in IR responses, RSMs are used and they're used currently, and they're used in a wide variety of utilities: in hydro electric, in water, in gas distribution companies. They're real life examples for each.

As we saw in a previous slide, had the RSM been implemented in the first decade of the century, the Manitoba Hydro experience would essentially have provided refunds to ratepayers. One (1) other live example I'd like to point to is that Newfoundland and Labrador Hydro have a rate stabilization mechanism that it util -- utilizes.

On slide 67 I refer to a Manitoba Hydro rebuttal that indicates that a RSM, quote:

"Will not serve to stabilize rates in

the event of a significant financial
loss."

And again, I would suggest to you that I would disagree. And unfavourable export variance could lead -- likely lead to a financial loss. I think we're all on the same footing there.

Clearly that was the experience from the 2004 drought. The RSM would provide explicit identification and quantification of the variance, and then the variance would be amortized over a reasonable period.

So, Mr. Chairman, as you've seen on the -- the table that we walked through, the amortization smooths out the impact that the export vari -- that the export variance from any a particular year would otherwise have on a refund recovery in a subsequent year. And, there is a direct transparency and accountability for the precise amount of the variance. And that, I would suggest, Mr. Chairman, is something that the retained earnings does not offer.

So this slide is -- is to serve to remind us that whereas wide fluctuations in export revenue variances, the RSM transfers the benefits of those export variances and the costs, and smooths the impact to ratepayers and does so in a transparent manner.

Further in the Manitoba Hydro rebuttal, Manitoba Hydro suggests that the more debt it takes on, the more financial risk to it. We're all alive to the issue that more debt means more interest costs. The real question is with more investment and more debt, unless the investment will take care of the extra debt, we may be placing domestic ratepayers at too great of a risk.

So now I'd like to address the Manitoba Hydro rebuttal, in light of the 2004 drought specifically. So if we take a moment to examine the impact of that drought, we note the following took place in that year. In a year of a major drought, Mr. Chairman, Manitoba Hydro had a finance expense of almost $500 million in 2004. That's almost half a billion dollars in finance expense alone.

Clearly hundreds of millions of dollars of interest payments were due in that year. And clearly, those interest payments were met by Manitoba Hydro. However, this was during a time when cash flow from -- from operations had literally dried up.

Despite everything, Manitoba Hydro had additional boring -- borrowings to refinance debt and fund new cash requirements. Manitoba Hydro was able to raise over $1 billion in new debt that year. Manitoba Hydro was apparently able to make the interest payments that were due in 2004.

So what was the outcome of this drought in Manitoba Hydro's financials? Manitoba Hydro suffered its worst loss in history, $436 million. In 2002, the debt-equity was 77:23, which is very close to what its target is and very close to what it is today. After the drought and the $436 million loss debt-equity fell to 87:13 by the end of fiscal 2004.

According to a subsequent credit rating by DBRS, 2004 represented the weakest results in Manitoba Hydro history and increased levage -- leverage in 2004, yet the credit ratings in 2004 were unchanged from 2003. Moreover, the credit ratings in 2004, a high, were actually slightly higher than those in 2002 which were rated 'A'.

Mr. Chairman, there does not appear to be a compromise in the borrowing power of either Manitoba Hydro or its parent arising from the year of 2004 drought where Manitoba Hydro suffered its weakest financial results in history.

THE CHAIRPERSON: Sir, do you take into account the fact that this Board provided a conditional rate increase which should have amounted to 9 1/2 percent, which, fully implemented, in the end had a present value -- doing this in my head, somewhere under two (2) -- 2 billion?

MR. GREG MATWICHUK: And --

THE CHAIRPERSON: Prob -- would have had presumably something to do with the support of the position.

MR. GREG MATWICHUK: And that -- that rate increase, sir, came after 2004?

THE CHAIRPERSON: Yes, it -- it came in the light of the drought loss.

MR. GREG MATWICHUK: Yes, and I recall that. And what I'm reflecting on, sir, is that in 2004, while it was suffering the drought that it was able to maintain its credit rating, was able to make its interest payments, and was able to access debt in that year.

THE CHAIRPERSON: Thank you.

MR. GREG MATWICHUK: Now I'd like to turn to a different topic, intergenerational equity. It is a fundamental regulatory principle and I'm sure you've heard about it during this proceeding, Mr. Chairman, and other proceedings. As a principle it has implications on debt-equity ratio debate. The recommended RSM is a reliable mechanism that can -- can assist in preserving intergenerational equity.

MR. BYRON WILLIAMS: Just one (1) second, Mr. Matwichuk. Okay. Please proceed.

MR. GREG MATWICHUK: Intergenerational equity --

MR. ROBERT MAYER: We were just --

MR. GREG MATWICHUK: -- sorry.

MR. ROBERT MAYER: -- we were just attempting to resolve this, when they got the money, because Mr. Matwichuk's chart shows it came in 2003.

MR. BYRON WILLIAMS: I -- Mr. -- I think if memory serves me right, and I'll look to Mr. Peters for confirmation, there might have been in August of 2004 the first iteration of that rate increase in the range of five (5) -- 5 percent with --

THE CHAIRPERSON: And it was followed by two (2), two and a quarter's (2 1/4).

MR. GREG MATWICHUK: Yes.

MR. BYRON WILLIAMS: Exactly. So I think that's the -- I was going to intervene, and then I thought we -- you had moved on, so.

MR. GREG MATWICHUK: Yeah. And I -- I think the point that that followed fiscal 2004, I think that's the issue, yeah.

THE CHAIRPERSON: Yes, it followed the experience of the -- of the large net loss.

MR. GREG MATWICHUK: That's correct, sir, yes.

Intergenerational equity has, and continues to be, a fundamental principle of rate regulation. Ratepayers in a given period should pay only the costs necessary to provide them with service in that period. Combined with the cost of service standard, this principle requires that rates in each period should recover the costs of providing service in that period. It generally adheres to the notion that costs should be borne by those who receive the service generating the cost.

As discussed earlier, there doesn't appear to be any positive correlation between debt-equity level and the credit ratings provided for -- for Manitoba Hydro. Manitoba Hydro's debt-equity ranged from 88:12 to 73:27 in the period 1997 to 2010, and, as we've discussed, it does not appear to be a primary concern at credit rating agencies.

Yet those who are ratepayers during the drought are not necessarily those who provided for the 75:25 or those who would replenish the retained earnings to resume the 75:25. A practical example for this point of reference is that in a large infrastructure organization like Manitoba Hydro and other utilities, intergenerational equity is generally achieved through the depreciation and interest charges over the life of an asset. Ratepayers who benefit from the use of the infrastructure pay the costs of the asset, the cost allocated over the time that it is used.

In the case of equity, when equity is built up, customers who pay for the build-up of that equity do not have the assurance that the equity -- equity will be used for their benefit. Currently, Manitoba Hydro is projecting, during the expected decade of construction, that it will allow its debt-equity ratio to shift to 79:21 by 2015, to 80:20 by 2016, and 81:19 by 2019, and not return to current levels until 2026.

Now, quite apart from the reliability of such projections, the market and prolonged divergence from its existing and long-sought-after 75:25 level has implications on intergenerational equity. There's a marked difference between the certainty of costs to undertake a dec -- a decade of construction of a met -- mega-project and the level of uncertainty of the revenue that may, or may not, be recovered from incurring those costs.

A debt-equity ratio of 80:20 apparently diminishes the Corporation's ability to mitigate such risks as drought, and that's taken from Mani -- a Manitoba Hydro quote. Based on Manitoba Hydro's testimony and that of its experts, it's reasonable to expect a drought during the period before 2026, and perhaps before 2019. In the case of equity, when equity is built up, customers who pay for the build-up of that equity do not have the assurance that equity will be used for their benefit.

In terms of intergenerational equity and the RSM, the benefit is far more clear: Ratepayers benefit in the period that is relatively close to the period in which the costs were incurred. The RSM allows for the disposition of the rate stabilization mechanism balances over a reasonable period of time, so that ratepayers who are responsible for the gains and losses during that period will -- will be those who benefit or bear the burden of those, respectively.

Mr. Chairman, those are my opening comments in direct, and I thank you for the indulgence of this Board, and thank you for your time, sir.

THE CHAIRPERSON: Thank you, sir.

MR. BYRON WILLIAMS: Mr. Chairman, just noting the time, I wonder if it would be best to break for lunch now and resume at 1:00, or even quarter to 1:00, and proceed with Mr. McCormick. I can indicate, in our trial run, Mr. Matwichuk's doing a little better than we -- we planned. Mr. McCormick's evidence will be somewhat shorter, but it will not be brief, so I -- I would expect it would take us meaningfully into the afternoon.

THE CHAIRPERSON: Meaningfully into the afternoon means -- means by 2:30?

MR. BYRON WILLIAMS: That would be optimistic, sir, if we started at 1:00. I -- I think we would -- it would be between 2:30 and 3:00.

THE CHAIRPERSON: Mr. Hacault, do you know -- do you have any idea how long your cross of these two (2) witnesses will be?

MR. ANTOINE HACAULT: Mr. Chair, I don't think that my cross-examination of these two (2) gentlemen would last longer than half an hour.

THE CHAIRPERSON: Okay. And Mr. Gange is not appearing. Ms. Boyd, do you have any idea of how long your cross would be?

MS. MARLA BOYD: It's difficult to say without having heard all the evidence, but I'd suspect about an hour, or thereabouts.

THE CHAIRPERSON: Okay, we may be going past 4:30, but it sounds like it's all doable, so we'll see you back at one o'clock.

(PANEL RETIRES)

--- Upon recessing at 11:54 a.m.
--- Upon resuming at 1:02 p.m.

THE CHAIRPERSON: Okay. Welcome back. We've scheduled for a presentation, basically another MIPUG presentation.

Mr. Hacault, would you mind introducing the representatives from Gerdau.

MR. ANTOINE HACAULT: Yes, Mr. Chairman, it would be my pleasure. Seated -- seated to my immediate left is Mr. Gavin Tobin, he's the vice-president and plant manager of Gerdau in Manitoba. And to my far left Mr. David Forsyth, the regional energy manager.

And with that introduction I would invite Mr. Forsyth to make his presentation to the Board.

THE CHAIRPERSON: Very good. And before they begin I'll just point out that being circulated to us an outline of the presentation, so we have that here too.

So, sir, please.

PRESENTATION BY GERDAU:

MR. DAVID FORSYTH: Okay. Thank you. Vice-Chair and Chair of the Board, thanks for allowing us to present our comments of Gerdau to you today. I'm David Forsyth as Antoine told you, the regional energy manager responsible for Gerdau's Manitoba mill. And with me is Gavin, the Vice-president and plant manager and we can answer any questions you have after we're finished.

Please turn to the second slide. As you probably read in the newspaper recently Gerdau is very proud to be celebrating a hundred and ten (110) years in business as of May 17th, 2011. We now have forty-five thousand (45,000) employees in Canada, the US, twelve other countries around the globe. Manitoba Mill started production in 1907, some one hundred and four (104) years ago.

It's important to note that Gerdau's size means that more than one (1) facility can make the products our customers need. Gerdau's financial model looks at where these products can be produced and delivered at the lowest cost. Energy is one (1) of our key controllable costs and is therefore a very important consideration in Gerdau's production and investment decisions.

Next slide please. The Gerdau Manitoba Mill: Gerdau's steel mill in Selkirk is one (1) of the largest manufacturers in the province. We are one (1) of the largest shippers in the region, averaging over one hundred and fifty (150) truck loads and twenty-five (25) rails -- rail cars per week.

In addition to over four hundred (400) jobs at the Gerdau Manitoba Mill, Gerdau has also attracted several large downstream manufacturers to the province creating valuable manufacturing jobs at Monteferro American, the Birds Hill and Steinbach locations; TC Industries in Selkirk; Black Cat Blades, also in Selkirk; Bradley Steel Processors in Winnipeg, and Bucyrus Blades of Steinbach.

Including Gerdau Manitoba Metallics Raw Materials, which is our scrap operations, seven hundred and seventy (770) jobs and families are directly involved with the plant. There are also many Winnipeg industries that support Gerdau thereby creating a significant number of collateral jobs. In fact, in 2010, Gerdau spent more than 49 million with local suppliers and service companies and utilized the equivalent of twenty (20) full-time employees through local contractors.

Gerdau is the largest recycler in the province, processing scrap metal collected from throughout the region. We recycle approximately four hundred thousand (400,000) tonnes of scrap each year. We are extremely efficient at what we do and we do it in an environmentally responsible manner. Making steel from scrap metal reduces 70 percent of the energy and 60 percent of the emissions when compared to steel made by a steel mill making steel from iron ore.

Gerdau also takes this respons -- this social responsibility very seriously in Manitoba. With the help of our employees, we support the Selkirk Hospice, Safe Workers of Tomorrow, the Food Bank, Red River Hamper Toy Drive, the Manitoba Heart and Stroke Foundation, the Red River Clean-up Operation, and the Selkirk Fire Department, to name a few.

Next slide, please. Steel making energy and investment. Steel's an energy and capital intensive business. As with any investment decision, Gerdau's management must consider the long-term costs of doing business. With regard to steel manufacturing, electricity costs are second only to our scrap steel costs, and as such, are a very important contributor to the competitive cost structure. Energy efficiency is one of the tools at hand to help Gerdau's Manitoba facility improve its competitiveness, and we have invested heavily, improving our costs and benefiting the environment.

Low-cost, stable, and reliable electricity is essential to Gerdau's operations in Manitoba. While energy costs in Manitoba are generally favourable, our increasing labour costs, high transportation costs, and fuel costs are items that consume some of the advantage offered by lower-cost electricity.

Recent rate increases have been substantial. Manitoba energy rates have increased substantially since 2004. Energy rates are up over 20 percent since that time. Manitoba Hydro began this rate case with a 2.9 percent rate increase request for 2011 and '12. We note that the Public Utility Board, on an interim basis, provided approval for a 2.9 percent increase for 2010, and an increase of 2.0 percent for 2011 fiscal years.

Gerdau hereby requests that the -- the Board reconsider the contemplated increase and modify it to reflects the costs of service to our customer class. During these difficult economic times, costs have to be reduced, not increased, as they cannot be passed along to customers.

Next slide. I'll talk about the demand billing concessions. In the depths of the economic downturn in 2009, the Gerdau Manitoba facility saw production orders fall dramatically. Notwithstanding, the significant economic downturn, we undertook initiatives to keep people employed using the workshare program and reduced -- and immediately started to initiate new plans to operate the plant as efficiently as possible at the reduced operating rate.

This, as I'm sure you can appreciate, presented many challenges to the operations, including increased energy intensity due to heating the plant when not -- not operating, an increased use of energy, consumables, and refractory due to starting and stopping the milling processes.

One (1) component of our costs that stood out immediately was the average price of electricity. With the reduced load at the plant, the average unit cost of electricity skyrocketed overnight by over 40 percent and became a major issue for continued operation.

You'd expect that the utility rates would provide an opportunity to reduce unit costs by reducing consumption, but Manitoba Hydro's rate does the exact opposite: the unit costs increase when you consume less. This is due to two (2) facts: If the demand for steel is low, a steel plant doesn't slow its production down for a month, it simply produces on fewer days per month. So the fifteen (15) minute demand for energy stays the same, but the volume of energy is greatly reduced, driving up the unit cost. In fact, the construct of the demand charge recovers the same amount from the Manitoba mill whether we operate one (1) hour or seven hundred and forty (740) hours in a month. This is one of the rate design shortcomings.

Gerdau subscribes to Manitoba Hydro's greater than 100 kV tariff. This tariff has two (2) components: energy and demand. Coupled with the demand charge of five dollars and forty cents ($5.40) per peak kVA per month, our average unit cost of energy was approximately three and a half (3 1/2) cents per kilowatt hour when we were at full plant operation. Under this current rate design, we had no way to limit or exposure at the reduced operating schedule, and the costs in -- increased to four point nine (4.9) cents per kilowatt hour. The only way to lower costs would be to shut down completely for the month.

Since the economic downturn in 2008 was unprecedented, we had never previously experienced this problem in the rate design. Coupling the drastic reduction in production with this significant cost increase led us to discussions with Manitoba Hydro to rectify this unintended consequence.

When we brought this to Manitoba Hydro's attention, we were informed that other large consumers had similar concerns. Manitoba Hyb -- Hydro subsequently offered the demand billing concession program that would offer relief only after a facility had seen an increase of at least 10 percent in their average unit energy cost.

With the demand billing concession that is noted in an ill -- illustrative example in MIPUG Manitoba Hydro Interrogatory 1-21A, average unit costs of energy was capped at approximately four (4) cents per kilowatt hour. So while it is a concession from the approved rate schedule, it is important for the Board to note that we paid on average 10 percent more than we were paying prior to the economic crisis.

Without this interim rate change, for which we are very appreciative, we would have had no way to make some relatively hard -- we would have had to make some relatively hard decisions relative to the continued operation of the plant.

At almost all of our North American facilities we have the opportunity to reduce costs when situations such the -- as the economic downturn arise. In Ontario, we can avoid the major component of the demand charge by shifting production to off-peaks. In New Jersey, we avoid the highest demand periods and benefit be reducing fixed cost to a fraction of our bill. Other locations have total variable costs which directly pass through cost reductions during low consumption periods.

At many of our other North American tility

-- facilities we participate in interruptible rate contracts. We have approached Manitoba Hydro many times to subscribe to the appropriate program, but it is closed to new entrance. As a result, there is no other option available to us or Manitoba Hydro.

The next slide. In summation, regulations should achieve firm, low cost, stable power rates that are necessary to maintain investment and jobs in the province. Rate stability is one (1) of Gerdau's key investments inputs when making long-term decisions.

Demand billing concession should be made permanent, consistent with the Manitoba Hydro application, as the payments already made by those customers was at least 10 percent greater on a per unit basis than the revenues expected by Manitoba Hydro when the rates were set. The demand billing concession reacted as expected to the needs of energy consumers impacted by the economic downturn, and at the same time, those customers were able to keep people employed while ensuring the -- that Manitoba Hydro's revenue stream was secured. Thank you.

THE CHAIRPERSON: Thank you, sir. I'm quite aware of the plant's long operations in Manitoba and the significance of it to the province. In fact, I was -- I had the please of attending the hundredth anniversary at the Fort Garry Hotel. It was quite a gala. I remember that. It was very nice.

Mr. Vice-Chair, do you have any questions?

Thank you very much for your presentation. We appreciate it.

MR. DAVID FORSYTH: Thank you.

THE CHAIRPERSON: So we'll return now to our -- the -- for the presentation from CAC/MSOS's witnesses, and think we're moving on to Mr. McCormick and the direct examination by Mr. Williams.

MR. BYRON WILLIAMS: Yes, we're prepared to proceed, Mr. Chairman and Mr. Vice-Chairman.

If I might, and I apologize, Mr. McCormick, Mr. Chairman, right at the start of the day I said that at some point in time the Board might want to have near at hand two (2) information responses. And I'll -- one (1) is PUB-1-35E. And I think there were revisions, but Mr. McCormick indicates he can speak to both.

And -- and, secondly, PUB/CAC-1-13 and Exhibit 1. And I just wanted to make sure that the Board had that near at hand as we proceed. They'll come up a bit later in our discussions this morning (sic).

And I see Mr. Murphy -- excuse me, Ms. Boyd is looking as well. So, Mr. McCormick, before we proceed maybe we'll just make sure she gets it as well.

MR. ROBERT MAYER: What's Exhibit 1?

MR. BYRON WILLIAMS: It -- it should be a document from the Emera, E-M-E-R-A, financial reports.

THE CHAIRPERSON: We have it here.

CAC/MSOS PANEL:

GREG MATWICHUK, Resumed

JOHN MCCORMICK, Resumed

CONTINUED EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Okay. Please proceed, Mr. McCormick. Thank you for your patience.

MR. JOHN MCCORMICK: Good afternoon, and thank you for receiving me today. This type of presentation is a bit of a novelty for me. I've never been called to do a PowerPoint presentation as part of my evidence before. And because I'm bringing up the rear, I'm going to try and go -- go quickly.

But in going quickly, I would be very much disappointed if I left the Board members behind. And if I start going too fast in either my speech or glossing over points that you would like further explored, please bring me back to task.

THE CHAIRPERSON: Thank you, sir.

MR. JOHN MCCORMICK: My qualifications are listed on this slide, and there are four (4) points I want to make with respect to the slide. The first one is the fine print that appears after the word "Qualifications." Throughout this document I have used small type to identify the places in my evidence, the IRs or other documents, to which more information can be found, or from which I have drawn important information.

The next point I'd like to make with respect to this slide, is that among my experience, which is well catalogued in the written documents, the career that I had with Levesque Beaubien Geoffrion was a firm which became National Bank Financial.

In terms of particular experience related to this transaction, which is not borne out in my general discussion of my experience, I have had hands-on experience with Monte Carlo simulation modelling and financial advice assignments, and valuations of companies. My corporate finance experience includes a number of industries, but it also includes hands-on experience with corporate debt financings for a range of utility issuers, including Nova, Alberta Natural Gas, among others.

And, finally, my litany of Board appearances in Appendix 1 has one (1) stale-dated aspect;

it does not include the fact that I was recently retained to appear before the National Energy Board in a matter involving Maritimes and Northeast Pipeline debt financing, and in particular, the wisdom of one (1) particular covenant, and the allocation of the many millions of dollars of consequences that flew from that covenant being triggered.

With those brief remarks, I'm going to continue into an outline. Because of the shortness of time, I will not touch on all my recommendations in the written evidence. I do want to touch a bit on forecasting, because we have not yet resolved all the matters that were discussed in the Centra proceeding. I also want to deal with a couple of the several matters that were arising from the rebuttal of Manitoba Hydro, and some things that arose in the National financial report.

I'll offer you one (1) slide on risk, one (1) slide on process efficiency, and, should you remain interested in an interest market update, I have four (4) or five (5) slides at the tail end. But I'm, certainly, if the Board is well acquainted with the current market conditions, quite happy to gloss over those aspects.

Let's begin with --

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. McCormick, I'd just encourage you -- we'll try and move expeditiously, but to also take your time. I'm -- I'm sure you're -- you'll be received with -- with interest by the Board.

MR. JOHN MCCORMICK: Thank you. I'm now moving to my recommendations, and I'm only to touch upon three (3). And I probably should have suggested that if the Board wanted to have a document before them related to this, page 10 of my written evidence would be relevant, if you have that at hand. It's not essential in any way for our discussion.

But my first recommendation related to the type of debt forecast. And with so many issues before you, I'd like to set some background and remind you that there are three (3) Hydro policies, in terms of forecasting the revenue requirement, which were relevant to this particular recommendation.

And the first Hydro policy that I understand is still embedded in the interest costs of the revenue requirement, is that all new debt would be forecast as being long-term debt -- I believe they use a thirty (30) year term in their example -- and not shorter terms, say, five (5) years, or floating rate debt.

The second policy that is relevant to this is the overall corporate policy that they would have up to 30 percent of their total debt being based on some floating rate or short-term mechanism.

And finally, the third item of interest is the guideline which is well understood, that the proportion of floating rate debt would appear between a 15 and 25 percent range. Although, quite curiously to me, in this proceeding we learned that that test may only apply on a once-a-year basis at their year end, which, in my view, lends itself to certain potential for mischief.

My recommendation, which is of course found in the executive summary of my evidence, was to reject the assumption that all new debt would be the expensive, long-term, fixed-rate debt, thirty (30) year debt described in some places, and that we should in fact embrace a forecast that recognizes the other policies, which are to maintain a range of short-term debt, and that would have the effect of bringing the matter of interest rate forecasts more into the actuality of the business.

Now, I have believed for some years now that this all long -- all new debt is long-term debt represented an upward bias, and frankly, was totally indefensible. And if you wish, we could take a look at section -- or rather, page 10 of my evidence where I --

dealing with the expected debt financing show how there would be significant interest reductions from using the short-term component as a forecast element, as opposed to all new debt being long-term during the revenue period.

And in that particular example, using old statistics that were available, I identified that there might be $5 million of savings in the first year; there would be more savings in the second year because we would have floating rate debt done in both years. And the example that I used was based on statistics that were then available. If we went and updated those statistics, which I can do for you now if you wish, the savings would be much greater because the current and prevailing interest rates over the last year are lower than what Hydro had in their forecast for the '10/'11 and '11/'12 period.

But I'm going at a breakneck speed here rather than taking you in baby steps because I'm quite confident you understand the issue well.

And in part because Hydro has indicated in the IFF-10 filing that in future years there will be a component of a floating rate or short-term debt used to forecast interest costs. And so we've come quite a bit in terms of resolving my concern in -- but this is, in fact, a promise of good things to come in the future, because I have not yet seen a document that says we're going to recognize that in the 2009 economic outlooks and the assumptions for the '10/'11 and '11/'12 forecast, which the revenue requirement is based on, we have not yet embraced that a portion of the new debt will be financed on short-term -- on a short-term debt basis.

MR. BYRON WILLIAMS: And I see you, Mr. McCormick -- I'm just watching the Chair's facial expression; perhaps I shouldn't do that.

Mr. McCormick, are you -- are you making the point that the -- embedded in IFF-09 is the -- the old approach to forecasting new debt?

MR. JOHN MCCORMICK: Yes. IFF-09 has the old approach to forecasting new debt. I -- perhaps, Mr. Chairman and Mr. Vice-Chairman, if you have the PUB-135E, either the old or new addition, I could use that just to underscore my point.

May I speak to that briefly?

THE CHAIRPERSON: Please.

MR. JOHN MCCORMICK: In the old IFF -- sorry, in the old PUB-135E, there's a list of recent financing. And there is an indication that there will be some forecast financing in the '10/'11 year for $800 million of financing, and they were all to be financed at 4.65 percent, being the forecast rate. And for '10/'11 -

- pardon me, '11/'12 there were a further 600 million of fine -- new financing to be done, again all at the forecast rate which was 5.2 percent.

If you have the replacement or the updated PUB-1-35E schedule before you, you would see that not all of the financing is done in the year '10/'11 which was -- well, was essentially completed, were long-term financing; several were short-term financing. And so, to maintain, if you like, the fiction, that all new debt is going to be the most expensive debt, when in reality many of the issues which were done and will be done in future will be shorter term debt, or will be swapped into a floating rate item, creates the upward bias that I fear.

And so I would like to see this year's revenue requirement, the '10/'11 and the '11/'12, reflect the new policy that is embedded in the concession related to IFF-10.

Flipping to my third recommendation, I think this topic has became the -- what is called "pruning". And in my Centra appearance I recommended that Hydro use what I described as the best forecasters that might create the most robust forecast. And I'd like to let you in on a little secret. Hydro already prunes the forecasts that go into their forecast methodology. I just want them to have a logical and tested methodology for the selection of those forecasters that they choose.

Right now, we've had a period where the forecast methodology was largely un-codified. It was, in my view, upwardly biassed. And, regretfully, it operated as perhaps a bit of a revenue grab. And in the Centra case you'll recall that they have very old forecasts that had been superceded that were not updated. I think we can do better.

With respect to pruning, if one looks at the consensus forecasts, one will see that consensus uses J.P. Morgan, Desjardins, and a number of other, I assume, very competent economic prognosticators, but those were not included in Hydro's list. I'm not sure why they weren't included and other ones, like the Bank of Montreal or National Bank were included.

But I'd like to know, as we move into forecasting customer revenue requirements, that we've got the best guys to do that. In my evidence you'll recall I believe I filed an IR, where I suggested that for a particular time period using data available to me the combination of Scotia Bank and National Bank providing us with a more robust forecast than simply taking five (5) or six (6) banks and a few other people and stirring them together in one (1) great stew.

Personally, I'd like to get the guy with the best track record on my side, and I'd like to pay attention to what he says, as opposed to worrying about a car -- a cacophony of voices. Recommendation 3.

My fourth recommendation was that I thought, for a number of reasons, the Board should adopt an interest cost deferral mechanism, so as to ensure that consumers pay only the right amount.

And you'll note that I have highlighted this quote, as I've done throughout the presentation in a number of respects. Generally you'll see that when I've done that, it is for emphasis rather than having actually been in the original quote.

So, I believe that if you had an interest rate deferral mechanism, you would end up reducing regulatory costs. And it also has another benefit that completely delights me, and that is that I believe that it would mean consumers over a long-run would pay the right amount of interest: neither too little, nor too much.

Reducing the equity burden -- I'm sorry, reducing the regulatory burden was one (1) of the reasons why many regulatory boards in Canada operated an equity return formula. I'm a great proponent of that formula. I understand this Board has had a formula in early days, and, in fact, applied it to Centra.

In terms of the regulatory burden, if one were to look back into the Centra case and look at a number of IRs which I composed, including CAC/MSOS/CENTRA-1-1N, which was the one in which I asked for the copies of the source documents that led to the Centra forecast in that proceeding. I didn't get the source documents. The fact that I didn't get the source documents meant that we had to spend a fair amount of time reverse engineering the information that was presented.

In this particular proceeding, in one (1) point of their rebuttal, Hydro has suggested that they feel the rigorous regulatory review is appropriate for this process and that an interest deferral account is not required. But it's really hard to have a rigorous review when you don't have the base documents. So I -- I'm not particularly optimistic that Hydro will willingly embrace my recommendations to reduce the over-collection of interest costs.

But in the absence of a need for a prudence review, or concerns about debt consolidation, if the Board was to insert an interest cost deferral mechanism into your calculations, there would be very little chance that I would need to appear. So Hydro might effectively get the with that they had when they opposed the application for funding my appearance indirectly, if you were so kind as to advance the position that they put forward.

But as I'm about to leave this recommendation and move into forecasting, I want to comment on the concession for which I am very grateful in, IFF-10, that we will now have 20 percent of the new debt forecast at short-term rates, and suggest that I'm not convinced that that's the right amount. And, similarly, there are other items in the very complex Hydro financing characteristics that mean we might need to tune up some other aspects of the forecasting. And I'll get to them in a moment.

I'm of the view that forecasting interest expense accurately is critical to customers. I believe it is the largest one of Hydro's expenses. It seems to be about 28 percent in forecast 2010, based on IFF-09, and it rise -- or it rose in IFF-09 to about 33 percent by 2020.

I -- I've already taken you to PUB-135E, which provided a couple of examples where things that were forecast at thirty (30) years, were perhaps done at ten (10) years at an interest rate saving, or things that were forecast to be at thirty (30) years and done on a fixed rate basis were done on a floating rate basis.

And it's worthwhile, I think, to see as we can in the update, that in the 2009/'10 year, the forecast based on the mix of financing done by Hydro -- and I'm looking at the expanded I -- PUB-135E -- the expected four sixty (460) financing costs turned out to be, on a weighted average, four thirty-seven (437). So there were twenty-three (23) basis points times $900 million worth of debt in terms of interest saving, which would have been captured by an interest deferral account. And in 2010/'11 the difference was a weighted average four twelve (412) against a four sixty-five (465) on 800 million of financing.

So the combination of an interest deferral account, or a more precise estimation of the appropriate ratios within the forecast, and a -- a robust interest rate forecast methodology, I think will help consumers greatly in terms of millions of dollars.

Now, I have to say thank you right off the bat to whatever Board staff member in the Centra proceeding wrote PUB/CENTRA-2-198. That was the IR that picked up some of the threads of the IRs that I had proposed and caused the applicant in that case to give us just a sliver more information that allowed me to match up some of the forecasts with the names of the forecasters that had provided them, and that was a significant breakthrough.

In my recommendation with respect to future interest costs, I was recommending that the floating rate portion of the new debt to be financed in a particular year should be done at the 25 to 27 percent range rather than the 20 percent range. I believe that's more appropriate, and I'll take you through those steps.

But let's begin by looking at 20 percent. When I looked at it, I didn't see any in-depth explanation of why that was the correct number. It appeared to me to be the midpoint of the range of their guideline of 15 and 25 percent, and one might ask: Well, why not just forecast on 50 percent -- 15 percent? Or why not forecast on 25 percent, the high or the low end?

But if it has to be a midpoint of something, I would prefer that it be the midpoint of the National Bank Financial range of optimal short-term debt structures. Their full range, I understand, was 14 to 27 percent. The midpoint turns out to be 20.5 percent, and that sounds like half a percent, not a very big, important number, but when we're talking about half a percent change in eight hundred (800) or a billion dollars -- pardon me, 800 million or a billion dollars of new debt in a particular year, that actually turns out to be a recognizable sum of at least six (6) digits.

So, as we try and find the right level, assuming we don't adopt the interest rate deferral mechanism, and we try and figure out the correct amount of debt that should be allocated or forecast at a high long-term rate and the lower floating rate, we need to pay attention to some small things. There are a few factors that need to be considered.

Again, referring to PUB 1-35(e), in 2010/'11, and I'm using the expanded edition, the full, highly-detailed one as opposed to the initial one, it looks like the average term of debt was sixteen (16) years. And every consumer is acquainted with the fact that the bank will give you a different rate on a GIC for one (1) year or five (5) years or ten (10) years. Term is important to the value.

So, to the extent that we're talking about a forecast fixed interest rate to choose a particular rate, we also need to be aware of the variance in term. And while there's really little difference between twenty-five (25) and thirty (30) year or forty (40) year debt in most interest rate environments, there can be significant differences at the ten (10) and fifteen (15) year level from the level that may be forecast for thirty (30) year financing.

So, once again, significant consumer

savings, which I understand are not reflected in the 2009 assumptions that led to the '10/'11 and '11/'12 interest costs. And I'd like to see the Board be cognizant, in setting the revenue requirement, of the interest rate differences which have already happened. And I'd like to see the Board be aware of the new lure -- lower forecast rates which we see in the market.

So, again, assuming that I cannot convince you that the interest rate deferral mechanism is the ultimate way to go, in terms of my recommendation for the proportion of debt that should be treated as short-term debt among the new debt, I'm in the 25 to 27 percent range.

One (1) of the factors I've already touched on is the fact that not all long-term debt is really long-term debt. And the second factor that I'd like to touch on is Hydro's note program. And my understanding is that Hydro has the ability to issue some $500 million of notes, these are generally done at a very low cost financing level. My understanding also is they typically will get up into the two (2) or perhaps $300 million range before they undertake a long-term financing, and there may not be any notes outstanding at a particular point in time depending on their cash requirement.

But even twenty-five (25) or thirty (30) basis point numbers on $200 million worth of debt is a factor that can be included into forecasting. And we needn't have an upward bias by making the assumption that everything is long term, or that only a small portion of the floating rate debt is floating rate.

I apologize to the Board. I see that I was delayed in not giving you the slide that I was actually thinking I was speaking to. Pardon me, I've gone the wrong way.

I started to learn about Hydro's interest rate forecasting methodology in the Centra 2009 GRA proceeding. And I've given you two (2) quotes, I'm going to give you two (2) more in a second that related to the things that I was told at that time.

You may recall from my evidence that I did not think we had yet achieved a sound forecasting -- forecasting methodology because we were using stale, dated data. We were using data of different descriptions, end of period, period average. And we've resolved many of those issues, but I do think that we can do a very good job of improving things.

The second quote refers to numerous high quality and independent forecasters. I've already told you that I think we can prepare an analysis that would provide a methodology showing that we have the best forecasters. And I don't know whether any of the names that are included in the consensus forecast that are not in the Hydro sample are, in fact, better than we might otherwise have.

This slide presents two (2) more quotes. The first one really relates to the pruning issue. The Corporation in the Centra case did not review the relative success of its forecast. And for a sophisticated organization like Hydro not to review the success or failure of its forecasting methodology of its largest expense, to me, was completely puzzling.

Looking at the last bullet again, in the context of this hearing, to learn that Centra -- and I assume Hydro, monitors and assesses interest rates on an ongoing basis caused me to think of two (2) logical corollaries. The first is: They should be well equipped to provide you with updates as to the situation in the market and changes in forecasts. And we have some in the revision of PUB-1-35E, but that information ended in January. I'm sure there have been a number of financing since then which may have affected the average interest cost and I'm quite certain were unlikely to have been done at a 5.2 percent interest rate.

The second corollary is that they are well aware of the variances that have arisen. And to my knowledge and I may be comp -- I may have missed a document in the veritable forest of filings here, but I haven't seen any statement that says, We now recognize that the 5.2 percent rate for long-term financing in '10/'11 is really high, and we are prepared to embrace a reduction of that forecast rate in our revenue requirement. But I do accept that Centra and Hydro assess interest rates on an ongoing basis.

While I'm hopeful that Hydro will embrace my suggestion that pruning would be a valuable task, I was interested to read that 'K' and 'M' thought there was, and I quote, "definitely a role for qualitative professional judgment" in forecasting.

Not to belabour a point unduly, I was disappointed with the professional judgment that I saw in Centra which did not seem to care whether inputs were statistically dependent or independent. They didn't seem to care about stale data.

But -- well, it can be difficult and admittedly difficult to forecast future interest rates often resulting in significant variances. The fact that it's difficult doesn't mean that we shouldn't put resources into the process to get the best results done for consumers.

People make choices every day. In our daily lives we'll go shopping and we will make what will be a relatively easy decision. We'll try and choose the best melon or the best orange from a container of fruit provided in some local store. When we go into the -- the cookie aisle we may see fifty (50) or more different packages of cookies, and to pretend -- ask you to pretend for a moment that each package of cookies that you see laid before you is actually an interest rate forecast.

When Hydro went shopping, as far as I can tell, they picked some well-known names off the packages of -- of interest rate forecasts that were available. They picked BMO and Scotia and the federal government, but they didn't look at the ingredients. They didn't look at the raw material that was there or check to see if the package was stale dated.

I'm allergic to bad forecasting. I have a niece who is allergic to peanuts. And as a result of both those allergies I tend to read the package information. It may be more difficult or inconvenient to do that, but it's necessary for my niece's benefit and it's necessary for the consumer's benefit that we get the rates right.

Hydro did use its professional judgment by picking BMO and rede -- rejecting Desjardins. I'm happy to let them make those choices. I'd just like to know there was a methodology out there that says we made good choices.

Forecasting, as I've said, is difficult. It's complicated. And the central quote on the slide you're looking at now refers to the optimum balance of short and long-term debt in both Cana -- both Canadian and US currencies.

In earlier proceedings we asked how Hydro defined optimum. We asked them a range of questions about the balance there. And, frankly, we did not at that time receive answers that were satisfying, at least to me, and ultimately that discussion led to the National Bank financial report, which we will be chatting about briefly.

Now, Hydro's views on a number of subjects are described as policies, guidelines, and, in this case, a long-term objective. These various policies, guidelines, and long-term objectives have been quite interesting to me for the last several years. But while I've asked for the documents that provided them so that I could read the, if you like, ingredients, they didn't seem to be written down anywhere.

The fact that I was unable to get a copy of the policy to me was very interesting because I -- I would have thought large organizations were really good at preparing policies and I -- we've seen some in the proceeding on other areas. Now --

MR. ROBERT MAYER: You're not -- you're not the first person to comment on Hydro's lack of documentation.

MR. JOHN MCCORMICK: Thank you, sir. I -- I did though, find it very interesting, because I had assumed that if you have a policy that you're supposed to be within fifteen (15) or twenty-five (25) or under thirty (30), that meant every day.

I know that my bank account has a policy that says my checking account will be in positive territory or my phone is going to ring. It's a very simply policy. I had made that assumption, because no time period was mentioned. But we did learn in CAC/MSOS/MH-2-119 Revised, of something that the policy that I'm never able to get my hands on did not state.

I quote:

"Note that Hydro's..."

Pardon me, I must begin again. Quote:

"Note that Manitoba Hydro's floating rate policy does not state it is applicable for each quarter. It has been long-standing Corporate practice to be in compliance with the target at year end."

End quote. Without regard to what the policy does or doesn't state, or is or is not written, having a short-term debt policy that only applies on one (1) day a year could lead to mischief on the trading desk.

And I've worked for a bunch of brokerage houses and we watch what our traders are doing, because if they go rogue on us we need to be on it immediately. The fact that this comment came to light in a revision meant that I was not able to follow it up in the way I would have liked to. So in future hearings it may be necessary for us to find out the frequency of the application of the other policies that we have been referring to.

Like my colleague, Mr. Matwichuk, I will not be addressing every comment in the Manitoba Hydro rebuttal with which I do not agree. And the fact that I may gloss over something or not specifically address it should not be taken as my tacit agreement with respect to that matter.

In its rebuttal Hydro addresses timely forecasts and it notes that interest rates were again reviewed in October 2009. October 2009 was nineteen (19) months ago. A lot has happened in the financial markets in that time period. And while we have some information that was updated in January, we have IFF-10 and a few other things, we really don't yet have the full picture. We don't have all the information that I believe the Board should have to adequately assess the revenue requirement with respect to interest.

Now, with respect to footnote 18, this is a -- a small point, but footnote 18 was part of a discussion which arose from CAC/MSOS/MH-1-141B and some other information in the proceeding in which I observed that there were certain forecasts from, in this case, I believe the federal and British Columbia governments, that had not been updated. And I was not able to conclude the importance of those on their forecast methodology, but, in keeping with the views expressed in my Centra appearance, I like current data. I don't like superceded data.

And in their response in footnote 18, I am accused of being inconsistent and ignoring my own arguments that we should not use data from statistically non-independent sources, which were the BC and provincial government. And I think, if you drill down, what you will see is that, in the year 2013 and beyond perhaps, they were using old federal government data and old BC government forecasts for one (1) element of their long-term interest cost estimation.

And I've gone back and taken a look at my evidence and the source documents, and I admit that I can't see where I was wrong, but perhaps their position is, 2013 doesn't really matter in a hearing for the '10/'11, '11/'12 year as a -- and I will admit it's of lesser importance. But we're embarking, I believe, on a decade of investment, and, frankly, I'd rather know the cumulative consequences of the millions or perhaps billions of dollars of new debt that's going to be incurred over time, and I'd rather they were properly estimated.

So rather than embracing the November 2008 federal data when the January 2009 data was available, I think I have to go with the January 2009 data. And, similarly for BC, the document that I referred to, I believe, had February 2009 data when September 2009 data was available.

As I'm moving along, I have used the word "rigourous" a few times in this proceeding. This is the quote from which it was derived, and apparently I have failed to acknowledge your rigourous cost of service methodology. I don't believe that is the case, and, frankly, I'm not a methodological purist. I don't really care about the -- the subtleties of the methodologies this Board applies. You know how you work better than I will, but I do know that you can't make your best decisions with flawed inputs. And it's irrelevant to my concerns what you do with the data we provide you, but if we give you a poor forecast, I know you are less able to do the job I'm sure you'd like to do.

I really enjoyed this objection, though. I thought the author of this quote had a delicious gift of irony, because Hydro's wrapping itself in the flag of rigour, and I'm thinking back to the Centra case, and I'm postulating that, to have an efficient and rigourous review, you really should answer the question when I ask for the source documents. And, frankly, I'd like Hydro to answer the questions more directly. When I've asked for a copy of what turned out to be a Bank of Montreal publicly available report, there really wasn't a lot of copyright concern that could have been there. I probably already had it in my file at home.

So to read this objection to my evidence, you'd think that Hydro would welcome a rigourous review. They weren't very forthcoming with some of the data in Centra. There were a couple of places where, in this proceeding, my counsel requested incremental further and better disclosure. They seemed to be somewhat resistive to the logic of a pruning exercise.

I promised this Board that if I'm ever invited back I will vigorously and rigourously review the material presented. That, of course, assumes that Hydro doesn't make another objection to providing the Intervenors with a budget to afford me, which again, doesn't seem to me to be quite in keeping with sponsoring a rigourous regulatory review.

There's a point though after the word methodology, another complete topic that I'd like to spend a second on and that is that I am failing to recognize that because of the inferior forecasting methodology more consumer money was paid in on interest that wasn't actually needed to be paid out. And the good part of all that is that the retained earnings, or increased net income, are now being held for the benefit of ratepayers.

I've not objected to Hydro having a particular equity or income layer, as far as I know, in any proceeding. I do object to defending a seriously flawed and substantially untested group of policies as part of a -- a program that has the effect of maintaining or increasing income. I would prefer that if someone actually needed a higher level of income they would make that case directly rather than surreptitiously.

And the other aspect of retaining these extra funds for the benefit of consumers is that it's not an RRSP, it's not something that I can get the year that I need it. It's like, I've given it away and at some future year of unknown time some potentially illusory benefit will be available to the customer, but not necessarily to me.

Hydro has told us, on page 22 of 96, that:

> "To the extent there are higher contributions to retained earnings as a result of this difference there will be lower future rate increase requirements."

Perhaps, I don't know. But I have to tell you I am not persuaded for several reasons. The first one (1) is intergenerational equity. To some people, I think intergenerational equity is a fancy term. To me, it's actually quite real even in this Hydro proceeding.

And my rationale for that is that one of my best friends, a lawyer that I worked with in the late '70's and early '80's has a beautiful wife, Diane (phonetic). And she comes from a town called Swan River, Manitoba, which is about six (6) hours drive from Winnipeg. I've heard about the drive, among other things.

The parents of Diane still live in that town, they're in their '70's. And it's absolutely clear to me that they've got a pretty darn good chance because they're healthy of living through the decade of investment. I'm not really sure that they're gonna be around for very much, if any, of the decade of return that will follow.

And so, for Diane's parents I'd be quite happy if I could convince this Board to consider a interest deferral mechanism so that we got the right amount of interest paid, even though it might mean I would never appear before you again, I'd be willing to forgo that joy.

At the risk of overplaying that hand, I think making those elderly folks pay too much is inequitable. And I don't think Hydro is individually nefarious about their forecasting methodology, but I'll bet within an organization like that there is a much, much bigger desire to estimate just a little bit more generously than there is to grind things down to the last cent and potentially be low.

But if I can stay with that thought for a minute. In the Centra case we explo -- exposed a problematic methodology for rate base -- pardon me, for interest evaluation and estimation forecasting, and I think that had existed for a number of years. I'm unfortunately handicapped. I never asked them the start date of when they began to use that methodology. But when we found it in Centra's case we demonstrated that it was overforecasting interest rates and interest costs.

I'd like you to pretend for a moment that Hydro had a methodology at that time that was chronically and repeatedly and materially underforecasting interest costs. And I'd like you to ask yourself how long it would take Hydro to get a team working on coming up with a superior methodology that would get them back to whole.

And if you don't think it'd take very long, you and I are now in agreement that there is an asymmetric interest forecasting advantage in Hydro that makes my interest deferral mechanism fit beautifully because we don't have to worry about them being wrong in a particular test year because in the next couple of years we'll get the money back or we'll pay the money that we should have paid.

But from the moment we put in an interest deferral mechanism there really isn't any incentive to shoot for the moon and have a particularly high interest rate forecast because you're not going to be able to keep the money very long.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: To begin our discussion of the National Bank Financial report I thought it might be worthwhile to review the six (6) things that were required in the request for proposal or whatever the appropriate term was.

The six (6) tasks that you see on the slide behind me are in slightly different language and sequence repeated in Section 1.2 of the National Bank Financial report. And after a very careful reading of the report I am saddened to say that I was unable to confirm that each of the six (6) services for which National Bank Financial was paid were actually delivered.

Now, as has been my practice, I've highlighted a couple of words on this slide. I've highlighted, "policies," and I have highlighted the words "steep," "flat," and "inverted" related to yield curves because I want to touch on those as we move along.

But let's do the focus of the obligation to define an optimal relative weighting of fixed and floating rate debt for scenarios including steep, flat, and inverted yield curves. I've discussed this in Question 51 of my evidence. The short answer is I could find no instance of the word "inverted" appearing in the report.

There was only one (1) use of the word "flat" occurring in the report, and that was in a context unrelated to yield curves. And before we leave this slide you'll see in the fifth recommendation an obligation to provide some information with respect to tools. I'll touch on that in a later slide related to risk.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. McCormick, if I could interrupt for a second just -- and -- and if you're coming to this in your evidence that's -- that's fine, but you've highlighted the absence of discussion about flat, steep, and inverted.

Isn't it enough just to have a -- a range, a 15 to 25 percent range? Why -- why would you be looking for an additional discussion in terms of those different circumstances?

MR. JOHN MCCORMICK: Well, let's assume for a moment that we have a normal or steep yield curve. Low rates are 1 percent, high rates are five (5), six (6), or seven (7) for the longer terms. In that instance you're in a very different circumstance in terms of how you might want to raise -- arrange your financial affairs than if all the interest rates, whether they were low rates, or long-term rates were in, say, a -- a bandwidth between 3 and 4 percent, you'd behave differently.

And if you go back to the really ugly financial period of the late '70s/early '80s when I think we got into long-term rates that may have been in the say 17 percent range, and the short-term rates in the -- the 21 percent range, you'd probably want to do something radically different at that time than when you were faced with the current example of say 1 percent as a current short-term rate and 5, 6, or 7 percent perhaps as a longer-term rate. I certainly would want to arrange my affairs differently.

And the reason why that's important, why the analysis is important, if I'm trying to figure out the optimal structure, or the optimal range, the data that I put into my analysis is going to drive the result. If I put in the 1978 to '82 interest rate period, I'm going to have quite different results than if I sort of ignore that. Because if it never happened I don't have to plan for it.

At the risk of using floods as an example, if you plan your construction for a fifty (50) year flood average and we have a one hundred (100) year flood, you may incur a loss that you hadn't anticipated. I hope that's helpful to you.

MR. BYRON WILLIAMS: Thank you.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: I regret to report that I am of the opinion that Manitoba Hydro's underwriters report is seriously flawed. But without regard to the many flaws in this report, which determines a 14 to 27 percent optimal range, I'm happy to recommend that in approaching the question of the amount of short-term debt that should be used in determ - or allocated -- the amount of new debt that should be treated as short-term debt for your forecasting pleasure, that we go and deal with the higher end of that range.

Essentially, this report says the old 15 to 25 percent target range isn't broad enough. It's 30 percent larger, it's seventeen (17) to twenty-four (24). In the exchange of IRs, National Bank Financial and Hydro indicated that fifteen (15) to twenty-five (25) was sufficiently close to fourteen (14) to twenty-seven (27).

Well, I disagree, because each one (1) of these points is worth millions of dollars of consumer interest savings. Right now the short-term/long-term spread on base rates is over 3 percent. So, if you start doing math on 800 million times, say 5 percent times 3 percent, you're coming up with some fairly nice numbers.

Hydro's 15 to 25 percent range is something of a fiction. Based on the quarterly data that's been provided to us in this hearing, the real range, where they'd carry on their business, I believe has been sixteen point six (16.6) to twenty-one point eight five (21.85). That's on a quarterly basis. It would be about the same if we did it on an annual basis, but there would be differences because the sixteen (16) was not necessarily on a year-end date.

So within -- looking at that range for a moment and seeing the last ten (10) years of interest rate conditions, I have no idea what interest rate conditions would ever cause Hydro to get up towards the 20 percent, 25 percent level, or even the 30 percent level. I can't envision a scenario.

So talking about this as a 15 to 25 percent range to me seems to be a fiction. We've had some of the most amazing short-term money sales in the last few years that we haven't seen for decades, and we've had declining longer-term interest rates, so we could have had a double win-win. The first win would be having more short-term debt when the rates are in the one (1), one and a quarter (1 1/4) rate. Had we gone to twenty-five (25), we would have saved a ton of money, as opposed to locking in at four point six (4.6) or numbers above 4 percent.

And what's happened on the long-end, is over the last few years, we've gravitated down, from say 6 percent to 4 percent ranges. So we could have enjoyed a fantastic win in terms of interest rate savings between the short and the long rate through much of the last little period; although there has -- there have been points, and I will come to a chart which will show a slight inversion of the base rates. But I don't think ten (10) to twenty-five (25) is sufficiently close.

Here's the promised chart. This chart occurred to me when I was looking through the rebuttal evidence of Hydro in the 2008 GRA. A similar chart appeared on page 20 of 65 of their rebuttal evidence.

And their chart was a twenty-five (25) year chart. It charted the Bank of Canada data, and the code is one (1) month BAs, standing for bankers' acceptances, which are very highly liquid, very low-rate instruments, and it looked at the ten (10) year and the long benchmark.

And while I want to talk about the chart for a second, in terms of the information on the chart, I want to put -- no, let's talk -- I'm sorry, I'm going to talk about the chart.

When you look at this chart, there are, if you like, three (3) interest periods and two (2) transitions between those periods. In the period January 2001 to somewhere in 2005 -- in the period January 2001 through late 2005, perhaps early 2006, we have a period where we generally have quite low short-term rates, and we have declining longer-term benchmark rates on the Government of Canada stuff.

At the tail end, again, beginning sometime in late 2008 and moving through 2010 to current time periods, we have again a period where short-term rates are really low and the long-term rates are materially higher.

In the middle, in a period of late 2005, for about seventeen (17) months, we have a period where the yield curve is inverted or flat. You'll see that the yellow line in the middle and the green line of the BA's overlap for a period of time.

So in the first and last period, you have a position where by being short there was a significant financial advantage. Had you gone short and hit the 25 or 30 percent maximum at the beginning of the chart and not locked in anything you didn't have to, you would have been able, generally, to finance at gradually lower rates as time went on. And during the middle period you really wouldn't care very much whether you were in longer term instruments or shorter term instruments because the rates were pretty much the same. You would be relatively indifferent.

So, in Hydro's chart, the twenty-five (25) year chart they put in the rebuttal, this was put in in context of the fixed and floating rate question which we raised at that time and ultimately received the Board's instructions to prepare what turned out to be the National Bank Financial Report. But Hydro prefaced the chart saying, and I quote:

> "It is important to put in context the interest rate environment for a longer period of time than the last three (3) years."

End quote.

And this is at page 22 of 65 of their rebuttal. Quote:

> "Such an analysis would have to be extended over a much longer period of time to incorporate the varying interest rate and business cycles to provide any meaningful results, as it relates to policy direction."

Why is this relevant? This is relevant because in the National Bank analysis -- and I refer you to IR CAC/MSOS/MH-1-154E and 'F' -- they tell us the starting and ending dates for the analysis done by National Bank Financial. And the start date is April '05, and the ending date is either March, April, or May of '09, a period of about four (4) years. And while four (4) years is longer than the three (3) period I may have been discussing in the material that leaked through from me in the 2008 GRA, it's really not that much longer and it's no where near twenty-five (25) years.

The period that National Bank Financial used for whatever they did in their analysis, is actually quite different than the rest of the time on this chart. And I've used ten (10) year data because it's convenient. I can access it on the internet. It's available at the Bank of Canada website.

If you look at the average spread, that sort of range between the short-term and long-term -- and admittedly there's very little spread. In fact, there are negative spreads in -- sort of, seventeen (17) months of this ten (10) year period. The average spread is about two (2) basis -- or sorry, two hundred (200) basis points, 2 percent, between the one (1) month BA data series and the long Canada series.

During the seventeen (17) months National Bank Financial was doing whatever it was they were doing with the data series they chose to analyse, these benchmark series, indicative of the financial circumstances of the time, had a spread of eighty-three (83) basis points average. That in interest is a material difference; it's a very special period.

And the analysis that National Bank communicated to us in the IR responses is not clear to me; it is very opaque. And I know how to do Monte Carlo simulations; if you wish me to understand things, I can probably ask questions and we can iterate and have a wonderful chat about.

But with respect to this, the period of analysis waves a red flag to me. And if understood their methodology, I might be able to accept that, but I don't know how they have set up their various data series, the ranges, the shape of the data, and a few other things along that line.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Mr. McCormick, just before you -- you move on. In the context of Monte Carlo simulations you used two (2) words: one (1) ranges; one

(1) was shapes.

Do you recall using those words, sir?

MR. JOHN MCCORMICK: Yes.

MR. BYRON WILLIAMS: And the Board might be familiar with different terms based upon their review of Professor Kubursi and Magee.

Would a -- in the context of -- of -- in which you have spoke, for the word "range" would you -- would it be possible to substitute "minimum" and "maximum"?

MR. JOHN MCCORMICK: Yes.

MR. BYRON WILLIAMS: And in terms of the word "shape," would it be possible to substitute the word "probability distribution"?

MR. JOHN MCCORMICK: Yes.

MR. BYRON WILLIAMS: Please proceed.

MR. JOHN MCCORMICK: This portion of my commentary will be drawn from Question 48 in my evidence. This portion relates to data provided in Table 14, the first group of three (3) lines. It was the historical debt mix; effectively, the proportion of floating or short-term debt set out in Table 14. And Table 14 was amended.

You'll see that I have highlighted the value for 2007. 2007 was the only year in which the original Table 14 had Manitoba Hydro's floating rate debt number right. In the second group of three (3) lines, we have what was to be Manitoba Hydro's total debt. The initial numbers and the amended numbers were only right -- or the same in two (2) years.

I -- I have to tell you I found it interesting that the total debt numbers were consistent in 2008 and 2006. I found it interesting because in the discussion of the work done by National Bank Financial with respect to Emera data points, they admitted that they only used some even numbered financial statements. So they would have the comparative financial statement for -- if you like, 2008 numbers are real.

2007 might be comparative, that may be one (1) explanation for why we have correct numbers on those even years. The other could be that they definitionally did not include the note program in their analysis. But that will only account for instances where the error is a positive number; it would not account for instances where the error is a negative number.

And in asking you to look at this slide, I'd ask you to remember that the people from Manitoba Hydro who are reviewing the work of National Bank Financial are intimately familiar with these numbers. I'm sure they have immense resources at their fingertips and reports that they could readily assess to determine whether these are correct.

Thi -- this report was replete with errors. And I've just shown you a slide related to Table 14. Of the values in Table 14, only twenty-seven (27) of the seventy-two (72) values there were not amended. With respect to the very simply numbers for total debt, only two (2) of nine (9) were correct. On Table 17, only one (1) of nine (9) values for the percentage of Manitoba Hydro's floating rate debt were correct. One might ask, how -- how are these errors possible in a two hundred thousand dollar ($200,000) report.

If you have a background in education or parenting, I'd like to point out that twenty-seven seventy (27.70) seconds is 37 1/2 percent, and one (1) out of nine (9) being right is 11 percent, and no course I ever attended would give me a passing mark if that was my exam.

This inexplicable circumstance, or conundrum, forces me to urge the Board to require in instances where you authorize or order a new and technical report to be generated on a subject that was of significant interest to Intervenors, that you bring the Intervenors to the table and make sure there's somebody there who's interested in proofreading the document before it sits around for six (6) months and gets exposed in a hearing such as this.

National Bank Financial chose to describe their analysis of fixed and floating debt policies as in depth. In fact, we learned through the IR process that they looked at the actual levels, not the policies. And frankly, the fact that they looked at the actuals was somewhat odd since Hydro supplied the policy limits and target guidelines of some of its peers at page 18 of 65 in its 2008/2009 rebuttal evidence.

The next problem with the peer analysis is that National Bank Financial used actual internal numbers from Hydro, numbers you couldn't get from the financial statements. But for the peers they paid a great deal of attention only to balance sheet data.

Well, trumpeting this was an in depth analysis. And, frankly I don't think it's very good to produce a table where you can't use the same methodology to come up with every number in the column using the inputs available to you from the balance sheet. It's not consistent.

The other thing which we learned is that there was an agreement that National Bank Financial would only use annual reports. And annual reports represent one (1) quarter of the financial information available to a company or -- and to the industries and investors that are interested in it.

So I -- I also think when you publish a report and all your work is based on solely annual reports, that it is professional not to disclose the limitation of your work.

In CAC/MSOS/MH-2-117, when we asked about the in depth analysis, National Bank Financial altered the description of their work to be a general insight into the, quote, "Choice of floating rate debt mix," end quote. That wasn't the deal.

In my evidence I've documented some other methodological failings that can be seen from the use, or misuse, of SaskPower or Emera information, and I'm not going to go into them. But there are elements of this report that disappoint me.

The one (1) thing I have to mention about SaskPower, is that the annual report provided -- the 2008 annual report, which was available to National Bank -- provided that SaskPower is currently examining its structure to determine if an increased amount of floating rate debt would provide opportunities for lower average borrowing costs. There is no mention of that in the National Bank Financial report because of the focussed attention on the balance sheet rather than the full information that was available. And balance sheets actually don't give you as much information as the notes or the management discussion and analysis. And while their concentration was intense -- again, it was a concentration that applied to the peers -- they use a different methodology to identify the material related to Hydro.

A few moments ago, I did mention that using comparable data supplied in, say, the 2008 financial statements leads to errors. The table before you is the data supplied by Emera for each year, drawn from its annual reports, except for the chart -- or the column headed 2007/2008, and that was the data that appeared in the National Bank Financial report, and we asked some IRs about it.

They calculated that short-term debt represented 2 percent of Emera's debt, based on the financial statement information. If you actually looked at the 2007 financial statement, you would have come up with the number 6 percent. That's three (3) times as big.

If you weren't completely focussed on balance sheets, and you actually looked at the management discussion and analysis of Emera, you'd see that, in the management discussion and analysis document, the amount of short-term debt or floating-rate debt that they referred to was in the order of 14 to 24 percent at a time when we're at 11 percent. Essentially, if you look at these numbers, ignoring the 2007 and 2008 column, the National Bank Financial told us about 40 percent of the real amount of debt that Emera had, and they told us nothing about the policies that they were supposed to address.

And, frankly, I found, in checking the information related to Sask Power and Emera, that this sapped my confidence for this particular report.

MR. BYRON WILLIAMS: Mr. McCormick, can you go back to that chart just for -- for one (1) moment, just for clarification. You see the second-last line is labelled STD/Total?

MR. JOHN MCCORMICK: Correct.

MR. BYRON WILLIAMS: And is that the -- the information reported by National Bank, with the exception of the 6 percent? I'm just trying to get clarity from you, sir, in terms of what that line represents versus the bottom line.

MR. JOHN MCCORMICK: That line is found in the National Bank report. It is part of Table 17, except for the 2009 numbers, because they didn't have the 2009 numbers available to them. So if you look at page

17 of -- sorry, Table 17 of the National Bank Financial report, you will see -- the numbers that you see on my table for 2005 through 2008 can be found in the National Bank Financial report, in Table 17, and in PUB/MH-1-174A, which was an IR related to that, where certain information on the table was corrected, but not these numbers.

So you can find the five (5), the seven (7), the two (2), and the six (6) on that IR, or on Table 17 in the report. The 6 percent one in the 2007 column is the corrected one that I have identified in my evidence, and the 2009 data was data which was not available to the National Bank, but I threw it in to be more complete.

MR. BYRON WILLIAMS: And the bottom line or numbers of the table that's on page 30 of your PowerPoint presentation are numbers drawn from management discussion and analysis?

MR. JOHN MCCORMICK: And they are contained in Exhibit 1, PUB/CAC/MSOS McCormick-1-13, Emera Information.

MR. BYRON WILLIAMS: Thank you.

MR. JOHN MCCORMICK: Why do I place so much information on these obvious errors? I'm, frankly, of the opinion that if the stuff that you can check doesn't bode very well, or doesn't prove up very well, then there are likely to be problems in the calculations that you cannot see.

There are invisible errors in SaskPower data, Emera data. And as we weren't provided with the detailed modelling to support the 14 to 7 (sic) percent range I don't have a lot of confidence in it, but I'm willing to give them the benefit of the doubt and encourage it to be dealt with.

Mr. Chairman, I -- I don't know if it's your practice to do an afternoon break. I have five (5) more National Bank slides. And if -- if there was to be a break in the afternoon that might be a reasonable time to do it.

THE CHAIRPERSON: How much more time do you think it will take to finish your -- your rest -- evidence?

MR. JOHN MCCORMICK: I have -- I'm on my 32nd slide of 52, but the last few slides are interest rate updates, so they're very quick. So I'm probably more than 50 percent through.

MR. BYRON WILLIAMS: Based -- based on our trial run yesterday, I'm -- I'm guessing that Mr. McCormick is roughly 70 percent through. But we still -- I'm guessing that there's another forty (40).

THE CHAIRPERSON: Okay. We'll take a break now.

--- Upon recessing at 2:42 p.m.
--- Upon resuming at 3:04 p.m.

THE CHAIRPERSON: Okay. Welcome back, everyone. First of all it might be helpful, Ms. Boyd, would you mind putting this on -- on the record?

MS. MARLA BOYD: Certainly. Thank you, Mr. Chairman. Distributed at the break was Manitoba Hydro response to Pre-ask Question number 4, which is the twenty (20) year financial outlook for 2010/'11 through 2020 -- 2029/2030. I believe it should be marked as Manitoba Hydro Exhibit Number 154.

--- EXHIBIT NO. MH-154: Response to Pre-Ask 4

THE CHAIRPERSON: Thank you. Ms. Boyd, do you happen to know the -- I'm sure the answer is within it, but the -- the amendments go beyond simply the construction costs, do they?

MS. MARLA BOYD: My understanding and I -- I'll have to make it subject to confirmation with the right people in the back room, is that it reflects the updated costs of Bipole 3, it doesn't reflect anything else, but it shows you -- and able to -- to allow you to compare this to the previous statement, it allows -- it shows only the -- the changed costs of Bipole 3.

THE CHAIRPERSON: So it doesn't attempt to reflect the -- the new export contracts or anything of that nature or any changes in short-term export sales prices or anything of that nature.

MS. MARLA BOYD: No, that's my understanding.

THE CHAIRPERSON: Okay. Thank you. If it's any different, if you could let us know --

MS. MARLA BOYD: Certainly.

THE CHAIRPERSON: -- in the morning.

MS. MARLA BOYD: Yes, Thank you.

THE CHAIRPERSON: Thank you. Mr. Williams...?

MR. BYRON WILLIAMS: Yes. And Mr. McCormick will be resuming on page 32 in short order. But just if the Board -- if the panel members and -- and parties in the room could turn to page 19 of his PowerPoint presentation for just one (1) second. Page 19, which is --

THE CHAIRPERSON: We're there.

MR. BYRON WILLIAMS: In the second bullet you'll see a reference to in footnote 18. And what -- just that actually should say, in footnote 1, and that's from pages 20 of 92. So it should read: in footnote 1. And if you're looking for the page on which that footnote appears it's page 20 of 92.

THE CHAIRPERSON: Thank you.

MR. BYRON WILLIAMS: I think Mr. McCormick might have been referring to the PDF page at the top, so.

THE CHAIRPERSON: Well, that's fine. The correction helps. Thank you very much.

Mr. McCormick...?

MR. JOHN MCCORMICK: Thank you, Mr. Chairman, panel. Slide 32. You've seen this quote before, it was one of the starting points for our discussion in testing the assertion of optimality. In reply to the various IRs in that proceeding, we have obtained the National Bank Financial report to supplement the lack of supporting analysis and the lack of academic literature that was brought out in that report. But, regrettably, after reading the report I remained unconvinced that we have identified the optimum balance.

In these various proceedings the Intervenors have attempted to seek to understand these policy levels. And we were advised, essentially, that these were matters of judgment. We received no confirming analysis.

In its rebuttal Hydro asserts that the co -- coalitions case was primarily based on the premise that they were underweighting their floating-rate debt below optimal levels. Really the initial issue in the first case was that they had asserted optimality. And when we asked how they demonstrated the optimality they had no support.

Intervenors in a rigorous regulatory review are certainly entitled to ask for proof of statements made in that utility's evidence. We don't need a premise to ask those questions. We're entitled to say why do you do the things you do.

The optimality discussion only took the shape it did because when we asked the questions we didn't get an answer. But let's be clear. I do believe that in handling its debt portfolio over the last number of years Hydro has missed or lost many opportunities to provide the consumers with lower interest costs without unduly increasing the risk of their performance. They've never been anywhere near the top range in a whole range of financial markets. For me, that makes their top range really less reasonable.

As I mentioned earlier, I've read the

evidence of these proceedings quite closely, and I have no idea under what circumstances they'd ever be near the top range. And the -- the fear of being at the top range, in my mind, is overstated relative to the risk because there are tools available to mitigate the risk of higher levels of floating rate debt than we've seen.

In it's rebuttal at page 31 of 96 Hydro has referred us to the modern portfolio re -- theory approach in the National Bank Financial report which arrived at a 12 to 23 percent floating-rate debt level. National Bank clearly said that that modern portfolio theory was subject to limitations.

And, frankly, when your advisor says this isn't the best way to do something, it's kind of hard to raise that range, the twelve (12) to thirteen (13), as a superior range than the fourteen (14) to twenty-seven (27). And I'm willing to accept the fourteen (14) to twenty-seven (27) as the point that we should use in future forecasting.

But Hydro also asserted that CAC/MSOS advocated this modern portfolio theory range. I'm not sure where they've advocated that. I certainly don't recall ever advocating that method or, frankly, any method for which I've had a particular preference.

In its rebuttal Hydro also asked us to

look beyond the errors and omissions that I believe were found in the report and presented in my evidence by saying, and I quote:

> "Any suggestions by Mr. McCormick that NBF omitted to provide sufficient granularity are therefore misdirected."

This is the first time I've ever been told my observations lack granularity. I actually had to look it up and I disagree. And I think in looking at the whole picture from my legal background, a rule of interpretation called the contra proferentem rule is a really good ruler to hold up to this situation.

The contra proferentem rule, as I recall, is used by courts when they're looking at cases of uneven bar -- bargaining position, like getting a car from a rental car company where there's a lot of fine print, and either get the car or you don't. And the courts tend to deal with what might be unfair circumstances in the contracts by saying, unless you've got the right magic words we're not going to stick it to the customer.

Well, I think that concept is very helpful here. The Board made the order. Hydro established the terms of the request for proposal, they listed six (6) things which we were supposed to get. They negotiated the price, they included the word "policies," they included the word "tools," which I'm still going to discuss. They picked one (1) -- they picked the list of people who were entitled to receive the policy or the opportunity to compete, and they picked one (1) of their parent organization's underwriters to do the job. They apparently received from National Bank some assurance that it was going to be an in-depth analysis as we see those words in the report.

And having reviewed the report, however they did it, they didn't identify any lack of depth, inconsistent methodologies, or data errors which I seem to have pointed out. CAC/MSOS didn't set the terms of reference. We didn't pick the party to do it. We didn't -- we still never got to see the parameters of the Monte Carlo simulation and understand how those really work.

But we did get to review the results and I believe my observations have granularity and I again recommend that in future if you order a special report on a technical matter, that the Intervenors be permitted to sit at the table. And if not participate in the -- the scoping of the report to at least hear the structure of the analysis and learn of the special limitations that are being made on data gathering and have an opportunity to proofread the report before it sits around for six (6) months and is reviewed in a hearing such as this.

In its response in rebuttal Hydro notes that all the other requests in the RFP beyond the directive to determine a -- an optimality number were to obtain additional value. And I'm quite willing to agree that these other requests were clearly to give additional value. In fact, the literature review directly would parallel something that we requested in an IR in a previous proceeding.

But I'm also sure that they cost money as investment bankers as which I -- of which I once was one, rarely do work for free. And regretfully, I see little value in the way some of these other requests were performed.

MR. ROBERT MAYER: Mr. McCormick, you have reference up there to page 30 of 96. And the rebuttal I have is page number whatever of 92. Is there -- I'm having a little trouble --

MR. JOHN MCCORMICK: Thank you, sir. May I assist you?

MR. ROBERT MAYER: That would be helpful. I think that's why I'm asking.

MR. JOHN MCCORMICK: When I was preparing this I was using electronic documents. And so the thirty (30) of ninety-six (96) would relate to the PDF format in Adobe. So I think if you add four (4) pages to go to page 34, if my memory is correct. Because typically in Adobe page number 1 is the cover page and it may not be numbered that way.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: My colleague, Mr. Matwichuk, is attempting to find the document.

MR. BYRON WILLIAMS: We're having an internal debate whether you go up pages or down pages. Mr. Mayer, Mr. Vice-Chair, if I could suggest this. You have my assurance that this is in the evidence. We'll -- we'll -- I'll send Mr. Matwichuk looking for it in the transcript, and if -- if -- unless you feel it's critical that we stop here to -- to --

MR. ROBERT MAYER: No, no, no. I don't feel it's critical. I'm just finding that the references --

MR. BYRON WILLIAMS: Yeah.

MR. ROBERT MAYER: -- are useless to me, and so --

MR. BYRON WILLIAMS: Yeah, we understand that, and certainly if the Board wishes us to correct that, we can do it.

MR. ROBERT MAYER: I don't want to do

anything to prolong today.

MR. BOB PETERS: Just an attempt to get on the microphone, Mr. Vice-Chair, Mr. Matwichuk can look to page 26 of 92 of the printed rebuttal. So I hate to say this on the record, but Mr. Williams was correct. It was -- it was page 26 as opposed -- subtract four (4) from the noted numbers would -- would bring us back onside. So I did find the quotation. It is in the last paragraph on page 26 of 92 of Manitoba Hydro Exhibit 8, which is their rebuttal evidence, and I hope that helps My Friend Mr. Williams.

MR. JOHN MCCORMICK: Thank you, counsel. Thank you, Mr. Mayer. I'm sorry that my references were confusing.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: Mr. Chairman, Mr. Mayer, the final point on this slide is that I view the other tasks as valuable, mainly to the degree that they have given us a window on the quality of work in the balance of this report. And one (1) of the items that was supposed to be dealt with in the National Bank Financial report was the question of whether there were tools out there to make things better.

And my counsel suggested that we might look at the Emera exhibit that was addressed -- and I'm afraid, sir, I'm guilty again of having used the electronic references to describe, in my notes, that page 23 of 35 of the Emera exhibit is relevant. It relates to the 2007 annual report, and there you'll see a reference to the fact that Emera capped its exposure to 86 percent of its floating-rate debt at that time. And while I don't have a page number, if you look at the lower corner, it is a page that has the number 45 by Emera, and I've highlighted the little paragraph where we see that Emera, who had floating-rate debt, thought that it was worthwhile to cap its exposure.

So, in terms of their fear that the floating-rate debt would run up, say, to the 17 or 21 percent of the interest rate spike of the '70s or '80s, they already had it fixed, and there are several other examples in the Emera documentation of their discussion of how they've used caps. Regrettably, there is no discussion of caps on floating-rate debt in the National Bank Financial report.

MR. ROBERT MAYER: I think we -- I think we have your point, that you're not impressed with what Hydro got for its money they paid National Bank.

MR. JOHN MCCORMICK: You are succinct

beyond my abilities, sir. Thank you.

I only have one (1) slide for risk. This slide appears in one (1) of the IRs, and it is a debt-distribution slide. It's based on Hydro-supplied information which set out the maturity dates for Hydro debt.

Now, there's as complexity in trying to figure out the maturity dates for Hydro debt, because Hydro may take an instrument of a particular year and swap it into a -- an interest rate obligation from fixed to floating, or floating to fixed, and then interest rate obligation may actually mature in a year other than the year in which the underlying debt instrument matures. So there'll be an obligation to bridge that time period in terms of cash, but it doesn't change the interest rate obligation under the interest rate con -- under the interest rate contract.

This slide takes the maturity dates presented in one of the CAC/MSOS IRs, 149A, and it addresses the maturities of those various debt instruments and/or the swap interest rate obligations. Because in -- for the purpose of this discussion, I'm also interested in the years in which the interest rate obligations change, so swaps are relevant.

The thing that I'd like to draw to your

attention is that in the year 2018 we have a whole host of things maturing, or swap contracts ending. And Hydro's got about $8 billion in debt, and in 2018 you'll see we have about 1.1 billion of debt, either maturing or interest rate obligations related to other bits of debt maturing at that time.

So I looked at this chart and said, in one year we've got about 13 percent of our obligations maturing, and that caused me to think about the fact that we have not seen a debt concentration policy for Hydro. And the question of putting all your eggs in one (1) basket is something people learn about very early on in life.

If you take the six (6) tallest lines on this chart, which are 2013, 2018 which I've mentioned, 2020, '22, '31, and '38, you see that in those six (6) years out of thirty-five (35) years, in which at least $500 million of debt is maturing, we've got over $4 billion of debt. That's half the game. I don't know when the next interest rate spike is coming, but I do now that there are gonna be a few very unhappy people if it happens in 2018.

And yes, there are things that can be done about it at that time; they could go short or long so that the -- the pain was not enduring. But, in terms of the policies, we haven't seen a debt concentration policy, or an interest rate exposure policy in terms of future years.

In one (1) aspect of the disclosure in certain years, Emera capped the risk of 40 percent of its floating rate debt. There are tools out there to do it. I would have liked to see something on caps to address that issue, and I would have liked to see some discussion of our risk related to maturities in the discussion of Hydro's financing policies.

There's only one (1) slide on process efficiency. In this application, which has gone on for an extended period of time, there's a lot of time sensitive data. I've referred to a number of things that haven't been updated since October 2009; or in the case of PUB-135E, were updated in January. And frankly, I believe the Board could benefit from a series of updates as they go to make the decisions related to this.

Even if we just use the comparison for the forecast '10/'11 long bond rate, the forecasts to the economic outlook have fallen fifty-five (55) basis points. Well, fifty-five (55) basis points on 800 million or 900 million that may be new debt represents real money, and I would like the Board to have their most up-to-date forecast available to them. Forecast short-term rates for 1011 -- that's from -- pardon me, for 2011/2012 in the 2010 economic outlook fell a hundred and thirty (130) basis points, from three eighty (380) to two fifty (250), and I'm about to tell you about the current estimates, which are even lower.

So the revenue requirement that I think we're discussing is based on a three eighty (380) base rate, which was in the 2009 economic outlook. And now I'm going to tell you that the going forward estimate of five (5) of the banks I can pull of the internet is in the range of a hundred and fifty (150) basis points: 1.5 percent. To me, I'd much rather see the consumers paying rates in 2011/2012 based on what we know today about the forecast rates, the much more current rates, as opposed to superceded rates.

And that brings me to the current interest rate discussion. And the slide you're seeing tells you that we're in a position where there are lots of things we could update. I intend to update a few of them. I've already told you that short-term rates, the T-bill rates, have fallen from three eighty (380), and currently, by the way, they're about 1.2 percent. The -- the ten (10) year rate was over four (4), and it's now below that.

This slide -- and with the Board's permission, since you have the numbers, I -- I'd rather not read it to you, but if you'd like me to go into the current report in any detail, I'm happy to address these dates. The date -- the values that I have were prepared on May 27th.

With respect to the Bank of Canada three (3) month rate, the data series is identified. On June 6th is was also 1.2 percent. Dropping down to the third bullet, the three (3) month T-bills, June 6th was also the 0.95 percent, ninety-five (95) basis points, the same number that happened to be on May 27th. The ten (10) year Canada bond was shown at three point-o-four (3.04). It's fallen to three (3) -- pardon me, 2.99 percent on June 6th. And the long Canada benchmark was three point four seven (3.47), one (1) basis point different. So, essentially, my May numbers and today's -- or yesterday's numbers are pretty much on track.

The message here is that even if we went and looked at the 2010 IFF, which I think is -- I'm sorry, it's the 2010 economic outlook, which I think is Appendix 51 -- we would see forecasts above those that are currently in the market, based on the knowledge base we have today. And I've prepared a little table using the data that was available to me in May, which gives you the five (5) banks that I referred to, forecasting T-bill rates about 1.5 percent for the financial year 2011/2012.

Just one (1) footnote: I want to make sure that you understanding I was using up-to-date data. I've noted that the National Bank date has the 15th of April beside it. It was -- the document that I used was the May economic outlook. That document had as its most current interest rate date in the body of it April 15th.

Looking at the longer term rates of -- the 2009 target for a ten (10) year plus rate was four point nine five (4.95). I think the PUB-1-39 -- sorry, 1.38 that we've talked about earlier, was showing a five twenty (520) rate as the ultimate hydro borrowing rate.

We're looking at rates which will average around 3.6 percent, as opposed to the sort of 4.95 percent. There -- there's a little tweaking we could do there to reflect one (1) -- the numbers I'm giving you are ten (10) year, as opposed to ten (10) plus rates, but we're materially below rates that were forecast in earlier times.

CONTINUED BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. McCormick, just before you leave this page, and you may have misspoke, you were referencing a previous PUB IR that we looked at, and I believe you said initially thirty-eight (38) -- thirty-nine (39) to thirty eight (38).

Are you referring to PUB-1-35E?

MR. JOHN MCCORMICK: Thank you. Yes, that was the --

MR. BYRON WILLIAMS: Okay.

MR. JOHN MCCORMICK: -- one I was referring to.

MR. BYRON WILLIAMS: Okay. So just for the --

MR. JOHN MCCORMICK: Thank you.

MR. BYRON WILLIAMS: -- court reporter.

MR. JOHN MCCORMICK: Yes, that reference should have been thirty-five (35).

PUB-135E provided us with some information related to financings that had gone on since that date. I'm unaware of Hydro having updated financing since the end of January, but when I went to Bloomberg, I noticed that Manitoba had announced a number of financings, one (1) which caught my eye was a January $350 million floating rate financing at CDOR or BAs, which are banker's acceptances, at the three (3) month quarterly rate plus fifteen (15) basis points. That issue was recently yielding one point five (1.5), which is somewhat below the three point eight (3.8) that may have been intended as an indicative item.

There was also a US pay issue for $750

million. This was not a thirty (30) year long term debt deal, and I don't know whether Manitoba Hydro participated in it. It was sold very close to par. It had a coupon of one point three seven five (1.375), so we'll add a few basis points there. National Bank Financial was a lead manager of that.

So, clearly if this was part of the referenced financing under the old assumptions, there's a marked difference between the 1.375 percent rate and the long-term expectation back in the initial revenue requirement, that all financings would be long-term and they would be done at five twenty (520).

On May 10th there was a $400 million issue maturing in 2040, clearly a long-term issue. National Bank was again a co-manager. The recent yield for that was four point three two (4.32). Again, below the five twenty (520) forecast.

And once again, the record, as far as I know, is silent in participation in the last two (2) issues. Because the January issue was not mentioned in the PUB-135E schedule, my assumption is we didn't participate; although, from a consumer's standpoint, I would have loved to see those sorts of rates on those consumer's interest cost calculation.

You'll recall a slide where we understood that Centra constantly monitored interest rates. I made the point that the possession of that knowledge probably is also in Hydro, and I think we could get an update to show us where we are with respect to these issues. Of course my information is incomplete. I don't know whether Hydro has reopened some of the existing issues and swapped our fixed to floating or floating to fixed, but with respect to the reference, the old forecasts for interest rates upon which this revenue requirement were based are currently high.

In response to PUB CAC/MSOS/McCormick-1-3, I provided this table, which I have now updated. This is the recent Bloomberg specific data for May 27th. And there again you see a ten (10) year deal would have been priced off of Manitoba's specific yield of about three point eight (3.8), much less than the five twenty (520), which would be the reference rate in the forecast.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: In the Centra case I was asked in one (1) of the Irs to confirm a proposition that if Centra was a standalone entity that needed to independently secure its own financing. It's cost of financing would be significantly higher than the integrated funding rela -- or, pardon me. The cost of financing would be significantly higher with its integrated funding relationship with Manitoba Hydro, and I did not agree with the proposition that was put to me, and I explained the answer in detail there.

The reason why I put this slide forward is, it compares Bloomberg 'A' utilities, which include AltaLink, Brilliant Power, Canadian Utilities Fortis, and the issues change from time to time. It would include some of the other government-owned utilities as well. And what we have are a range of spreads, 19 basis points to 61 basis points.

The Board is well aware of the 1 percent guarantee fee and, to my understanding, the Board nor Hydro have the power to reduce that fee, but it's one (1) of a host of factors that go into the calculation of Hydro's financing costs, and when I look at the right-most column, I see that the spreads there are somewhat greater than I might hope, but, in fact, they are still well less than the 1 percent, on average. And even if we assume there's some vagary in there for other government issuers that may be included in the Bloomberg Canadian utilities 'A' rated series, the average isn't really getting us too close to 1 percent.

But as the Board was very kind in its

assessment of my evidence in the Centra case, I would hope that, in assessing the reasonableness of the contrasting views that I've presented with Hydro, you will take into consideration some of the issues that I've mentioned today, like the notes that are not apparently part of the forecasting mechanism; like the fact that Hydro will not always do the longest-term maturities in their long-term debt package; that, in fact, there are ways of increasing the exposure to short-term debt without placing the farm at risk, because we can pay a small insurance premium and have caps; and in recognition of the fact that there is a guarantee fee.

And, with that, I'd like to move to my summary and conclusion, and respectfully ask that the Board implement each of the recommendations in my written and oral evidence.

I ask that the Board, in this and future hearings, require Hydro to provide interest updates and -- both on a forecast and actual basis, and to approve the efficiency of future hearings, when we have a technical, independent report sought by a consumer intervener, that the Board might require an intervener to at least sit at the table and assist in the prior review of the report.

And I thank you for your attention this afternoon, and I welcome questions of the Board, counsel and Manitoba Hydro.

THE CHAIRPERSON: Thank you, Mr. McCormick, and, previous to that, Mr. Matwichuk.

Before we go on, just one (1) question for Mr. McCormick, if I may, and it's just a general question.

Just from your general knowledge and background and involvement in these things, do you expect a QE 3?

MR. JOHN MCCORMICK: A quantitative easing 3? Frankly, I had not thought about that. I, like a number of other people, including Hydro, assumed that interest rates would be rising more quickly than they have, and I am concerned with the major European kafuffle and the large US debt overhang.

So, to the extent that it may take us a while to dig our way out of the trouble we're in, I am less certain. In fact, I would think it is less probable that we will have quantitative easing 3 because I believe the public sentiment for further government action has been moderated in this country by the fact that hundreds of millions of dollars will never be recovered from the automobile loans in the US, the quantitative easing was lavished on a number of special interest groups that didn't really lead to large stimulus. And I -- I guess the short answer is while anything is possible, I would not think it highly likely. But I do think we're going to be looking at lower interest rates for a longer period than I had established and recommended.

And in fact, if you look at the budget analysis, which was made available with the -- by the Federal Government yesterday and you look at the three (3) lines where they give the ten (10) year rate and the T-bill rate from a number of forecasters, you see that each of the three (3) lines shows lower rates continuing for a longer period of time.

So, I don't think we're out of the woods for a long time, but I don't think the public has a great stomach for what might be a -- an inefficient greasing of the wheels, having seen the last one.

THE CHAIRPERSON: Do you anticipate, therefore, gathering from what you said there, a very gradual return to normal economic times?

MR. JOHN MCCORMICK: Well, I hope it won't be too gradual, but I -- I don't think we're going to be experiencing fabulously buoyant times for a while.

THE CHAIRPERSON: Thank you, sir. We'll move to the cross-examination.

Mr. Hacault...? Mr. Hacault is representing MIPUG, which is the Manitoba Industrial

Power Users Group.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: And Mr. Hacault, if you could just give us a couple of minutes to clean up the backdrop here.

(BRIEF PAUSE)

THE CHAIRPERSON: Be careful. We don't need any worker compensation claims. Thank you, sir.

Mr. Hacault...?

CROSS-EXAMINATION BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: Thank you, Mr. Chairman. Good afternoon, all. It's been a long day. I'll ask a couple of questions first of Mr. McCormick and then a couple of -- that will be a bit lengthier for Mr. Matwichuk.

Do I understand your evidence correctly, Mr. McCormick, to say that there are two (2) issues with Manitoba Hydro and interest rate optimization? The first one (1) is that Manitoba Hydro isn't implementing what you would see an optimized mix and that it's causing additional interest expense which, ultimately, gets borne by Manitoba ratepayers?

MR. JOHN MCCORMICK: I wouldn't have put it precisely the way you have put it. I would suggest that the forecast methodologies remain inadequately proven. We've made steps in the right direction, we're now dealing with more timely forecasts --

MR. ANTOINE HACAULT: I was gonna deal with that in the second instance. I understood your evidence to be two (2) criticisms: 1) That they aren't implementing the policy, and the second issue was on forecasting. I want to deal with the first one.

Is it your evidence that they are implementing appropriate optimization of their interest portfolio between short-term and long-term?

MR. JOHN MCCORMICK: Hydro has a practise of having between 16.6 and, I think, 21.85 percent floating rate debt. It is not clear to me in looking at the interest rate movements and looking at the various financial transactions that they have entered into that there is a clear overriding theory about what we're supposed to be doing.

The fact that they have never been near the top end of their own 25 percent range, much less the 30 percent limit that has been established, and they had no significant logical developed theory to support those levels caused me concern.

We have not yet resolved those concerns, and I think there's more to be done in that area. But in terms of this Board's power, this Board doesn't get to tell Hydro, Oh, I want you to do a ten-year deal this week. They get to say something along the line of, We think a more reasonable forecast debt structure for you in the next revenue period is 27 percent floating, the remainder long-term, and we think reasonable forecast of rates in that period are 1 1/2 percent say for short-term and 4 percent for long-term.

And so, do I think Hydro is doing the best job possible and has employed the best parameters possible? The jury is clearly out on that and, unfortunately, the National Bank Financial Report, in my mind, did not provide us with a warm, comfortable feeling that we had wrestled all those demons to the ground.

MR. ANTOINE HACAULT: So your message to the Board is, I don't know whether it's cost Manitoba ratepayers because they -- I'm not too sure what the actual numbers are, but there's enough information there to cause this Board -- or should cause the Board concern to say, Well, listen, this is not something that we put away in a drawer. This is something we have to keep an eye on because it may be costing Manitoba ratepayers because Hydro may not be optimizing it's short-term and long-term policy in such a way that maximizes net results or income to ratepayers.

MR. JOHN MCCORMICK: I'm quite confident it's costing consumers more than it should. I can't specifically quantify to the nearest penny how much. And I know that in addition to the choices they're making, the manner in which they forecast has been such that it was indefensible, in my mind.

MR. ANTOINE HACAULT: Okay. The second issue which you had started to raise before I cut you off, and apologize for that, was the whole issue of how they estimate interest in the long-term forecasts.

And am I correct in understanding your view, that based on everything you've given and the numbers, they put numbers that are too high in their estimates when the actuals are lower?

MR. JOHN MCCORMICK: I'm not sure of the particular direction of your question. Let me see if this response helps. With the recommendations that I've made Hydro will be closer, I hope, in terms of the future estimation than they were with the quality of work we saw in the Centra case - so we've made some improvements.

The IFF-10 change to introduce a portion of a short-term debt will, again, make the estimates closer to the reality of what's actually going on the ground. It still doesn't incorporate everything.

There will always be errors. Sometimes those errors will be positive; sometimes they're going to be negative. And I like the interest deferral account, the interest rate deferral mechanism, because you don't need me to testify anymore and it will work itself out.

So if Hydro, using the best forecasters, is caught one (1) way or the other by financial changes that make their forecast too low or too high, it'll work itself out without any sweat.

MR. ANTOINE HACAULT: But isn't it true, sir, that those results true themself up in a GRA, in any event, because if we have GRAs, general rate applications, every second year we'll know the actuals, so it's going to true itself up every second year regardless of what the forecasts were.

MR. JOHN MCCORMICK: Well, my understanding of the way utilities were regulated was a revenue requirement is approved. And let's say the revenue requirement is ten (10). And one (1) component of that was interest cost, which happened to be 28 percent.

Well, interest costs vary. In the absence of a deferral account or an interest rate mechanism that ship has sailed. Either the utility is left short of cash that it wanted to come in the door, or it didn't. The fact that we were wrong either positively or negatively didn't effect the revenue requirement which they were authorized to take in rates.

And in addition to that, you have differences in the number of kilowatt hours steel plants may use that will affect the revenue. But all this Board can do is order a revenue requirement unless there's a specific deferral account to lead to adjustments, you pick the revenue for the next two (2) years and that's what Hydro gets to keep.

They can over earn or under earn. And when we come back to the next rate case, we'll proceed with the new information. And if the new information is we think our equity layer is too low, we have to increase rates to protect from some issue, which by the way is not a -- a theory I subscribe to, but the next case starts with a -- a brand new clean slate and we try and figure out what next two (2) year's interest are going to be.

So I don't think you true-up anything unless there's a deferral account.

MR. ANTOINE HACAULT: But if they've collected in your view, say just using numbers, $20 million too much because of an over estimate or whatever, they collect it, they come back in front of the Board, we know what that comes down and goes through the expenses and it ends up in -- some of it or all of it in retained earnings. We know the financial status of the company and they come again with new forecasts.

So, by the time they come again we know that they've had that extra revenue, or lack thereof if they were off. And every time we come up to -- in front of the Board the Board knows what Hydro has in its pockets as a result of the over/under estimate and -- and proceeds from there.

MR. JOHN MCCORMICK: Well, clearly the Board has tremendous discretion. The Board could say, as they did in the Centra case, we like Mr. McCormick's estimates of future interest rates more than we like the Board's -- I'm sorry, more than we like Centra's.

But that was a one (1) time deal. If you don't haul me back for the next hearing to say, let's have an improved forecast to debate the numbers, then there is the potential that Hydro or Centra will continue to come in with long-term high forecasts, because simply they pick forecasters who are at the upper end of the spectrum.

And in my evidence I noted that the

differences in forecasts showing that some guys were high, National Bank tended to be in my recent work one (1) of the higher ones. Scotia tended to be one (1) of the lower ones, if my memory is correct. So, I can go pick a bunch of guys from the consensus economics list and I can say, well, these are great names. They just happen to be ones that are on the high end of the spectrum.

And every rate case I'll come in and I'll walk away with 10 million bucks. And the $10 million number, sir, is a real number; that was the difference in the Centra case between what the Board awarded and was shown in the compliance filing as opposed to the original item that Centra had applied for, and that's an organization that is a tenth (1/10) the size of Hydro.

So, over estimation is a big number and it can be a big number on the good side or it can be a big number on the bad side, but there is no financial incentive for Hydro to narrow down to pick the most robust forecast that has an equal chance of being high or low unless you bring in something like an interest rate deferral account, or mechanism as we've described in our evidence, there is no true-up. The ship sales every two (2) years.

MR. ANTOINE HACAULT: So that's your

view, but I'm suggesting to you that it is a timing issue. In one (1) case they may collect it when they should have -- shouldn't have collected it, in -- in your view because the estimates were off and, in the other case, if the estimates are closer, because as you said, well, I think in your testimony, if the -- if we narrow the gap and the estimates are closer, then we don't need the interest deferral idea that you're suggesting.

Isn't that correct?

MR. JOHN MCCORMICK: If we have a more robust interest forecast methodology, we will likely have lower error, because we're not taking a two and a half (2 1/2) year old forecast which has been updated a number of times by the authors, and using the old one. But we will never get to the almost perfection of true interest costs being paid for, and I -- I would disagree with your proposition, sir, that there will be a true-up.

The money goes into the bank, the consumers have paid it, and unless we reach such an egregious point that the interest rate forecasts have been so optimistic that we're now at 50:50 debt-equity, then people might blow the whistle, but there would be a potential for constantly forecasting high, because you get to keep the money.

MR. ANTOINE HACAULT: I take your point,

sir, that if they paid it in 2010, Hydro keeps it for two (2) years until it gets to 2012, but they don't get to charge that interest twice, do they?

MR. JOHN MCCORMICK: No, they only get to charge for interest -- pardon me. They only get a revenue allocation for interest they've forecast, and right now they're forecasting five twenty (520) back in 2009 for long-term debt to be done in the '10/'11 period. That forecast is not in keeping with the current interest rate environment and the current forecast by many of the forecasters that were used.

So with the cycle, using the Centra case and the Hydro case, the information lag is such that there is a -- a great distance between the time when the initial forecast is done, but the money paid in 2010/'11 will never be paid again, but there will be another forecast in the '12/'13 period which increases the risk.

MR. ANTOINE HACAULT: Okay. Thank you. Next, Mr. Matwichuk -- hopefully I'm pronouncing that correct. I apologize if I'm not, sir. Could you turn to page 33 of your evidence? That's the main evidence, not the PowerPoint presentation. I just want to clarify a point.

MR. GREG MATWICHUK: I have that, sir.

MR. ANTOINE HACAULT: Okay. At that

page, if everybody has managed to find it now, page 32 of 50.

MR. GREG MATWICHUK: Oh, 32? I thought you said 33.

MR. ANTOINE HACAULT: Sorry, yeah, 32.

MR. GREG MATWICHUK: Okay.

MR. ANTOINE HACAULT: You quote a section of the Manitoba Hydro Act, Section 39(1), and you highlight (c), which starts, and I quote, "The sum that, in the opinion of the Board," and you continue, and you highlight the words "reserves or funds" following that quote. And I'm quoting your evidence at line 31:

> "This section appears to allow a reserve or a fund to be used at the discretion/direction of the capital 'B' Board."

You haven't so indicated, but that would be the Manitoba Hydro Board, correct?

MR. GREG MATWICHUK: That's correct.

MR. ANTOINE HACAULT: Okay. So you're not suggesting that the issue of reserves, or the direction thereof, is something that the Public Utilities Board has discretion, pursuant to this particular section?

MR. GREG MATWICHUK: I believe the

Manitoba Hydro Act, in the -- when it references the board, it's talking about the Manitoba Hydro-Electric Board.

MR. ANTOINE HACAULT: Thank you. The next issue I just want some clarification on is page 10 of your slides. That's where you reference taxpayers and residents. I think in your direct evidence you said that they were basically one and the same. What was the -- the reason or the logic, or why do you think you need to assimilate those two (2) different groups as one (1) group?

MR. GREG MATWICHUK: Okay. So, first of all, Mr. Hacault, this is an issue that goes back to who is at risk. And when we're looking at who is at risk, we're looking at those who pay the rates and those who are responsible for the ownership and bear the ultimate risk. And when we look at those groups there is such significant overlap of those groups that they are essentially the same group --

MR. ANTOINE HACAULT: Okay.

MR. GREG MATWICHUK: -- in that Manitoba Hydro, it being the ubiq -- ubiquitous provider within the province.

MR. ANTOINE HACAULT: Let me just test that a little bit. You've heard one (1) of the MIPUG presenters, energy intensive user, over a hundred gigawatt class, general service, while that is one (1) customer, one (1) client of Manitoba Hydro, would that company's interests be different than, say, for example, the head office of Great-West Life, which is largely office space with a low power consumption?

MR. GREG MATWICHUK: Mr. Hacault, I believe in my evidence when I made the comparison of the groups I used the word "essentially". There can be all kinds of fine points that one can draw on this. And a lot of those fine points, when it comes down to the rates being charged to each individual group or individual customer, usually finds its way through the cost allocation study and the rate design.

MR. ANTOINE HACAULT: Okay. And you had also recognized that there would be, for example, in Northern Manitoba -- and I think the Vice-Chair mentions this quite often, some homes are practically totally hydro-electric dependent, whereas homes, for example, in an urban centre such as the City of Winnipeg, that may not be the case.

So again, there may be a difference between a ratepayer in Northern Manitoba, either all-electric or in a diesel community, rather than in an urban centre.

MR. GREG MATWICHUK: Yes, and I'm -- and again, I'm sure there are fine points across that spectrum, sir, but if I were to draw two (2) circles they would intersect to a very large degree.

MR. ANTOINE HACAULT: Okay. Is there any evidence in Manitoba that residents generally are at risk to have to pay a Manitoba Hydro debt

MR. GREG MATWICHUK: Well, res -- residents generally are the ones who are -- to whom the shareholder is ultimately answerable. So they feel the impact of the Manitoba Hydro decisions through the government ownership, and whether it's payment directly, whether it's a distribution that is received by the government from Manitoba Hydro, those all -- and -- and what risks the provinces face, those all are felt through -- through being a resident and -- and being a taxpayer.

MR. ANTOINE HACAULT: Maybe I didn't put that directly enough. If Hydro has increased revenue requirements, we don't go see taxpayers for that, we go see ratepayers based on the rate schedules, correct?

MR. GREG MATWICHUK: That's right.

MR. ANTOINE HACAULT: Okay.

MR. GREG MATWICHUK: Yeah.

MR. ANTOINE HACAULT: Now I'd like to take you to your rate stabilization reserve example, or illustration. And to do that could you please turn to Table 3 which, as I understand, a critical table in that analysis. It's at page 16. So page 16 of your evidence, Table 3.

MR. GREG MATWICHUK: I'm there.

MR. ANTOINE HACAULT: And the other item which is kind of a new document based on that table, as I understand it, is in your PowerPoint presentation at pages 45 and 46, 45 is a table.

MR. GREG MATWICHUK: Forty-five?

MR. ANTOINE HACAULT: Yeah.

MR. GREG MATWICHUK: Is that the table that you're suggesting is new?

MR. ANTOINE HACAULT: Oh, at page -- at page 45 Mr. Williams indicated -- indicated that that kind of -- section of the evidence was new. The -- for example, page 46. I think it's the first time we see an illustration of how that might be implemented.

MR. GREG MATWICHUK: Okay. So -- so just for --

MR. BYRON WILLIAMS: And just for clarity, just -- and Mr. Hacault -- and please pose your questions as you wish.

MR. ANTOINE HACAULT: Yeah.

MR. BYRON WILLIAMS: Page 45 would be on

the record already. And in terms of page 46, that particular illustrative page would not be, and I hope that assists.

CONTINUED BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: Okay. Thank you. Now, first with respect to the table at page 16. If I go to the first line, which is 2001, which IFF is the source of those funds -- or those numbers?

MR. GREG MATWICHUK: This -- these numbers came a result of a request by CAC/Manitoba -- CAC/MSOS to Manitoba. So for actual, it was -- and I guess -- sorry, yes, for both. It was from CAC/MSOS-125(b).

MR. ANTOINE HACAULT: Okay. I'll maybe try to explain the context of -- I'm trying to understand how this might work. So, for example, the 2001 numbers, did they come out of IFF-1999, out of IFF-2000, out of IFF-2001? What's the source document? Because part of what you're saying is that they didn't forecast the export revenue correctly so we need to have some kind of a mechanism to deal with that. So I'm trying to -- to see which IFF, to your understanding, is the source of the line that you've marked as 2001.

MR. GREG MATWICHUK: Just bear with me,

sir. I'll pull up that.

(BRIEF PAUSE)

MR. GREG MATWICHUK: Pardon me, sir, while I pull this up.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: I think the witness said he was trying to pull up CAC/MSOS Manitoba Hydro 1 -- 125. It's referenced at the footnote 28 at the bottom of the page.

MR. GREG MATWICHUK: I -- I found it. And the IFF is indicated on that response.

MR. ANTOINE HACAULT: Okay, so for the forecast export revenue in Table 3 for the year 2001 what is the IFF? Is it 1999, 2000, or 2001?

MR. GREG MATWICHUK: The response shows it as 1999.

MR. ANTOINE HACAULT: And when in 1999 is that -- does that IFF usually come out?

MR. GREG MATWICHUK: I -- I could check the date, sir, but I -- I think it's in the early fall.

MR. ANTOINE HACAULT: In the fall, okay.

So now let's just see what kind of issues -- or I'm just trying to follow through how this might work. Let's go to 2004, which was the drought year. That's the year where the Board found it necessary upon application to increase rates.

MR. GREG MATWICHUK: In 2004 or in 2000 -- fiscal 2005, where the rate increase was?

MR. ANTOINE HACAULT: Okay. Well, let's start with the year ending 2004.

MR. GREG MATWICHUK: Okay. And we're still on Table 3?

MR. ANTOINE HACAULT: Table 3. There's a forecast export revenue of 522 million --

MR. GREG MATWICHUK: Correct.

MR. ANTOINE HACAULT: -- if I'm correctly reading that table.

Is that correct?

MR. GREG MATWICHUK: Yes.

MR. ANTOINE HACAULT: So if I'm understanding your evidence correctly, that forecast would have been produced two (2) years before, probably in November or so of 2002?

MR. GREG MATWICHUK: That's what the IR response seems to indicate.

MR. ANTOINE HACAULT: Okay. Following

through what your example is. Now I'm -- subject to check, I'm suggesting to you that under another interrogatory, by April 2003 Manitoba Hydro knew that its energy in storage was down to four point two (4.2) which was lower than usual. And the highest energy in storage that year was seven point five (7.5), again, lower, because it was -- we were getting into the drought situation.

They would be revising forecasts and sometimes producing more than one (1) IFF in some extreme circumstances. Which IFF do we follow under your model?

MR. GREG MATWICHUK: Well, and it's a very good question and here is my response to that, sir, is that in those early years in -- of the first decade of -- of this century, there weren't GRAs before this Board. 2004 going forward there were.

Based on what we're seeing lately it's -- seems like a reasonable expectation that there will be GRAs on somewhat more of a regular basis particularly that we're going into this decade of construction. So I suspect that the Board, again, wanting the best information, would want to rely on the IFF that was used for determining forecast rates being applied for.

MR. ANTOINE HACAULT: I understand what the Board's going to do in its regulatory process, but you're proposing some kind of a formula that says we look at the variance between IFFs and actuals --

MR. GREG MATWICHUK: M-hm.

MR. ANTOINE HACAULT: -- and that seems to run independently of what the Board's going to want to do. Am I understanding that correctly?

MR. GREG MATWICHUK: No.

MR. ANTOINE HACAULT: So your formula runs, but the Board decides whether it runs?

MR. GREG MATWICHUK: No, sir. The -- if -- if you'd like I could try to summarize how -- how that formula would work.

MR. ANTOINE HACAULT: Well, maybe we can go to your page 45, which is an illustration, and look at, for example, that drought period to see how your formula would have worked in that time period where the Board allowed a 5 percent increase and then I think two point four (2.4) and two (2). Two point two five (2.25) and two point two five (2.25). Sorry for the -- that error.

So that -- first, before I get into that, is it the intent that where you're referencing net export revenue that it should be net of imports firstly?

MR. GREG MATWICHUK: Yes, sir. That's -- that's the definition that's included in the -- the evidence.

MR. ANTOINE HACAULT: Net of water rentals secondly?

MR. GREG MATWICHUK: What you're -- I'm going to have to do is I'm going to have to turn up the prospective cost of service study to walk through this with you if you like.

MR. ANTOINE HACAULT: And -- but would the third item be net of fuel costs also?

MR. GREG MATWICHUK: And again, if -- if you want me to respond to that I'll have to turn up the -- the prospective cost of service study and I'm happy to do so if you like.

MR. ANTOINE HACAULT: As long as we get the response. I just want to know -- and that can be by way of undertaking if you want, given the time.

MR. GREG MATWICHUK: Sure, if that helps you, sir, I could do that. I'd be prepared to take that undertaking.

MR. BYRON WILLIAMS: He would, but he could probably assist you in about two (2) minutes, Mr.--

MR. ANTOINE HACAULT: Oh, if it only takes two (2) minutes, let's have --

MR. BYRON WILLIAMS: He's --

MR. ANTOINE HACAULT: -- the answer right away.

MR. BYRON WILLIAMS: Maybe I'm exaggerating his speed, but...

MR. GREG MATWICHUK: Okay. Gee, I turned right to it. Okay. My reference point, sir, is -- is page 3 of the prospective cost of service study. And in my evidence I indicated the net export revenue that is derived from the prospective the P -- PCOSS. And so that -- that item is net of one (1), two (2), three (3), four (4) -- about eight (8) items that include -- I just -- include some of the items that you talked about.

MR. ANTOINE HACAULT: Thank you. Now, turning back to page 45 of your PowerPoint presentation--

MR. GREG MATWICHUK: Yes.

MR. ANTOINE HACAULT: -- if I turn to that table and I go to line 16 --

MR. GREG MATWICHUK: Line 16. I have it, sir.

MR. ANTOINE HACAULT: -- and under the year 2002, I see the number -- would it be $16 million?

Is that correct?

MR. GREG MATWICHUK: Yes, that's correct.

MR. ANTOINE HACAULT: And am I to understand, by looking at the next slide, which is slide 46, that in 2002, you're suggesting that there be an automatic payment of 1.6 percent, and where I'm getting that number from -- roughly in the hearing we've been using around $10 million for 1 percent rate increase or decrease, about that. So at 16 million, the ratepayers would be getting a 1.6 percent refund that year if --

MR. GREG MATWICHUK: Using your assumptions of math, that would be approximately correct.

MR. ANTOINE HACAULT: Well, it's -- it's your table. It's illustrative.

MR. GREG MATWICHUK: Well, you're -- you're asking me percentage, which doesn't have --

MR. ANTOINE HACAULT: Oh, correct. Okay.

MR. GREG MATWICHUK: -- and the table doesn't have percentages.

MR. ANTOINE HACAULT: Okay. And in 2003, if the -- that math works out roughly at 10 million for a 1 percent rate change, it would be a 5.5 percent refund, is that correct?

MR. GREG MATWICHUK: Again, using your math.

MR. ANTOINE HACAULT: Okay.

MR. GREG MATWICHUK: In broad terms, that would be, subject to check.

MR. ANTOINE HACAULT: And in 2004, again, there would be another refund, subject to math, around four point four (4.4)? It may be a bit different, but there would be some kind of a refund, correct?

MR. GREG MATWICHUK: Subject to check.

MR. ANTOINE HACAULT: Yes. And in 2005, again, there would be some kind of a refund, according to my calculations, .9 percent or around there.

MR. GREG MATWICHUK: Subject to check, again, sir, yes.

MR. ANTOINE HACAULT: Okay. So tell me how the Board overrides this formula when it has a GRA, is hit with a -- an event or series of events or circumstances in which it finds that, well, here we've had a cumulative decrease over those years, if my math works out more or less correctly, of over 10 percent from the year 2001 to 2005.

MR. GREG MATWICHUK: When you say cumulative decrease, a -- you're talking about a --

MR. ANTOINE HACAULT: Refund.

MR. GREG MATWICHUK: -- a rider, a refund rider that would go to customers?

MR. ANTOINE HACAULT: Yes.

MR. GREG MATWICHUK: And, again, using your broad math, subject to check.

MR. ANTOINE HACAULT: So how does the Board and everybody kind of deal with that, then?

Because the Board's trueing-up at each GRA. Residential customers will have had refunds in each of those years, correct --

MR. GREG MATWICHUK: The illustration shows --

MR. ANTOINE HACAULT: -- from 2001?

MR. GREG MATWICHUK: -- when -- now, when you said residential customers, this isn't --

MR. ANTOINE HACAULT: Oh, sorry.

MR. GREG MATWICHUK: -- limited to residential.

MR. ANTOINE HACAULT: Domestic customers.

MR. GREG MATWICHUK: Correct.

MR. ANTOINE HACAULT: I used the wrong word.

MR. GREG MATWICHUK: Yes.

MR. ANTOINE HACAULT: Domestic customers will have received a refund in each of the years 2002, 2003, 2004 and 2005, correct?

MR. GREG MATWICHUK: That's correct.

MR. ANTOINE HACAULT: And in the circumstances, the Board found it appropriate to actually increase rates by 5 percent, and then two (2) further increases of two point two five (2.25) on each occasion. So in addition to doing that, they would have to reverse the effect of this formula, because, in addition, the Company would have needed to generate another 16 million in this example, 55 million, 44 million and 9 million. They -- they wouldn't have that money, would they?

MR. GREG MATWICHUK: I'm sorry, I'd have to disagree with your proposition, sir. The Company has already earned that money, and that's why this -- this has been set up, is that this -- this arises from export revenues that were actually earned in excess of the exports that were used to forecast the rates for domestic customers.

MR. ANTOINE HACAULT: So is your point, even if they earn export revenue, but show a net loss, which we saw a huge net loss, that Hydro still has to refund money in a year where it has one (1) of its big -- biggest losses ever?

MR. GREG MATWICHUK: Sir, maybe we're talking at cross-purposes here, but let me try to clarify for you.

This mechanism is independent of the rate-setting process. So there would be GRAs and the GRAs, as Mr. McCormick walked through the -- the forecasting process, the GRA process, and as I mention in my presentation, the revenue requirement process, the rates would be set the same -- in a similar fashion that they're always set in a GRA.

This would act as a deferral account whereby there would be the excess of export revenue -- and the definition it -- there is one (1) proposed, and the Board may -- may choose another definition, but the excess of the actual exports over what was forecast -- because you'll recall that the forecast amount is what's in the rates, so that excess would then be put into, essentially, a deferral account and amortized over five (5) years. And whatever the net result is of the -- each annual year's amortization would be either a refund or a recovery from customers that would be separate from any rate change that would be authorized in a GRA.

MR. ANTOINE HACAULT: So on the bill the customer would see rate stabilization credit, a little bit like what you've put on page --

MR. GREG MATWICHUK: That --

MR. ANTOINE HACAULT: -- 46.

MR. GREG MATWICHUK: -- that -- that is one (1) -- one (1) suggestion that it be a -- a separate line item. And the reason, Mr. Hacault, just to help you out with that, is that across Canada, across North America, utilities have been migrating towards more detailed, itemized bills. So in keeping with that, the suggestion here was that that be a separate line item.

MR. ANTOINE HACAULT: And in 2004, where the actual export revenue was so low because of the drought and they had these huge losses, then according to your table there would be shown on their hydro bill, forty-four (44) -- whatever that comes to if it's 4.4 percent --

MR. GREG MATWICHUK: M-hm.

MR. ANTOINE HACAULT: -- refund out of this rate stabilization in a year of drought?

MR. GREG MATWICHUK: Again, sir, the -- the refund associated with this is independent of the rate setting that may go on in a GRA year.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: And so, in effect, in some way, and it may be just my interpretation of it, the Board would kind of pre-approve a rate refund or a rate surcharge formula which would operate independently of its own GRA?

MR. GREG MATWICHUK: Yes. Mr. Hacault, maybe this could help you, is that there could be a separate proceeding in writing. And this is -- this is a common type of process with other regulated entities -- is that a mechanism like this is pretty automatic, there's nothing really complicated, not a whole lot of judgment that is required other than the amounts that have to go into it, and those would be set based on the parameters that are approved by the Board.

(BRIEF PAUSE)

MR. ANTOINE HACAULT: So using the numbers, and I don't know how to best describe this conceptually, but in 2003 we hit a higher degree of refund or rate stabilization using my numbers, 5.5 percent. Then the consumers bill would actually go up in the following year because the refund is less.

So if you had a hundred dollars that you had to pay and in 2003 you had 5.5 percent rate stabilization or refund, you'd take off the hundred dollars, the five point five dollars ($5.5), in that mathematical formula, leaving you with ninety-four (94) and some dollars to pay.

If you're -- you've got a bill in 2004 of a hundred dollars, the reduction is 4.4 percent, so your bill is actually increasing.

Is that correct?

MR. GREG MATWICHUK: Mr. Hacault, I guess -- I -- I want to be responsive to your -- your question, and the -- and I think maybe the best way is to do it this way. Is that, again, because this is separate and apart from the GRA process, these are -- these are relief amounts that arise from a deferral account that may and will likely change from year to year, so, yes, they will go up and down.

But, again, these types of deferral accounts and the disposition of the deferral accounts, which are usually handled through riders, do have an up and down effect, slight up and down. We're not talking massive because, to use your earlier examper -- example, Mr. Hacault, in 2004, when -- or even 2003 or 2004, when there was the serious drought and Manitoba Hydro had suffered a loss in that year, rather than simply taking the -- the variance for export revenues and plopping that into the very next year, this mechanism is suggesting that they be amortized so that they are smoothed out over a reasonable period.

So there is a transition between making sure that those who are responsible, who were -- customers who were in existence at the time of the event, received the benefit in a fairly short period.

MR. ANTOINE HACAULT: And -- and that may cause -- because of the inflexibility, I'm suggesting, there's two (2) models. Either you leave the PUB, in its discretion, to decide how it's going to deal with stable rates over the long-term. That's one (1) option, right? They can look at the drought and say, Well, I'm not going to burden Manitobans with a hundred percent of that in this hearing. I'm going to stabilize rates. That's one (1) option, correct?

MR. GREG MATWICHUK: There -- there are many options --

MR. ANTOINE HACAULT: Okay.

MR. GREG MATWICHUK: -- and certainly that is one (1) of them.

MR. ANTOINE HACAULT: And -- and this option, where I was getting at with my numbers, is that this hundred dollar bill would have increased from ninety-four point five (94.5) to ninety-five point six (95.6) to close to ninety-nine dollars ($99). And when it increased up to ninety-nine dollars ($99) they would, in addition to that, be hit with the increases that the Board gave, so there would be two (2) sets of increases. That's how it would have worked out under this example.

Manitobans would have seen their bill increased from ninety-five (95) -- or ninety-four (94), ninety-five (95), up to ninety-nine (99) on a hundred dollar bill. And in addition to that, they would be faced with the increases that the PUB would be hitting them with.

Is that correct?

MR. GREG MATWICHUK: So, Mr. Hacault, the -- the response to that is, again, there -- as I mentioned before, there are changes year to year that they would take place independent of what the Board may decide and whether there is a increase or no -- no change in rates from a GRA or a rate decrease as a result of a GRA, but the types of changes that we're talking about here, when it gets down to the rate level, I wouldn't expect that they would be significant to cause concern to individual ratepayers.

MR. ANTOINE HACAULT: Well, that's your judgment. A 5 percent number on a bill for some ratepayers might be considered important for somebody who's got 85 percent of his production costs and electricity rates, seeing rates raised by 5 percent might cause that person concern, correct?

MR. GREG MATWICHUK: But -- but, Mr. Hacault, the -- the issue is is that what the ratepayer received from the year before is a refund. And so there is a direct responsibility tie to the entitlement of the export change. Now, if the Board -- as you say, the Board can op -- optimize it in its view in terms of discretion, and can say we are going to modify the rider in -- in some instance.

This -- this particular rider provides for the mechanics of how it works and also it is consistent with how these types of riders work in utilities, other utilities.

MR. ANTOINE HACAULT: My only other question or point, sir, is: This formula is based on a Hydro IFF which hasn't been tested. So, consumers will either get refunds or, I guess, conversely charges.

Is that correct, because it works both ways?

MR. GREG MATWICHUK: Sorry, it's your -- your proposition at the beginning that I -- or premise at the --

MR. ANTOINE HACAULT: Okay.

MR. GREG MATWICHUK: -- that I had a little trouble with. An IFF that wasn't tested?

MR. ANTOINE HACAULT: Okay. Let's take it one (1) bite at a time.

MR. GREG MATWICHUK: Yeah.

MR. ANTOINE HACAULT: In your formula at page 46 you show a credit.

MR. GREG MATWICHUK: Yes.

MR. ANTOINE HACAULT: Correct. Export revenue normalization?

MR. GREG MATWICHUK: Yes, sir. And that -- and that's a placeholder for administrative purposes.

MR. ANTOINE HACAULT: Okay. So that is in the situation where Manitoba Hydro underestimates the export revenues --

MR. GREG MATWICHUK: Used to determine rates.

MR. ANTOINE HACAULT: -- used to determine rates.

MR. GREG MATWICHUK: Correct.

MR. ANTOINE HACAULT: And I'll put to you if there's a couple years where Hydro overestimates, does that mean the ratepayers have to pay? So, on their Hydro bill, based on Hydro overestimating, the ratepayers would automatically, under this formula, have to pay an extra amount on their Hydro bill?

MR. GREG MATWICHUK: Well, as you can see from my pic -- Slide number 45 that you referred to, which is my response to PUB/CAC/MSOS-22, that with -- with the number of years and the amortization of five (5) years, you're going to get a mix of under forecasting likely. And the -- and a mix together with a mix of over forecasting.

And so it isn't going to be necessarily a dependence on one (1) particular year or two (2) particular years, because you're going to have an amortization over five (5) years, therefore, typically you'll have a mix of five (5) years of positive variances and maybe a negative variance given that, as we've seen on the record, a drought is expected once every ten (10) years.

MR. ANTOINE HACAULT: But you see, sir, your co-presenter complained that Hydro was over estimating interest costs.

What if Hydro takes a policy of over estimating revenue. If it -- if it wants to have and play -- I shouldn't say play the game, because that's -- that's a bit strong of a word, but it -- through an IFF Hydro could over estimate export revenues and guarantee itself a rate increase through your rate stabilization if it did that on a cont -- consistent basis?

MR. GREG MATWICHUK: Well, I have a tough time with that proposition as well, Mr. Hacault, because as you know the IFF comes to this Board and the Board look -- looks at the export revenue -- looks at the export revenue --

MR. ANTOINE HACAULT: But that isn't necessarily so, sir, the IFFs do not get tested --

MR. BYRON WILLIAMS: Mr. Hacault, if you'll let Mr. Matwichuk answer your question and then ask another one (1), you're welcome to.

MR. GREG MATWICHUK: And -- and the Board -- the -- the current -- the current standard as I referenced earlier is the median water flows that the export revenues are based on. Now, I recognize there are a lot of other factors that go into export revenue, but in -- and, sir -- what we're doing, sir, here is we're going to the next step.

Is that typically IFFs will be examined before this Board. Now if there is no GRA, then that brings us to -- the question is: What forecast amount should be used, and whether we should have amortization in a non-test year? And I think that -- that's an issue that we need to further explore as to whether we should be use -- relying on an IFF that is -- is tested, or whether we rely on all IFFs each and every year.

I suspect that the best approach is to rely on IFFs that are approved, and then the rider remain in place until the next GRA.

CONTINUED BY MR. ANTOINE HACAULT:

MR. ANTOINE HACAULT: So is -- your recommendation is that we don't use your formula unless the Board has had the opportunity to scrutinize and approve the IFF?

MR. GREG MATWICHUK: Well, let's not call it a formula, sir. This -- this is -- this is not a formula. This is a structure of how to deal with deferral accounts, and there are many ways to gather the costs in a deferral account and many ways to dispose of a deferral account.

So, you could estimate -- you've got the variance amount, and you can amortize the year -- the first year's variance, and then, in the second year, when there is no -- let's take your example. I think this is where you're heading. If there was no test year, then you could amortize the -- the test year variance and keep amortizing that test year variance ag -- or until you have the next GRA.

Now, again, with this particular entity, my suspicion is that you're going to see fairly regular GRAs, given that they're going into a decade of construction. MR. ANTOINE HACAULT: Could you just indicate to me, sir, the source in Table 3 of the actual export revenue? Is that using the PCOSS method also?

MR. GREG MATWICHUK: The actual export revenue? I believe I have it footnoted, sir. It's CAC/MSOS/MHI-25B.

MR. ANTOINE HACAULT: Perhaps my question wasn't clear. Is it intended that you use a PCOSS method?

MR. GREG MATWICHUK: Oh, you -- you asked me for the source, so.

MR. ANTOINE HACAULT: Yeah, the source first, and -- and is it intended that you use a PCOSS method for actual export revenue?

MR. GREG MATWICHUK: That's my suggestion at this stage, is that we use the net export revenue that is developed through the PCOSS, and you and I talked about it. It was itemized on page 3.

MR. ANTOINE HACAULT: Would it make a difference, sir? It's my understanding that Manitoba Hydro doesn't use an actual PCOSS method in determining actual export revenue.

MR. GREG MATWICHUK: Yeah, and -- and this is an -- an element that has to be developed and refined, and it's a matter of what data's available, what data the Board feels most comfortable should be provided, because they may -- the Board may decide that Manitoba Hydro should provide that on an actual basis.

If there -- if there is another method of determining net export revenue that best fits the risk profile and the reward quantification, then -- then that -- that should be examined.

MR. ANTOINE HACAULT: So it's your view

that the PCOSS is sufficiently robust to use for this purpose, then, for the purpose of actual export revenue, that function?

MR. GREG MATWICHUK: It is a -- an example of what might be used, and without being definitive, I didn't go into particularly investigate whether that is the definitive method, as you mention.

If Manitoba Hydro doesn't have this number on an actual basis, we certainly have to have a meeting of the minds as what we can provide on both a forecast and an actual basis.

MR. ANTOINE HACAULT: Have you addressed your mind at all to whether -- what parts of the rate structure this percentage gets applied to? Is it energy demand? Is it fixed charges? What does it get applied to?

MR. GREG MATWICHUK: No, we haven't developed it that far, sir.

MR. ANTOINE HACAULT: Thank you very much, you've been very helpful. Thank you, Mr. McCormick, also. Those are all my questions.

THE CHAIRPERSON: Thank you, Mr. Hacault.

Mr. Peters, we're going to go Mr. Boyd -- Ms. Boyd now.

I'm wondering if you'd like five (5) minutes before we start?

MS. MARLA BOYD: I would appreciate that, thanks.

THE CHAIRPERSON: Or would you like longer than five (5) minutes?

MS. MARLA BOYD: I think five is probably adequate. Thank you.

THE CHAIRPERSON: Okay.

--- Upon recessing at 4:42 p.m.

--- Upon resuming at 5:02 p.m.

THE CHAIRPERSON: Ms. Boyd...?

CROSS-EXAMINATION BY MS. MARLA BOYD:

MS. MARLA BOYD: Thank you. Good afternoon, or almost good evening. It seems like every time I talk to Mr. McCormick it's late at night, so I'm not sure what that means about the time we take to do this.

I'm gong to start, actually, where Mr. Hacault left off with Mr. Matwichuk, if that's acceptable.

Dealing with the rate stabilization

reserve that you -- you discussed, do you envision a cash reserve to provide a fund for that RSM?

MR. GREG MATWICHUK: No.

MS. MARLA BOYD: How would you envision that that money would be allocated or set aside?

MR. GREG MATWICHUK: I -- it's not a setting aside money issue; it's a deferral account, and it would be financed the same way Manitoba Hydro finances any of -- any other part of its operations.

MS. MARLA BOYD: So you indicated in your evidence that one (1) of the advantages of this fund was that retained earnings was not cash.

And in that sense this fund wouldn't be any different than retained earnings?

MR. GREG MATWICHUK: That's right. This is -- this is not a cash fund.

MS. MARLA BOYD: Way back this morning, in discussing the variance of export revenues, you indicated that there was a 22 percent average variance in export revenues. And you were referring to the -- the graph that's after slide 5 of your presentation if you need a reference.

Do you recall that?

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: I noted in looking at

page 16 of your pre-filed evidence that you've indicated a 10 percent variance in export revenue.

MR. GREG MATWICHUK: Yes, the 10 percent -- and I'm glad you pointed that out -- the 10 percent is a net variance. And when I looked at it again and sought advice from statistical experts they said I should really do it on a absolute value basis. So when I do it on an absolutely value basis it's at 22 percent, and basically it's showing the -- the variance -- from one (1) end of the variance to the other.

MS. MARLA BOYD: It's an absolute value of what?

MR. GREG MATWICHUK: Sorry, absolute value.

MS. MARLA BOYD: Of -- but --

MR. GREG MATWICHUK: That's a mathematical function.

MS. MARLA BOYD: Yeah. Oh, so -- I'm sorry. I'm --

MR. GREG MATWICHUK: Yeah.

MS. MARLA BOYD: -- you're saying it's a variance from -- what's your percentage calculated on, is what I'm --

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: -- trying to get at?

MR. GREG MATWICHUK: Okay. So if you look at that column, Ms. Boyd, the final percent vari -- variance column, the --

MS. MARLA BOYD: You're looking at page 16 of your evidence.

MR. GREG MATWICHUK: Page 16 --

MS. MARLA BOYD: Okay.

MR. GREG MATWICHUK: -- Table 3, yes. So the twenty (20) -- it's twenty (20) -- you start with the numbers of 22 percent, 48 percent, those are the absolute values as well. The negative 10 percent, the absolute value of te -- negative 10 percent is 10 percent.

MS. MARLA BOYD: Thank you. I -- I understand your math.

If I could ask you to turn past slide 5 of your presentation today; there's graphs that aren't numbered. The third one in is one titled, "Compare Export Revenue Variances to Refund/Recovery Under Recommended RSM."

MR. GREG MATWICHUK: Let me just catch up to you.

MS. MARLA BOYD: Sure.

MR. GREG MATWICHUK: Which one are we looking at, sorry?

MS. MARLA BOYD: It's -- the last page

numbered before it is page 5. Then there's three (3) graphs, so it's the third one: "Compare Export Revenue Variances to Refund Recovery Under Recommended RSM."

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: It's got the red and the blue lines, for --

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: -- others in the room.

MR. GREG MATWICHUK: I'm with you now. Thank you.

MS. MARLA BOYD: Based on that graph and looking at the period between 2003 and 2004, it appears that Manitoba Hydro would be refunding money to customers, that being the blue line, while coping with a significant drought, being the red line, correct?

MR. GREG MATWICHUK: There -- the way this would work, is that there would be a refund during that timeframe if -- if that -- if this was in place during that timeframe, yes, and it's jus -- just like Manitoba Hydro was able to obtain a billion dollars of debt during its worst financial timeframe, yes.

MS. MARLA BOYD: You would expect that that would exacerbate an already difficult financial circumstance?

MR. GREG MATWICHUK: I would see it as

they're able to obtain financing of a billion dollars, and this would be a drop in the bucket relative to the billion dollars.

MS. MARLA BOYD: It would be something in the order of 10 percent?

MR. GREG MATWICHUK: I see it in the order of 5 percent for 2003.

MS. MARLA BOYD: And this is over two (2) years, 2003/2004?

MR. GREG MATWICHUK: So it'd be 5 percent each year.

MS. MARLA BOYD: A total of 10 percent, a hundred million dollars?

MR. GREG MATWICHUK: No. Well, I guess if you're -- you're mixing apples and oranges because you're combining two (2) years of rebates with one (1) year of financing, so I'm -- I'm having trouble with your proposition.

MS. MARLA BOYD: You're suggesting we would refund in 2003, $50 million, if I'm looking at the little square on the blue line, correct?

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: And in 2004, we're just under $50 million dollars?

MR. GREG MATWICHUK: That's right.

MS. MARLA BOYD: So that's a hundred million dollars total?

MR. GREG MATWICHUK: That's a hundred million total.

MS. MARLA BOYD: Over the two (2) year period?

MR. GREG MATWICHUK: Over the two (2) year period.

MS. MARLA BOYD: And at the same time, according to the red lines, we're experiencing export revenues than are lower than those that were forecast?

MR. GREG MATWICHUK: Correct.

MS. MARLA BOYD: In one (1) case by 50 million, and in the other case by about 175 million?

MR. GREG MATWICHUK: Okay.

MS. MARLA BOYD: Those are the two (2) dots on the red lines.

Am I correct there?

MR. GREG MATWICHUK: Yes.

(BRIEF PAUSE)

MS. MARLA BOYD: You suggested that Manitoba Hydro was in a position to borrow a billion dollars, and, therefore, this extra wouldn't be a problem, correct?

MR. GREG MATWICHUK: That it wouldn't -- it wouldn't be a significant amount relative to the billion dollars.

MS. MARLA BOYD: Okay. And I'm suggesting that a hundred million is 10 percent of a billion.

MR. GREG MATWICHUK: And your hundred million is from where?

MS. MARLA BOYD: Fifty million plus fifty million, the two (2) blue dots.

MR. GREG MATWICHUK: Relative to the billion dollars that we're talking about?

MS. MARLA BOYD: That you just referenced, yes.

MR. GREG MATWICHUK: Yes. So, again, I'm having difficulty with your proposition, because you're talking about borrowing -- that the financing that took place in one (1) year, and then you're comparing that to a refund in two (2) years.

MS. MARLA BOYD: I thought that was your point, that we were able to borrow money.

MR. GREG MATWICHUK: Yes. And so you're able to borrow money in -- in the worst year, so I assume you're -- Manitoba Hydro's able to borrow in the year that's not the worst year. So whatever -- whatever the finance -- and we can look it up if you'd like, in terms of the proceeds from debt that came from each of the two (2) years; a billion from one (1) year, and I'm not -- I can't recite what it was from the other year, but I can look it up.

MS. MARLA BOYD: Suffice to say it would be necessary for us to borrow an extra hundred million dollars over the two (2) years?

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: Thank you.

MR. GREG MATWICHUK: Yeah.

MR. ROBERT MAYER: I note with interest, Ms. Boyd, that when we get back to the -- to what really happened, we appear to have given you the 5 percent before you had a significant loss. It would appear that way at least from the -- the chart immediately prior to the one we were just discussing.

MS. MARLA BOYD: I -- I don't have all the figures in front of me, but I -- I suspect that that may be something we'll have to deal with, and I'm not sure your assertion is correct.

CONTINUED BY MS. MARLA BOYD:

MS. MARLA BOYD: Mr. Matwichuk, if I

could turn you to page 35 of your presentation today.

(BRIEF PAUSE)

MS. MARLA BOYD: I'm sorry, are you there?

MR. GREG MATWICHUK: Yes.

MS. MARLA BOYD: Thank you. You noted that the difference between the actual cumulative net income from 2005 to 2010 was $777 million. And you compared that with the actual accumulative export revenue for the period 2001 to 2009.

Did you look at or compare the cumulative net income for the 2001 to 2009 period? I'm wondering why the dates are different.

MR. GREG MATWICHUK: Thank you. And I -- yes, the answer is that the data wasn't available on the record.

MS. MARLA BOYD: Would you accept that, subject to check if you like, that the net income impact of that period, 2001 to 2009 is $174 million variance?

MR. GREG MATWICHUK: Well, I -- I -- I guess I'd like to see what documents are being used for that.

MS. MARLA BOYD: And assuming for a

moment that it's $174 million, that would be a 1 percent variance of total revenue, or 2 percent based on domestic revenue over that nine (9) year period?

MR. GREG MATWICHUK: Sorry, could you put that proposition to me again, please?

MS. MARLA BOYD: Sure. Assuming my $174 million variance over the nine (9) year period, 2001 to 2009, that would amount to approximately 1 percent variance in total revenue, or a 2 percent variance if you were to base that only on domestic revenue.

MR. GREG MATWICHUK: And we're talking about net income here?

MS. MARLA BOYD: Over that same period. Yes.

MR. GREG MATWICHUK: Yeah. If we're simply talking about net income, I'll accept your math, subject to check.

MS. MARLA BOYD: Thank you. Thank you, Mr. Matwichuk.

MR. GREG MATWICHUK: Thank you.

MS. MARLA BOYD: Mr. McCormick, I'll apologize in advance, I have little snappers that are all over the place, so I'll do my best to -- to tell you where I'm going. I wanted to start with your comment today relating to the Centra Gas proceeding. And you said at least once and maybe more than once that Centra didn't provide you with the source of its interest rate forecast data. And you took issue with that in terms of the disclosure that was available to you.

I'm looking at CAC/MSOS/CENTRA-2-156, which was filed in the same application which you've suggested that the source data was not provided. It was filed on June the 3rd of 2009, and it provides the source data for the -- the -- the interest rate forecast.

Is that something you may have overlooked in your testimony today?

MR. JOHN MCCORMICK: My recollection is that I filed my evidence in May. And the IRs occurred earlier. The CAC-1-1M, to which I referred, asked for the source documents. It said:

> "Please identify and supply copies of the source document."

And we were then referred to CAC/Centra-2/C for a description of how forecast rates were devised. CAC- 2/C said:

> "Provide copies of the economic or financial forecasts relating to the matter, and particularly identify the 4.05 percent average banker's acceptance rate."

And the answer there was:

"The short-term forecast rate is set by initially considering data for ninety (90) day T-bill rates from independent forecasters and major Canadian banks. A spread is then added to reflect the thirty (30) day T -- [pardon me], the ninety (90) day T-bill rate and the three (3) months banker's acceptance rate."

And then there was a later period where after PUB-2/198 was asked that we received additional information. But as I was asked to prepare my evidence, those documents had not been filed.

MS. MARLA BOYD: So do I understand you that you received the source document subsequent to your evidence, but not that you didn't receive it at all?

MR. JOHN MCCORMICK: Ultimately, it was put on the record. It was put onto the record very late in the proceeding. And it was put on after the Intervenors had an opportunity to analyse it. So, yes, ultimately we did receive the information. It was available at the time the Board made its decision, but not when I was preparing evidence.

MS. MARLA BOYD: And in this proceeding,

you've received the source data in PUB Manitoba Hydro 1-46C, correct?

MR. JOHN MCCORMICK: I have seen various IRs; I don't know what source data's contained in 1-46C, but I have seen evidence that has been filed and the source documents for the 2009 forecasts, in some respect, but I don't believe that there was any particular difficulty in this case in getting the information, although some of the information, which was apparently used in the forecast, was stale dated, in my view.

MS. MARLA BOYD: So the source data was critical to you in the Centra GRA, you didn't actually look at in the Hydro GRA?

MR. JOHN MCCORMICK: I'm sorry, I -- I would not have looked at two (2) year old forecasts in the Centra GRA in assessing an opinion in the Hydro GRA.

MS. MARLA BOYD: That wasn't my question.

MR. JOHN MCCORMICK: Could you say your question again, please?

MS. MARLA BOYD: Yes. The source data which you considered critical in the context of the Centra GRA and which you thought was so important that you needed to raise it with the Board today, is the same data that the current version for the Manitoba Hydro GRA was provided in the First Round in this GRA, and you didn't look at it.

MR. JOHN MCCORMICK: No, I have looked at a host of IRs. I have looked at the documents that were provided from the various bank forecasts. I'm unable to confirm what IR number they were in.

MS. MARLA BOYD: Or what the data was, is what you told me initially.

MR. JOHN MCCORMICK: I don't remember what was in PUB-146 that you referred to. I have, though, satisfied myself with respect to an improvement in your forecast methodology as a result of seeing the various matters placed on the record.

MS. MARLA BOYD: You also suggested today, and I believe it's in your earlier responses, that -- that you've recently learned that Manitoba Hydro's policy with respect to floating-rate debt only applies at the year end, and you've suggested that that may result in mischief, correct?

MR. JOHN MCCORMICK: It has the potential to result in mischief.

MS. MARLA BOYD: Are you aware that Manitoba Hydro has not gone outside of the 15 to 25 percent floating-rate debt range in any quarter since March of 2004?

MR. JOHN MCCORMICK: No. I'm only aware

of quarter-end data. I don't know what they've done in between the quarters, where --

MS. MARLA BOYD: That was my question, was with respect to any quarter since March of 2004?

MR. JOHN MCCORMICK: Since March of 2004, I don't believe they've been outside the 15 to 25 percent at any quarter end. I'm unfamiliar with dates taking place in the quarters.

MS. MARLA BOYD: And you would find that information, for the record, at CAC/MSOS Manitoba Hydro 1-46D.

MR. BYRON WILLIAMS: Ms. Boyd, just so I'm clear, the information you're referring to is quarter end dates, not the -- the -- is that what you're meaning to suggest?

MS. MARLA BOYD: I'm referring to the material filed at Manitoba -- CAC/MSOS Manitoba Hydro 1-46D, yes.

CONTINUED BY MS. MARLA BOYD:

MS. MARLA BOYD: Mr. McCormick, given the variability in interest rates, do you agree that there's a greater interest rate risk associated with a five (5) year floating-rate debt versus a five (5) year fixed-rate debt?

MR. JOHN MCCORMICK: There is greater var -- variability in terms of interest rate risk. If you equate variability with risk, yes, but in terms of the floating rate, one has the reward often of the shorter-term floating-rate DA-base type instruments as providing you with a significant advantage in terms of total interest cost.

So, yes, there will be more frequent rate resets on a five (5) year basis on a floating-rate instrument than there will be on a fixed-rate instrument, but the ultimate financial cost may be lower.

MS. MARLA BOYD: Turning to slide 5 of your presentation, I'm looking at the last bullet on the page. You've suggested that adoption, or partial adoption, of your Recommendation number 1 would bring about a $5 million consumer savings in 2010/'11 alone.

Can you confirm, please, that that $5 million doesn't include the offsetting impact of interest capitalization?

MR. JOHN MCCORMICK: While I generally deal in cash interest, I recognize that your financial expense will have a number of items in it including capitalized interest related to capital projects.

MS. MARLA BOYD: And can you also confirm that the $5 million is calculated based on the BA flat as opposed to adding any spread for the financial market?

(BRIEF PAUSE)

MR. JOHN MCCORMICK: Can I take you to page 10 of my evidence, please.

MS. MARLA BOYD: I'm sorry, do you mean your pre -- your pre-filed evidence?

MR. JOHN MCCORMICK: Yes, my pre-filed evidence.

MS. MARLA BOYD: Okay.

MR. JOHN MCCORMICK: In the table that begins beneath line 16, I created an example of interest rates saving against the assumed fixed rates for the revenue period that was remaining and noted that some $1.8 billion of debt was intended to be taken out in 2009/'10 through 2011/'12. And I've used for the long-term fixed rates the five twenty (520) and the four point six-five (4.65) as an example. The four point six-five (4.65) was not the forecast rate, but was in fact developed off one (1) of the recent issues that is shown on the prior page, the FK-2 issue as being a representative rate. And I identified there a full year interest cost, again, ignoring any minor adjustments that might be required for the issue being sold at a price other than par.

So we're dealing with essentially nominal interest rates. And I'm ignoring, perhaps the five (5) basis point cost of funds that might be relevant there.

I then compare that to a 1.7 percent floating rate assumption. And that 1.7 percent also comes from the previous page where I took the average inferred rate from two (2) recent financing series one (1) -- pardon me, C-107, and series FM-4, which were done at BA's plus forty (40) or BA's plus forty-eight (48) and resulted in a rate that averaged one point seven (1.7).

I then subtracted the fixed minus floating amount which gave me a 2.95 percent difference. And taking 25 percent of the 800 million of debt, and a 2.95 percent spread arrived at approximately 5.9 million of interest savings. So if that helps you understand the -- the nature of the calculation, you would have 5 million.

Now, of course, because the markets have changed today and the IFO-10, I -- I believe has a forecast floating rate of 1.10, the savings on 25 percent of those 800 million would be 3.55 percent, as opposed to the 2.95 you see. And of course, the savings would be greater, but in terms of structure that was the nature or the type of the calculation that I developed and referred to to support the bullet that you see on the slide under

Recommendation 1.

MS. MARLA BOYD: I've asked your counsel to have available to you Manitoba Hydro Exhibit 109, and CAC Exhibit 20.

MR. BYRON WILLIAMS: Mr. McCormick has those. And we thank you, Ms. Boyd, for the courtesy in providing them.

CONTINUED BY MS. MARLA BOYD:

MS. MARLA BOYD: Thank you. I have provided to the Board secretary copies of Manitoba Hydro Exhibit 109. I did not have at hand copies of Exhibit CAC-20. Mr. Singh, if you're able to make those available as well, CAC-20.

(BRIEF PAUSE)

MS. MARLA BOYD: We're looking for CAC Exhibit 20, please.

(BRIEF PAUSE)

MS. MARLA BOYD: I'm sorry, I probably should have had copies available. I -- I don't intend to be really in-depth with them, so perhaps we can try it without CAC Exhibit 20. And if it becomes necessary, I'll -- I'll make copies.

(BRIEF PAUSE)

CONTINUED BY MS. MARLA BOYD:

MS. MARLA BOYD: Okay. Mr. McCormick, Mr. Schulz, in his testimony at pages 5,159 through 5,160 of the transcript, indicated that Manitoba Hydro considers, and I quote:

"The full bandwidth of possible experience. And the original thinking for us is that if we're going to be looking at thirty (30) year bonds looking forward, that it seems more representative to look at thirty (30) years going back in time."

That would be contrasted with the yield-curve data that was produced by CAC/MSOS Exhibit 20, which went back to 2002, correct?

MR. JOHN MCCORMICK: Clearly one (1) was ten (10) years, the other was thirty (30) years, but the point of producing the data may have been different.

MS. MARLA BOYD: Would you acknowledge then in the context of the last thirty (30) years of the yield-curve experience, which you can see in Manitoba Hydro Exhibit 109, that long-term interest rates are currently at historical lows?

(BRIEF PAUSE)

MR. JOHN MCCORMICK: Counsel, may I have your question again, please?

MS. MARLA BOYD: Certainly. I was looking at Manitoba Hydro Exhibit 109, and asked that you acknowledge that in the context of the last thirty (30) years of yield-curve experience the long-term interest rates are currently at historical lows.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: Yes, but in accepting that, I think it important that we take a look at how rapidly that judgment may change. And I refer you to CAC/MSOS 1-148, which was also provided, where we have the long-term curve showing the very ugly spike which occurred, I think in March of 1982.

So to the extent that we are driven by an analytical period that begins in the worst spike in my data sources, which go back to 1919, yes, we have had the worst time -- sorry, we have had the lowest periods since March of 1982 -- sorry, yes, March 1982.

So absolutely. Unfortunately, Manitoba is not restricting itself to merely 30-year securities. I believe you're now going out and doing maturities that go out as far as 2063. So if one were only to focus in on forty (40) -- thirty (30) years in doing the average, you'll get a very different result than you would if you did twenty-eight (28) years on this chart.

And you'd get a very different result if you went out however many years sixty-three (63) was because of the low rates. So yes, we are at a low, relative to a period which you have chosen that arbitrarily has the worst spike in long-term memory.

MS. MARLA BOYD: You'd also acknowledge that short-term interest rates have in the past thirty (30) years been at levels far higher than the current long-term fixed interest rates?

MR. JOHN MCCORMICK: Yes, I would acknowledge that. And one (1) of the high points again was the '78 to '82 period which we've discussed.

(BRIEF PAUSE)

MS. MARLA BOYD: If I could refer you to

page 39 of your presentation today.

(BRIEF PAUSE)

MS. MARLA BOYD: This is the graph of maturities that was taken from your response to PUB/CAC/MSOS 101.

Can you confirm, please, that that depicts maturities grouped on a calendar-year basis?

(BRIEF PAUSE)

MR. JOHN MCCORMICK: That is my memory, yes.

MS. MARLA BOYD: You're aware that Manitoba Hydro has a fiscal year that ends on March 31st not December 31st?

MR. JOHN MCCORMICK: I am aware of that.

MS. MARLA BOYD: Are you also aware that if your graph had been prepared on a fiscal year basis that the year ending 2018 would have had $530 million in maturities as opposed to the 1.06 -- 86 million?

MR. JOHN MCCORMICK: I have not done that calculation, but with respect to the information that we've just touched on in CAC 1-148, where we have the spike, regretfully the spikes don't occur to be restricted to any twelve (12) month period.

They may, in this particular case have gone on for some four (4) years. So while I am quite willing to accept that your question is certainly reasonable that -- in using a calendar-year basis, there may be instances where a particular calendar year has more or less impact than another, to put a billion dollars or more of debt within a twelve (12) month period, whether it begins in June or December, or an eighteen (18) month period in light of the spike that you're referring me to is not in my mind a material issue.

MS. MARLA BOYD: You mentioned a couple answers ago that you were now aware that Manitoba Hydro has debt maturities extending out to 2063, correct?

MR. JOHN MCCORMICK: I believe that's the greatest maturity.

MS. MARLA BOYD: And your graph doesn't include those maturities. It only goes to 2044?

MR. JOHN MCCORMICK: Because I believe there are only four (4) years of maturities in the nineteen (19) years that were available or in that time period, and they were relatively small maturities based on the date of the graph. I wanted to condense the graph.

(BRIEF PAUSE)

MS. MARLA BOYD: I take it you're aware of the importance of considering refinancing risk when determining a prudent level of floating-rate or shorter-date fixed-rate debt to carry in a debt portfolio?

MR. JOHN MCCORMICK: I am aware that financing risk is related to short-term debt. Clearly, it would be a factor that one would consider.

MS. MARLA BOYD: Did you make a distinction between short-term and floating in your answer?

MR. JOHN MCCORMICK: I -- I only spoke with respect to short term. Short-term and floating are the category which I understand Hydro lumps together in determining the 16.6 percent, or the 21.85 percent. And so, in terms of the shorthand, I was referring both to short-term debt and floating-rate in my answer.

MS. MARLA BOYD: And with the floating rate or shorter-term -- or shorter-dated fixed-rate debt, there's more refinancing points in the debt-stream term, and therefore increased financing risk?

MR. JOHN MCCORMICK: I'm sorry, can you

repeat the question again?

MS. MARLA BOYD: Sure. I didn't do it very well. With the floating-rate or shorter-term fixed-rate debt, there's more refinancing points during the debt-stream term?

MR. JOHN MCCORMICK: Yes, there are, but there are tools available to assist us in meeting the refinancing risk. And -- and, if I may, I -- I note there's a very large organization that, in anticipation of a program to significantly address a large number of its future financing issues, has gone out and taken a total of $2 billion of fixed-rate term debt issuances under hedging arrangements that set the average government bond rate at 4.4 percent. So there are tools to handle the risk on the upside.

We've already spoken of the activities of people like Emera who will have caps or collars built around their short-term debt. So while there are risks, there are ways of dealing with them, and in periods where we have had both declining long-term rates and very low short-term rates, there have been opportunities that I think have been missed.

MS. MARLA BOYD: The interest caps that you speak of come with a premium, correct?

MR. JOHN MCCORMICK: They do.

MS. MARLA BOYD: Typically, an upfront cost?

MR. JOHN MCCORMICK: Yes.

(BRIEF PAUSE)

MS. MARLA BOYD: If I could ask you to turn to page 25 of your presentation, please. Do you have it?

MR. JOHN MCCORMICK: I'm there, thank you.

MS. MARLA BOYD: Can you confirm your understanding that Manitoba Hydro utilizes the three (3) month Government of Canada T-bill rate for its Canadian short-term interest rate benchmark?

MR. JOHN MCCORMICK: Yes.

MS. MARLA BOYD: And that's different than the three (3) month Bank of Canada BA rate included on your graph?

MR. JOHN MCCORMICK: In fact, the graph has the one (1) month Bank of Canada BA rate because that is the item that was identified in the rebuttal evidence that I relied on to formulate this graph.

(BRIEF PAUSE)

MS. MARLA BOYD: Can you also confirm your understanding that Manitoba Hydro utilizes the average of Government of Canada ten (10) and thirty (30) year data to derive a ten (10) plus -- a ten (10) year plus forecast?

MR. JOHN MCCORMICK: That is my understanding, yes.

MS. MARLA BOYD: And can you also confirm your understanding that Manitoba Hydro does not forecast a ten (10) year interest rate?

MR. JOHN MCCORMICK: I'm sorry, it doesn't forecast a ten (10) year --

MS. MARLA BOYD: Ten (10) year.

MR. JOHN MCCORMICK: -- Canada rate?

MS. MARLA BOYD: Interest rate. Manitoba Hydro uses ten (10) -- ten (10) years plus in its forecasts, not ten (10) years?

MR. JOHN MCCORMICK: The reason why I'm pausing is there were some instances that I recall in the Centra case where there was confusion as to whether Canada ten (10) or Canada ten (10) plus was being used in Hydro's analysis, but I do understand that, generally, the long-term rate that is forecast is a ten (10) year plus rate.

(BRIEF PAUSE)

MS. MARLA BOYD: Mr. McCormick, just in terms of confirming something that I believe I heard you say earlier today, is it your understanding that Manitoba Hydro's board of directors can change the provincial debt guarantee rate?

MR. JOHN MCCORMICK: It is my understanding, quite the contrary, that they cannot. It would require the province to determine this, and I -- if I wasn't clear when I was making remarks on the subject of the guarantee, my comment was related to the fact that the guarantee was one (1) of the costs of the -- the full interest costs of borrowing for Hydro, but that I understood it outside both the power of the Board to modify and the power of Hydro to modify unilaterally.

MR. ROBERT MAYER: For your information, I understood the same thing as -- as counsel did in one (1) of your responses, and in fact we made a note of it up here, that nobody gets to vary that particular amount, or at least nobody in this building.

MR. JOHN MCCORMICK: Then I misspoke, sir, because my understanding is quite clear that it's beyond this Board and the unilateral action of the Company to adjust that guarantee fee.

CONTINUED BY MS. MARLA BOYD:

MS. MARLA BOYD: Thank you, Mr. McCormick, Mr. Matwichuk. Thank you. Those are Hydro's questions.

THE CHAIRPERSON: Thank you very much, Ms. Boyd. Well, Mr. Peters, to you goes the honour of the -- I should say Mr. Williams will have the last word with his redirect. You could proceed now, sir.

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

CROSS-EXAMINATION BY MR. BOB PETERS:

MR. BOB PETERS: I propose to start with Mr. McCormick, since he's already warmed up and -- in his answers to my colleague. I will do my best not to duplicate any of them, sir.

Can the Board understand your evidence, Mr. McCormick, to be indicating that Hydro should be required to either update its interest rate forecasts in this proceeding, or, alternatively, establish a deferral account? It's an either/or proposition, in your evidence?

MR. JOHN MCCORMICK: No, sir. I would not think that is the case. I think Hydro should be presenting an update because interest rates have changed so dramatically in the last little while, and interest rate forecasts are now materially less than they were at the time IFF-09 has happened, and I think the update should also include the actual financing, which we have part of the information on in what I believe is PUB 135.

But I think this Board is entitled to excellent information to determine, either we will allow this interest based on this forecast as part of the revenue requirement, or to decide that because of the problems of forecasting they wish to go further and say, We never wish to hear Mr. McCormick again, and we would enjoy, therefore, instituting his interest deferral mechanism so that we never have to.

MR. BOB PETERS: And the update forecast, if the Board turns to page 44 of your PowerPoint presentation this afternoon, you're suggesting that's the updated information, to the best that was available certainly at the time you prepared the -- the PowerPoint presentation?

MR. JOHN MCCORMICK: Clearly, the annual averages that I've given you for the fiscal year are the best information that was available for those from Bank of Canada sources. In recognition that Hydro uses a Bloomberg CDOR index as opposed to the Bank of Canada three (3) month BA, there are some minor -- two (2) or three (3) basis point variances that may creep in because of the way the data is established.

With respect to the three (3) month T-bill, annual average, again, that is, in my mind, the best available information and it won't change. We -- what we don't have -- what I have not offered you is the annual average for the first portion of the '11/'12 year. We're now in June, so we've had a fair bit of that year already, and in terms of the ten (10) year and long Canada benchmark, the information there, again, for the '10/'11 financial year is, I think, as good as you're going to get. But we don't have the historic average for the last few months of this time period, nor do we have up-to-date forecasts for the broader number of forecasters that are friends that Hydro would use.

MR. BOB PETERS: Can the Board understand your recommendation to be to do that update whether -- whether the interest rates have increased or decreased in the real world?

MR. JOHN MCCORMICK: Yes.

MR. BOB PETERS: And that is simply because of the duration of this hearing?

MR. JOHN MCCORMICK: No, I believe the Board is entitled to good information wherever it's making its decision. If the hearing lasted three (3) months from the date that we had the first forecast, I would suggest it wouldn't hurt to find out whether something material has happened in the world.

MR. BOB PETERS: And because of the data you say is missing, you're not able to provide the Board any estimate of the fina -- of the im -- impact of any such update on the finance expenses filed?

MR. JOHN MCCORMICK: I -- I hate to appear disagreeable, sir, but if one would turn to the later section, I believe I did provide you with bank forecasts from five (5) banks of two (2) of the three (3) series that might have proved helpful.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: I think page 45 and 46 of my presentation would provide information that would be helpful to the Board. And page 45, looking at three (3) month T-bill rates, I've given you five (5) forecasts that suggest the then-current thinking of the banks that I had at my disposal would have given us a 1.5 percent forecast rate for the forthcoming year.

And for the ten (10) year, not the ten (10) year plus rate, I didn't do the thirty (30) year table, I have given you a number of about 3.6 percent for the ten (10) year. Clearly there would be some -- a few basis points that might be added to the ten (10) year to get to a ten (10) year plus based on the recognition that thirty (30) year debt, if that's what we're averaging in, is a little bit more than ten (10) year.

And were you to flip to the slide 48 you would see that on May 27th on a Manitoba-specific basis we have the difference between 3.86 percent for the ten (10) year rate and four point three eight (4.38) on the Government of Canada basis. We have a forty-two (42) basis point difference between ten (10) and thirty (30).

So in terms of order of magnitude, I would suggest to you that we might add twenty (20) basis points to the number, but it -- I haven't done the full calculation, but based on that one (1) day's data point, we're not going to double the ten (10) year rate to get to a ten (10) plus rate because there isn't that much difference between the ten (10) year and thirty (30) year Canada forecast rates.

MR. BOB PETERS: You're saying it's still before -- still below 4 percent?

MR. JOHN MCCORMICK: That would be my expectation, but I haven't done the calculation.

MR. BOB PETERS: All right. And when I asked you to quantify, I didn't mean in -- just in terms of the percentages, which you've given us, I meant in dollars -- dollars and cents on the -- on the IFF statement of the Utility. Did you do the calculation for --

MR. JOHN MCCORMICK: I have not done such a calculation.

MR. BOB PETERS: Before we leave your presentation on page 49, which we're close to, I may as well ask you now, is the thrust of your putting in the slide at page 49 to suggest that Manitoba Hydro is not getting value for its 1 percent provincial debt guarantee fee?

MR. JOHN MCCORMICK: No, sir, I don't believe I would take that position. But in terms of the value, which I haven't attempted to measure, the information that I draw from this slide causes me to believe that the benefits of the financing through Manitoba, the province, are moderated by this fee. And it's perfectly open to an owner to wish to extract dividends or ownership rights from his investment.

Frankly, I don't care how he does it. From my standpoint, you could have a completely different capital structure and a higher or lower guarantee fee. But the thing that is of interest to me is the amount of costs that are being passed through to the consumers.

And in asking the Board to view the interest rate evidence, I didn't want them to disregard this cost in the same way I don't want them to disregard the advantage that Hydro has financing using its note program at very low rates, or the advantage they get by doing a five (5) year deal when we may have had a ten (10) plus rate assuming a thirty (30) year as part of the -- the function.

There are a whole host of pluses and minuses that I'd like considered. And my ultimate goal is that the consumer, the ratepayer pay only the amount of interest that's really being incurred. And I do recognize that the 1 percent guarantee fee is part of that financing cost.

But lets not assume that because we're enjoying very low BA-based borrowing rates that there isn't a healthy spread on that 1 percent. It's not quite double but it's a big percentage of those floating-rate amounts.

MR. BOB PETERS: All right. I -- I think the Board's got your clarification. In terms of the forecast methodology, you've seen in IFF-10 of the Corporation that 20 percent of the debt issues are variable rate?

MR. JOHN MCCORMICK: That for forecasting purposes for the next revenue requirement, which I assume is not part of this case, but will in a future GRA be there. As I've described it, it's a promise of great things to come in the future. I'd just like it to start now.

MR. BOB PETERS: I think the Board's got your point. But I -- just on the point of the 20 percent in the IFF-10, it's your further point that that should be up to maybe closer to 27 percent?

MR. JOHN MCCORMICK: I suggest that the 25 to 27 percent range to reflect shortness of term on the long-term issues and note programs among other things.

MR. BOB PETERS: So while IFF-10 has an improvement it's not enough and it's not early enough?

MR. JOHN MCCORMICK: Yes.

(BRIEF PAUSE)

MR. BOB PETERS: And by way of example, you're telling the Board that if the Board went to the 20 percent floating rate, there could be savings in the order of magnitude of 5.7 million in '10/'11 and as much as 7.8 million in '11/'12?

MR. JOHN MCCORMICK: I think those

numbers radically understate the savings that would be there because the forecasts for rates -- for floating rate have dropped. My memory was three point eight (3.8) was the intended rate for '11/'12 at one (1) point. And if I'm suggesting it's one point five (1.5), the multiplier is now much larger.

(BRIEF PAUSE)

MR. BOB PETERS: Can you just verify the three point eight (3.8) number and the -- and the -- the updated number while you're looking at your materials?

MR. JOHN MCCORMICK: Well, the updated number I think we've just spoken about in terms of the forecasts for the T-bills.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: So I'm looking at the base case, fiscal page, page 7 of the spring 2009 economic outlook, which I believe is one (1) of the documents that drives the revenue forecast. And the ninety (90) day T-bill rate forecast is 3.8 percent on that page.

MR. BOB PETERS: Appreciate the source

and your checking that, sir. When we get to independent forecasters or the forecasting methodology, your criticism has been that the Board, in looking at Hydro's forecast, does not know whether the forecasters have a robust forecasting methodology.

Would you agree with that?

MR. JOHN MCCORMICK: I think my criticism is the subset of forecasters they have used do not seem to be demonstrated to be the best at having that robust contribution to the methodology.

MR. BOB PETERS: And to bring your point home, on page 26 of your written pre-filed evidence you have a chart of the different forecasts?

MR. JOHN MCCORMICK: I do.

MR. BOB PETERS: So, who do you vote off your island?

MR. JOHN MCCORMICK: Well, again, let's be clear that I was dealing with a small sample of data and Hydro has been in the business of coming up with forecasts for a long period of time and will have a longer list of data available to it.

But in terms of who I would vote off the island, if you'd flip to page 27, I would vote off everybody except for National and Scotia because of the sample that I took and played around with, back-of-the-envelope effort, I got the lowest variance from reality by choosing those two (2) forecasters.

(BRIEF PAUSE)

MR. BOB PETERS: You qualified your answer to me, sir, to indicate that while it was, in your words, the back of the envelope, it maybe didn't have the time duration and the -- the data points that you would want to make a final decision.

Would that be fair?

MR. JOHN MCCORMICK: Yes, sir, I'd like to have somebody who came up with a good track record. Similarly, it may be possible to say the ultimate is that we'll use Desjardins rated at 20 percent and Scotia and National Bank rated at 40 percent, and that removes the error down to zero.

But, if you read the discussion on the -- page 26 in the last line, the averaging methodology that I used ended up with a two (2) basis point error over this time period, which is pretty darn good. They were too low in the beginning and too high at the end, but in terms of coming up with what would have been the base that we should use to underscore our floating rate instruments, a two (2) basis point error would be heavenly.

MR. BOB PETERS: It's not a matter of just having two (2) forecasters. It's a matter of having them within the -- within the range of -- of the plus or minus, as you say, two (2) basis points in terms of error?

MR. JOHN MCCORMICK: Well, if we could do that regularly I'd want to be following their recommendations completely, but in terms of structure, we have a whole list of people available. On page 28 of my evidence we list a number of people who are available either on Bloomberg or in the consensus estimates and, therefore, somewhere are publishing estimates.

And, frankly, somewhere in there we have somebody who is the best forecaster. I think either in my evidence or IRs I noted that the Bank of Montreal had won some award for its forecasting prowess in the last little while. But rather than just say, I will pick people whose names begin with consonants, I'd much rather we actually sat down and saw who was doing a good job.

MR. BOB PETERS: We've got your point on that. I just want to clarify one (1) point that I think Ms. Boyd was working with you on, was the forecast credit spread on short-term debt was based on the difference between the ninety (90) day T-bill and the three (3) month Bloomberg BA, and that was over a ten (10) year average, right?

MR. JOHN MCCORMICK: I'm not sure I follow you, sir. We can do a credit spread today between BAs and treasury bills.

MR. BOB PETERS: Well, you used the ten (10) year average to forecast short-term spreads for the twenty (20) years out to 2030, as I understood your evidence?

MR. JOHN MCCORMICK: Well, what I did do was take ten (10) years of data that was available from the Bank of Canada and use it in -- in an example. I think I've generally taken the position that one is unwise to use ten (10) years of data to forecast twenty (20) or thirty (30) year time periods because you're missing something.

But to the extent that I believe that we should take slavishly a thirty (30) year data period to forecast thirty (30) years of interest rate -- or interest rates on a thirty (30) year instrument, no, I can't go there, because frankly there are data anomalies, and if we have the data, would it be better to go back to 1919 and really cover all our bases.

MR. BOB PETERS: The point I was trying to get to was that there were two (2) years in that ten

(10) year period in which you, I think referred to it as significant turmoil representing the economic downturn, correct?

MR. JOHN MCCORMICK: Oh, are you referring to the chart that I used to describe the period before and after the National Bank financial analysis?

MR. BOB PETERS: Yes.

MR. JOHN MCCORMICK: Thank you.

(BRIEF PAUSE)

MR. JOHN MCCORMICK: Thank you, sir. I now have it before me. May I have your question again?

MR. BOB PETERS: Well, just -- let's -- let's talk about the -- the -- the two (2) years in which there was a significant turmoil that you identified.

You were referring to the economic downturn, correct?

MR. JOHN MCCORMICK: Well, there were several periods and I don't particularly recall referring to the economic downturn which happened in mainly 2008. But in terms of the National Bank Financial's choice of a data period from April 2005 to April 2009, that's one (1) of the factors that is special in that time period.

The other factor that is special in that time period is that seventeen (17), I think of the forty-eight (48) months, were either a very flat or inverted yield curve. And I think it was completely inverted in seventeen (17). If you like I'll check my data.

But that's not normal. And if a -- an unusual period is driving your analysis, let's say the four (4) years surrounding the 1982 spike, you're going to get some very interesting results in your forecast, because you've taken a -- an anomalus data period.

MR. BOB PETERS: In which case you would use subjective judgment to -- to change your forecast or change the period in which you would base your forecast?

MR. JOHN MCCORMICK: Well, sir, I would use professional judgment and determine -- to one (1) extent I'm in agreement with Manitoba Hydro that three (3) years and four (4) years -- three (3) years, an example I used, and four (4) years the period National Bank Financial used are not adequate, in my mind, to do the better job in the analysis of the fixed and floating rate optimal solution.

MR. BOB PETERS: Thank you, Mr. McCormick.

Mr. Matwichuk, as I understood your evidence, you have a view that there is a asymmetric risk tolerance between Hydro and the domestic ratepayers?

MR. GREG MATWICHUK: I think, Mr. Peters, I referred to it as a potential asymmetric risk tolerance.

MR. BOB PETERS: Can you provide an example to the Board of what you were referring to?

MR. GREG MATWICHUK: I think, sir, the -- the asymmetric risk tolerance that I was referring to is reference to the Kubursi and Magee evidence, first of all. And second of all, it is related to whether Manitoba Hydro -- and this -- and again, I'm reflecting on potential, is whether Manitoba Hydro is in the best interest of ratepayers to move ahead with a $16.5 billion expansion at this time.

And -- and in reflecting on that, it's -- whereas in prior years the US market, in particular, had significant potential demand. There was economic development going on in the MISO territory. And currently, that kind -- that level of activity is not taking place. We note that there -- the great almost general strike type in -- scenario in Wisconsin.

We -- there may be -- Mr. McCormick referred to where -- I think it was in relation to a question from Mr. Mayer in terms of where the world economy may be going in the future, and I -- I interpreted his remarks that, at best, maybe sideways.

MR. BOB PETERS: Thank you.

MR. GREG MATWICHUK: That's one (1) example.

MR. BOB PETERS: Yes. And in -- in terms of the quantum of export revenues that come before the Board in their GRAs and their IFFs, is it your suggestion to this Board that they drill down to the various components of each of the forecasts, or does the Board simply accept them from the Corporation's best efforts regardless of what they are in the IFF?

MR. GREG MATWICHUK: Are we -- and your question was in the context of the export revenues?

MR. BOB PETERS: Only the export revenues.

MR. GREG MATWICHUK: Yes. And -- and I guess I would suggest that the Board conduct its scrutiny of the export revenues the way it normally would in a GRA. And -- and then there could be an issue with respect to non-GRA years, and -- and I've got some suggestions in that regard.

MR. BOB PETERS: Well -- well, that's where I was going, because you talked, I think, with My Friend, Mr. Hacault about that. In a non-GRA year for the rate stabilization mechanism to work, it needs an input number in terms of the variance between forecast and actual.

And what do you suggest the Board do in those non-GRA years?

MR. GREG MATWICHUK: Well, I think, Mr. Peters, there are -- there are some alternatives, and there are going to be pros and cons to these alternatives. And as I reflected on Mr. Hacault's question, I roughed out some alternatives and, if I may, I'll -- I'll try to describe them, but it -- it goes much to the -- the detail that would take place akin to the illustrative mechanism that we -- where we walk through the numbers with -- with the Board members previously.

But if you -- if you like, I can try to put some parameters around them.

MR. BOB PETERS: Well, briefly, if you could, please.

MR. GREG MATWICHUK: Okay. One (1) alternative is that the variances, the amortization, and the rider are determined only in the test years, and so there would be no variance estimation in the te -- non-test year. So that's -- that's one (1) example.

And, like I say, there -- there are mechanics that we could work through, but I don't want to unnecessarily use the Board's time, but I have tried to map these out. Another alternative would be that the variances and the resulting rider updates are only in the test year, but we continue the amortization each and every year, so there's -- there's no variance in an non-test year.

The third alternative is that the variances and the amortization and the rider are updated each year, and that's using an IFF that may -- including those that are tested in a GRA and those that may exist in a non-test year.

I'm -- I'm suggesting that the third alternative has a fair number of inferiorities, particularly as it would stand relative to having an IFF that would not be tested.

MR. BOB PETERS: Sorry, could you repeat your last answer -- or your last --

MR. GREG MATWICHUK: The last alternative?

MR. BOB PETERS: -- your last alternative, yeah.

MR. GREG MATWICHUK: Yes, the variances in the amortization and the rider updates would be done each year regardless of whether there's a GRA. So in non-test years, there would be -- amortization would take place just as -- as the illustrative example indicated whether there was a test year or a non-test year. And so the ri -- the riders would be updated each and every year but it would rely on an IFF that may not be tested.

And -- and I think that's a -- in terms of that alternative, that is a -- a negative feature.

MR. ROBERT MAYER: Mr. Matwichuk, I'm -- I -- I was really thinking I was beginning to understand what was going on here, but I sort of thought from listening to your evidence that the only thing I need to establish the differential is the forecast of net export pricing -- net export revenue for the pre -- the -- that usually comes out, I understand in the fall of the previous year, and the actual net export revenue for that particular year once they have the numbers in, which should be sometime between March and June of the year following.

Am I missing something here?

MR. GREG MATWICHUK: No, you're -- you're not missing anything. And that's -- that's -- that is a -- certainly a possibility, Mr. Mayer.

MR. ROBERT MAYER: Because I'm -- I'm saying -- I'm assuming Hydro is not going to blatantly lie to us, we're going to have the numbers from one (1) -- the year before. We can get the numbers for the next year. I don't understand why we would have to worry about waiting for -- if we had a problem at the next GRA and we found out we had an issue, then our rate adjustment could be made. But I -- I just --

MR. GREG MATWICHUK: Yeah.

MR. ROBERT MAYER: -- don't see that -- why it has to be so complicated.

MR. GREG MATWICHUK: No, and, sir, it -- it doesn't. And it -- it can be that simple. It depends on the Board's comfort level with the IFFs that it receives each and ever year, including those that would come to you in a non-test year. So it really could be that simple, but recognize the -- the ones in the non-test year would not be tested as they are in a GRA.

CONTINUED BY MR. BOB PETERS:

MR. BOB PETERS: Mr. Matwichuk, on the -- in the terms of debt rating agencies and Manitoba Hydro and the Province, is it your contention that the debt rating of the Province is largely immune to the Manitoba Hydro debt-to-equity ratio?

MR. GREG MATWICHUK: Well, when you use the term "largely immune," I would turn it around, Mr. Peters and say that it is not the primary consideration in the debt rating of either Manitoba Hydro or the Province.

MR. BOB PETERS: Is the interest covered

ratio in that same category in your view?

MR. GREG MATWICHUK: Yes.

MR. BOB PETERS: Even less so than the debt/equity ratio?

MR. GREG MATWICHUK: Oh, I'm -- I -- I don't -- I couldn't comment on that. What I would comment on, sir, is that -- what I noticed in credit rating reports, particularly since the financial crisis of -- beginning in 2008, and I gave you a couple examples of where credit rating agencies would have a far greater emphasis on cash flow than earnings.

And I think you'll see in other credit rating reports where cash flow ratios are far -- far more important to the ultimate credit rating than earnings ratios.

MR. BOB PETERS: All right. I have your point and I thank you for that. Mr. Chairman, I'd like to thank both Mr. Matwichuk and Mr. McCormick for their answers to my questions.

And although Mr. McCormick doesn't want to come back to Manitoba, I think we can invite him back maybe next when his Calgary Flames are playing our yet to be named NHL team and we can -- we can settle our differences there.

THE CHAIRPERSON: Thank you, Mr. Peters.

Thank you, Mr. Matwichuk. And thank you, Mr. McCormick.

MR. JOHN MCCORMICK: Pardon me -- pardon me, Mr. Chairman. I worry that I have given you the impression that I haven't enjoyed coming here. I really was only speaking to the question of regulatory efficiency and would be delighted to be invited back.

THE CHAIRPERSON: I'm sure Mr. Peters has got a few seats for the -- the game, so he should save one (1) for you. And thanks also to you, Mr. Williams. And I have forgotten the fact that you may want to have some redirect.

MR. BYRON WILLIAMS: I just need to consult with my client. I just want to talk with my witnesses for one (1) second, Mr. Chairman.

(BRIEF PAUSE)

MR. BYRON WILLIAMS: Mr. Chairman, no re-direct, but an offer. In the -- in the case that the Board or others are interested, Mr. Hacault, for example, are interested in the pros and cons of the three (3) scenarios that Mr. -- Mr. Peters went through with Mr. Matwichuk, we would certainly be happy to share that if someone invited us to, but there is no re-direct, sir.

(PANEL STANDS DOWN)

THE CHAIRPERSON: Okay. Thank you, sir. It's been a long but extremely interesting day. So thanks again to all of you. So we're going to be back tomorrow at 9:30. We still seem to be on track, we hope, for getting to pre-closing remarks at some point on Thursday.

Mr. Peters, do you want to make a few comments about what lies ahead in the immediate two (2) days?

MR. BOB PETERS: Yes, sir. In terms of tomorrow, we are scheduled to hear from CAC/MSOS witness, Mr. Carter, and Mr. Williams will lead him in the morning and he'll be open to cross-examination. We have some rough estimates as to the times parties have indicated and there will be time left in the day for Manitoba Hydro to, certainly, commence if not complete, its re-examination/rebuttal.

I've had brief discussions only with Ms. Ramage and she's actively working on some aspect of that but indicates that it won't be complete -- the re-examination will not be complete tomorrow because I believe two (2) of her witnesses are not available. But, that may be a matter that has to be put over for first thing Thursday morning.

But, yes, we still appear to be on track.

THE CHAIRPERSON: Very good. Thanks to all. We'll see you tomorrow at 9:30.

--- Upon adjourning at 6:16 p.m.

Certified Correct,

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Cheryl Lavigne, Ms.