MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA PUBLIC INSURANCE CORPORATION (MPI)

2019/2020 GENERAL RATE APPLICATION

HEARING

Before Board Panel:

Robert Gabor, Q.C. - Board Chairperson

Irene Hamilton - Board Member

Carol Hainsworth - Board Member

Robert Vandewater - Board Member

HELD AT:

Public Utilities Board

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APPEARANCES

Kathleen McCandless	)Board Counsel
Robert Watchman	)Board Counsel
Steven Scarfone	)Manitoba Public
Anthony Guerra	)Insurance
Byron Williams	)CAC (Manitoba)
Katrine Dilay	)
Raymond Oakes (np)	)CMMG
Erika Miller (np)	) CAA Manitoba

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LIST OF EXHIBITS

--- Upon commencing at 10:03 a.m.

THE CHAIRPERSON: Good morning everyone, sorry for the delay. I was trying to ensure that the drilling would not start and we'll see how successful we are. Ms. McCandless...?

MS. KATHLEEN MCCANDLESS: Good morning, Mr. Chair and members of the panel. Just an update on the order of proceedings today.

We will hear from Dr. Wayne Simpson, Andrea Sherry, on behalf of CAC. We had some off-line communications with the parties yesterday late in the day as we were waiting for a number of undertakings to be answered by MPI. Those were answered I believe around 6:00 p.m. last night, but as a consequence, we have moved the panel number 2 of MPI which was the investments, DCAT, RSR, CMP panel to come back first thing on Monday to answer any questions arising from answers to undertakings; following that on Monday we'll hear from Mr. Viola. So, we are proceeding today with Dr. Simpson and Ms. Sherry and that will complete the day.

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

MR. STEVE SCARFONE: Yes, good

morning, Mr. Chair, panel members. Yes, before My Learned Friend begins with the examination-in-chief of his expert witnesses, MPIC has, as Ms. McCandless's indicated, filed a number of undertaking, some of which were sent on Wednesday, a number of which were sent yesterday but we're happy to report that all of the undertakings have now been provided, as I understand it, with the exception of some schedules and supporting documentation for PreAsk 1.

PreAsk 1, Mr. Chair, you will recall, was the update that was requested of MPIC for the various forecasting based on different interest rate forecast methodologies, CEMP, that stuff. I can tell the -- the Board and My Learned Friends that we expect that documentation and those schedules to be provided in -- probably after lunch. So all of that -- all of that work has now been performed. I'm told it's in excess of six hundred (600) pages so that has to be compiled and formatted while we're here and we hope to circulate that after the lunch hour, if that -- if that leaves My Learned Friend enough time to look at it.

And then, lastly, before -- before I turn -- turn it over to My Learned Friend, there are a number of exhibits that we'd like to read into the record, mainly, the undertakings that have been filed in the past couple of days.

Ms. Schubert tells me we're at Exhibit 31, which was Undertaking Number 1.

--- EXHIBIT NO. MPI-31: Response to Undertaking Number 1

MR. STEVE SCARFONE: Exhibit Number 32, is Undertaking Number 2.

--- EXHIBIT NO. MPI-32: Response to Undertaking Number 2

MR. STEVE SCARFONE: Exhibit 33 was Undertaking Number 15.

--- EXHIBIT NO. MPI-33: Response to Undertaking Number 15

MR. STEVE SCARFONE: Exhibit 34 was a response to Undertaking Number 5.

--- EXHIBIT NO. MPI-34: Response to Undertaking Number 5

MR. STEVE SCARFONE: Exhibit 35 was response to Undertaking Number 7.

--- EXHIBIT NO. MPI-35: Response to Undertaking Number 7

MR. STEVE SCARFONE: Exhibit 36 was response to Undertaking Number 9.

--- EXHIBIT NO. MPI-36: Response to Undertaking Number 9.

MR. STEVE SCARFONE: Exhibit 37 was the response to Undertaking Number 10.

--- EXHIBIT NO. MPI-37: Response to Undertaking Number 10.

MR. STEVE SCARFONE: Exhibit 38 the response to Undertaking Number 11.

--- EXHIBIT NO. MPI-38: Response to Undertaking Number 11.

MR. STEVE SCARFONE: Exhibit 39 was

the response to Undertaking Number 13.

--- EXHIBIT NO. MPI-39: Response to Undertaking Number 13.

MR. STEVE SCARFONE: MPI Exhibit Number 40 was the response to Undertaking Number 18.

--- EXHIBIT NO. MPI-40: Response to Undertaking Number 18.

MR. STEVE SCARFONE: Exhibit MPI-41 was response to Undertaking Number 14.

--- EXHIBIT NO. MPI-41: Response to Undertaking Number 14.

MR. STEVE SCARFONE: Exhibit MPI-42, the response to Undertaking Number 6.

--- EXHIBIT NO. MPI-42: Response to Undertaking Number 6.

MR. STEVE SCARFONE: MPI Exhibit 43, was the response to Undertaking Number 8.

--- EXHIBIT NO. MPI-43: Response to Undertaking Number 8.

MR. STEVE SCARFONE: Exhibit MPI Number 44 was the response to Undertaking Number 12.

--- EXHIBIT NO. MPI-44: Response to Undertaking Number 12.

MR. STEVE SCARFONE: MPI Exhibit 45, the response to Undertaking Number 16.

--- EXHIBIT NO. MPI-45: Response to Undertaking Number 16.

MR. STEVE SCARFONE: And Exhibit MPI-46, was the response to Undertaking Number 17.

--- EXHIBIT NO. MPI-46: Response to Undertaking Number 17.

MR. STEVE SCARFONE: And then, lastly, MPIC would like to mark as Exhibit 47 an excerpt from the Board Order 130/'17 from last year -- last year's GRA, page 29 of that particular Order will be filed as

Exhibit 47.

--- EXHIBIT NO. MPI-47: Excerpt from Board Order 130/'17 from last year's GRA, page 29.

MR. STEVE SCARFONE: And those -- that's all MPIC has at this moment.

THE CHAIRPERSON: If I could ask, Mr. Scarfone, I don't have a problem with almost all your exhibits. Explain Exhibit 47 to me. Is this -- was this referred to in -- in testimony?

MR. STEVE SCARFONE: I do. And I may, perhaps -- so Mr. Guerra will be asking questions of the CAC expert witnesses once they're done their examination-in-chief. I understand it --

THE CHAIRPERSON: So this is in relation to these -- that's why.

MR. STEVE SCARFONE: Yes.

THE CHAIRPERSON: That's fine. I just -- I was trying to figure out the -- the context.

MR. STEVE SCARFONE: The relevance, yes.

THE CHAIRPERSON: Yes, that's fine. Okay, thank you, Mr. Scarfone.

Mr. Williams...?

DR. BYRON WILLIAMS: Yes and I'll just indicate our client has no objection to Exhibit 47. It's certainly well within the Rules.

THE CHAIRPERSON: Certainly.

DR. BYRON WILLIAMS: Just perhaps if I might ask clarification. There was also one (1) response -- a confidential response filed by letter, which we received this morning and we thank Manitoba Public Insurance for it.

Is that marked as an exhibit or how -- how do we treat those documents?

THE CHAIRPERSON: I suspect it's marked as an exhibit in the CSI hearing. We're in public hearing now so it wouldn't be marked as an exhibit here.

We could -- once -- once we're finished here we could go back into the CSI or Monday morning or whatever, but it should be marked properly I would assume as an exhibit in that -- in that proceeding.

DR. BYRON WILLIAMS: And I'll just -- we may be referring to it so I just want to make sure I have the proper reference for it, Mr. Chair.

THE CHAIRPERSON: Sorry, you may be referring --

DR. BYRON WILLIAMS: Not today, not till Monday.

THE CHAIRPERSON: But if it's a confidential exhibit, are you proposing to refer to it in public hearing?

DR. BYRON WILLIAMS: Of course not, sir.

THE CHAIRPERSON: Okay, so we would go back to CSI, okay.

DR. BYRON WILLIAMS: I'll just note for the Board, they won't be surprised to see Dr. Wayne Simpson here and Ms. Andrea Sherry. Our client Ms. Gloria DeSorcy has -- is -- is here as well.

And I'd ask that the witnesses be sworn, please.

CAC WITNESS PANEL 1:

WAYNE SIMPSON, Sworn

ANDREA SHERRY, Sworn

DR. BYRON WILLIAMS: Mr. Chair, there are two (2) PowerPoints that -- in support of the direct evidence of the witnesses, one (1) is titled the Role of the DCAT and Interest Rate Forecasting. Dr. Simpson is always known for his snappy titles and that we'd suggest be marked as CAC Exhibit 26.

--- EXHIBIT NO. CAC-26: PowerPoints titled the Role of the DCAT and Interest Rate Forecasting.

DR. BYRON WILLIAMS: And the other one is the Capital Maintenance Provision and we would ask that that be marked as CAC Exhibit-27.

THE CHAIRPERSON: Thank you.

--- EXHIBIT NO. CAC-27: Powerpoint titled Capital Maintenance Provision.

EXAMINATION-IN-CHIEF BY DR. BYRON WILLIAMS:

DR. BYRON WILLIAMS: Dr. Simpson, and Ms. Sherry, the next couple of questions I'm going to ask you as a team, but I'd ask you to answer sequentially for the record.

Dr. Simpson, and Ms. Sherry, you were jointly responsible for the preparation of the report, the role of the DCAT and interest rate forecasting in the 2019 GRA, as well as for the report, the Capital Maintenance Provision Proposed by Manitoba Public Insurance?

MS. ANDREA SHERRY: Yes.

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And, Ms. Sherry, and, Dr. Simpson, you were jointly responsible for the preparation of information responses to the Public Utilities Board 1-1, 1-2, 1-8, 1-9, as well as to Manitoba Public Insurance 1-1 through 1-7?

MS. ANDREA SHERRY: Yes.

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And the information provided in those reports and Information Responses is accurate to the best of your knowledge and ability?

MS. ANDREA SHERRY: Yes.

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: Before turning to your presentations, I wonder if I could ask Ms. Schubert to go to Exhibit 10, Appendix B, B9, which is the evidence of the -- of rel -- regarding the Capital Maintenance Provision, and recognizing that you already have been prequalified, Ms. Sherry, you are a Fellow of the Casualty Actuarial Society and Fellow of the Canadian Institute of Actuaries?

MS. ANDREA SHERRY: I am.

DR. BYRON WILLIAMS: You also hold the

designation of Chartered Professional Accountant Certified Management Accountant?

MS. ANDREA SHERRY: Yeah.

DR. BYRON WILLIAMS: Currently you serve as Vice-President Insurance Solutions at the Wawanesa Mutual Insurance Company where you are responsible for actuarial pricing, product development and maintenance?

MS. ANDREA SHERRY: Yes.

DR. BYRON WILLIAMS: Your prior roles involved work insolvency and capital enterprise risk management and investments?

MS. ANDREA SHERRY: Yes.

DR. BYRON WILLIAMS: And while you currently work in the private sector you served with Manitoba Public Insurance as an Associate Actuary from 1991 to 1997?

MS. ANDREA SHERRY: Yes.

DR. BYRON WILLIAMS: You also served for four (4) years with Saskatchewan Government Insurance as Assistant Vice-President and Corporate Actuary?

MS. ANDREA SHERRY: Yes.

DR. BYRON WILLIAMS: And perhaps if we can just turn to page 10 of this same document. Ms.

Sherry, you were -- understand as a term of your retainer you're obliged to provide evidence that is fair, objective, and non-partisan; agreed?

MS. ANDREA SHERRY: Yes.

DR. BYRON WILLIAMS: Perhaps if we could go to Exhibit 9, page 9, "the Role of the DCAT and Interest Rate Forecasting".

Dr. Simpson, you are a full professor in the Department of Economics at the University of Manitoba and currently Acting Chair?

DR. WAYNE SIMPSON: Acting Head, yes.

DR. BYRON WILLIAMS: And you serve on the Editorial Board of Canadian Public Policy, which is Canada's foremost peer-reviewed academic journal for economic and social policy, sir?

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And you were a 2014 recipient of the McCracken Award for the Development and Analysis of Economic Statistics from the Canadian Economics Association?

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And whether on issues related to the Manitoba Public Insurance rate stabilization reserve or investment strategy, you have provided expert evidence to this Board in 2007, 2010, 2013, 2014, 2016, and 2017?

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And prior to joining the U of M, you worked both for the Bank of Canada and the Economic Council of Canada, sir?

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: And finally, you understand your duty to provide evidence that is fair, objective, and non-partisan?

DR. WAYNE SIMPSON: Yes.

DR. BYRON WILLIAMS: With that we'll turn it over to Dr. Simpson and CAC Exhibit 26.

And just for the panel's information, Dr. Simpson is going to go through the first ten (10) or so slides of this PowerPoint and then we'll turn things over to Ms. Sherry and then we'll go back to Exhibit 26, just to fin -- finish up the oral presentation.

Please proceed when you're ready, Dr. Simpson.

DR. WAYNE SIMPSON: Okay. Thank you. I hadn't thought of a snappy title, but I guess if I had, it would be something like looking back and looking forward, the role of the DCAT and Interest Rate Forecasting in the 2019 GRA. And I want to break this up into the two (2) parts.

Looking back, in terms of the role of the DCAT, where I'm going to look at a chronology or a brief history of where this has been and where we're at and in specific reference to a question that was posed by the -- by the Board.

And then looking forward, thinking about the role of interest rate forecasting and the 2019 GRA. Next slide, please.

So, these are the -- to my mind two (2) of the significant features in the -- in the 2019 GRA. What appears to be a renewed emphasis on attaching the Minimum Capital Test to the determination of the RSR, and as I said, I'm going to look back on that from the beginning, which isn't that far back.

And then, secondly, look at the continued application of the naive forecast to interest rates to do the breakeven rate indication and the Dynamic Capital Adequacy Test, the DCAT, to inform the RSR range and what has happened to substantiate or invalidate the naive forecast in -- in terms of recent events. Next slide, please.

So, as I said, we don't have to look back very far, simply going back to the 1988 Autopac Review Commission, the Kopstein report. When I was doing this, I was thinking that there are a number of historians who've been quoted as saying that you need to study history, because you don't want to repeat its errors. I went back and looked at the source of that which is not a historian at all, but a philosopher, George Santayana, an Italian, who said:

> "Those who cannot remember the past are condemned to repeat it."

And so going through this I was trying to provide a brief background for, essentially, the -- the question that the Board had posed that Mr. Sherry and I tried to answer in -- in a brief form and now this is -- is in a sense a more elaborate response to that.

So the 1988 report, which lay the foundation I think for the modern proceedings on the -- on the GRA established, among other things, a retained surplus targetable 15 percent for premiums around breakeven income as the basis for what has come to be called the Rate Stabilization Reserve or RSR.

And it also established a range which would put this at plus or five (5) -- plus or minus 5 percent of that 15 percent target, if you will. That was a midpoint target and said, in fact, that MPI should -- should and would be expected to take remedial action if these -- this range was -- if -- if the actual income breakeven net income fell outside this range.

And so this provided the foundation for the RSR in a range of 10 to 20 percent of annual premiums which would now be in a range as I -- I'm going to say from a hundred and eight to 215 million with a midpoint the 15 percent of 162 million.

And this was to protect motorists as we've often heard since from rate increase associated with unexpected events and losses arising from non-recurring events or factors.

This, of course, was during a period in the 1980s when inflation was a great deal higher and when rates were probably considerably more volatile than they've been recently as inflation has been relatively stable.

But it provided what I would characterize as a simple and transparent and, to use the term that's been used recently, objective mechanism index to the size of the operation of MPI, but one (1) which was not linked to the actual risks faced by MPI which was the problematic feature of it.

And these risks, of course, could be increasing or decreasing through time. The only thing that the -- the percentage of premiums or Kopstein approach did was index it, essentially, to the growth in the operations of MPI itself.

DR. BYRON WILLIAMS: Dr. Simpson, before you leave this slide, you may have misspoke. You talked about taking remedial action if net income fell outside the range of 10 to 20 percent of premiums.

Did you mean to say "net income" or did you mean to say "surplus"?

DR. WAYNE SIMPSON: I'm sorry, I meant to say that if the surplus fell. Yes, I'm sorry.

DR. BYRON WILLIAMS: Thank you.

DR. WAYNE SIMPSON: And -- and I presume from those remedial actions that the action would be that if the -- the -- it fell outside of 10 percent of the surplus, in a sense below 10 percent of the surplus, that remedial action -- what we would now call an RSR build -- rebuild, and if it were above 20 percent surplus in terms of 20 percent of premiums, then there would be some form of rebate to ratepayers. Although that's not explicitly stated in the recommendation.

And those numbers, I should add, I actually took out the Kopstein report from the

Manitoba -- University of Manitoba library. I looked through it. There isn't a great deal of analysis to inform us of how those numbers came about but, as I suggest, they have been relatively consistent with what we -- we observe as an appropriate premium for -- for the -- for the RSR.

Okay. So then the second part of the chronology, which is when I became involved in 2007, is the risk analysis approach or the subsequently called the Operational and Risk -- Investment Risk Analysis, RA/VaR.

And this, essentially, tried to take the evidence that was available on underwriting income from year to year, so, it was only the annual income available with -- because we're annual proceedings and to try and analyse that to see the extent of its volatility and there to try to identify what is referred to in statistical terms as the 95 percent or the 97.5 percent confidence intervals around that. So, it wouldn't exclude all outcomes, but only those that are within a range of the -- of the trendline for underwriting income.

The value of this I think, as I say, is redirected the risk analysis to a more statistical or scientific approach specifying a particular risk tolerance level, which corresponding to the confidence level used in the RA/VaR was the 97.5 percent confidence interval, which indeed would correspond to a 2.5 percent annual chance of occurring these adverse events or 1:40 year event.

So, essentially, all that it was excluding from the analysis of movements in underwriting income were events which were outside this range which would occur less frequently than once in every forty (40) years.

And this was endorsed by the Board in 2007, saying that the RSR should be large enough to withstand an unforeseen loss of a magnitude not anticipated to occur more than once in forty (40) years, and that has endured through the -- through this -- since 2007.

The problem here was that we didn't really have very much data. As I remember, when we first looked at this in the -- in 2007, there were only about eighteen (18) annual observations and that really isn't sufficient to give you much statistical reliability on -- on measuring the 97.5 percent confidence interval, and indeed on trying to see if the risks facing the Corporation were changing over time.

In principle, you can do that statistically, look at how the -- how the variation in underwriting income is changing through time; that's a fairly straightforward statistical procedure, but it wouldn't be very reliable when you've only got eighteen (18) annual observations. And so that wasn't entirely satisfactory, and this approach was never adopted as far as I can see by -- by the Board.

So, the third step then was in 2005 MPI introduced the Minimum Capital Adequacy Test, the MCT, and recommended an RSR range of 50 to 100 percent MCT in the 2007 GRA. It was pointed out then, and it's still pointed out, that it -- the MCT is recognized by OSFI to assess capital required for a private company in a competitive industry to forestall insolvency.

At that time, concerns were expressed and still are expressed that it's not clear how something that applies to private insurers in competitive markets has much to say about the risk profile faced MPI which is a Crown corporate monopoly.

In addition to that, the MCT does not address the specific risk faced by MPIC. It certainly doesn't itemize them and evaluate them.

And the Board Order in 2008 indicated a desire for some sort of consensus on an RSR range, which can be accepted by all parties, and that led to the final step, if you will, which was the -- in 2010, the Dynamic Capital Adequacy Test. This had been already commissioned to assess future financial condition of Basic but was now beginning to be used in 2010 to substantiate the RSR target.

At that time the scenarios that were used, I've characterized as improbable catastrophe scenarios which weren't grounded in historical evidence and this was one (1) of the major objections. And there was attempts and subsequent disc -- technical conferences and proceedings to move towards plausible scenarios based on evidence and establish risk tolerance levels.

2010, there was a commitment by MPI to do the DCAT in-house and to closely integrate it with the risk identification process, which I think facilitated this kind of transformation towards these plausible scenarios.

The consensus was then built on this methodology that would be something that was transparent and consistent with established risk tolerance practices, again, centered around this 1:40 year standard. And the DCAT -- its strength, I think, is it provides a direct connection of specific and justifiable risks posed as these adverse events that are based on the historical evidence to future financial condition. And I think we've had some very productive both technical conferences and exchanges in proceedings that have helped to clarify what evidence is useful and what evidence is not and where the best scenario constructions are -- are more compelling than in others.

Okay. But that didn't set the RSR range. It simply set what was referred to as an RSR target based on the 1:40 year standard. I've argued that the RSR range could be produced by setting low and high risk tolerance levels. For example, a 1:10 and a 1:200 year standard or a 1:20 and 1:100 year standard to establish the lower and upper RSR thresholds.

MPI suggested instead a hybrid approach, which would use the 1:40 year standard to -- in the DCAT to produce the lower RSR threshold and an MCT of 100 percent to set the upper threshold. Although the hundred percent MCT was subject to the same criticisms from before.

And the Board in 2016, said that it continued to favour the use of the scenario testing approach in the Basic DCAT for the purposes of setting

Basic target capital level -- levels expressed in terms of Basic total equity and for purposes of setting the upper threshold, the Board withdraws its support for the use of the MCT and the MCT threshold ratio of 100 percent. And that seems to be where we're at in terms of using the DCAT to set the R -- DC -- of the RSR, rather than the MCT.

So then why are we back using the MCT in terms of expressing the DCAT range. Again, the MCT is about the capital required for private companies in a competitive industry and not a monopoly Crown insurer to forestall insolvency. And it's difficult using MCT levels whether they be 50 and 100 percent or 35 percent and 85 percent to attach any meaning in terms of specific risks and associated risk tolerance levels that are consistent with some sort of a statistical or scientific approach to risk assessment.

The -- the DCAT, on the other hand, captures the specific financial risks, as they evolve according to the evidence and established risk assessment pract -- practices; something the MCT approach cannot do.

And the -- the DCAT has been built up using this collaborative process. It's involved a considerable amount of time. I think the process is now reasonably transparent, and it seems to me that there is no compelling argument at all for abandoning the DCAT at this point in time.

So, that brings me to the -- the -- the PUB question to us. We said, Ms. Sherry and I, that the POP and DCAT methodology should continue to inform the setting of the RSR range.

Question posed by the Board was:

> "Please explain why Dr. Simpson and Ms. Sherry believe the POP methodology is currently informing the RSR range..."

And the POP doesn't come up a great deal anymore, I guess.

> "...and the rationale to understand the assertion that POP is currently used for setting the RSR range."

Our response was:

> "We are not aware of any PUB decision that explicitly asserts that the POP would no longer be used to set the RSR range. It certainly was used in the early days century, I guess] with and without the use of other information.

Although we would -- we would acknowledge that recent emphasis and discussion has concentrated on the use of the DCAT to inform, if not set the RSR range, and the DCAT has been valuable in identifying the risk facing the Corporation and indicating how those risks change over time."

For example, what we've seen in the proceedings using the DCAT is that the risk scenarios in terms of the most prominent individual risk scenarios have moved from the equity decline scenario to the interest rate decline scenario and now to the high loss ratio or claim scenario. And this is, I think, important information not only to the operations of MPI and to the Board, but also in terms of setting the Rate Stabilization Reserve as a protection against these kinds of risks.

DR. BYRON WILLIAMS: Dr. Simpson, before you leave this slide, can you just remind the Board what POP stands for, sir?

DR. WAYNE SIMPSON: POP is the Percentage Of Premiums approach established by the Kopstein report which was a RSR target of 15 percent with a range of 10 to 20 percent of net underwriting income.

So my final slide at this point is my first recommendation, which is that the current POP and DCAT methodology should -- and not the MCT level should continue to inform the setting of the RSR range. The lower RSR threshold is 120 million, according to the DCAT, the current DCAT report, and indicates a declining risk which the MCT can neither detect nor evaluate.

The lower POP threshold on the other hand, is 108 million based on net premiums written of 1.08 billion a little bit below the RSR threshold from the DCAT report, but not a lot.

The upper threshold using the PUB approved methodology, again based on the DCAT and established risk tolerance meth -- methods -- levels and statistical methods, risk assessment methods, is 251 million, and the upper POP threshold is 250 million. Again, a bit lower, but certainly the gap between the upper POP threshold and the approved methodology is less than, for example, the difference between the approved methodology the 251 million, and the 85 percent MCT figure quoted in the GRA of 305 million.

DR. BYRON WILLIAMS: Ms. Sherry, over to you --

DR. WAYNE SIMPSON: Thank you.

MS. ANDREA SHERRY: Good morning, everyone. We can go to the next slide.

Just as an overview of our arguments in this paper. To start, I'm sure as everyone here is very well aware based on the naive forecast of interest rates, MPI has applied for a 2.2 percent overall increase, which is made up of a 1.9 percent decrease based on accepted actuarial practice in Canada and that includes the 1.2 percent decrease based on the investment income on the RSR and a 3.3 percent increase for the newly introduced Capital Maintenance Provision.

So the Capital Maintenance Provision suggested by MPI is calculated using the Minimum Capital Test. So what they did is set the Minimum Capital Test for the 9 -- 2019/'20 projection equal to the 2018/'19 projection to come up with the amount of capital they felt they needed to hold to keep their capital at a steady level, according to the MCT.

What we would argue is that every year MPI does a DCAT analysis, a very thorough DCAT analysis which comes to the PUB, it looks at the true capital need of the Corporation based on adverse scenario analysis and it determines -- it could determine the RSR range based on those adverse scenario results and MPI could hold capital within the RSR range determined that way, which we believe is actually prudent fiscal management and, therefore, the CMP is not necessary.

Through this yearly process, MPI comes to the PUB and presents the results of all of these analysis. If MPI needs capital through that yearly process, they can ask the PUB for a rate increase to bring their capital to the level it should be. Next slide.

So, from here I'm just -- I'm going to go through, basically, the arguments of the paper of why we don't believe that the CMP is necessary.

And one (1) thing that struck me when I first read the rate application this year was the suggestion that CMP was agreed to at the technical conference. And that again was repeated in Response to CAC(MPI)-172 where the Corporation states that the -- the Corporation agreed that it was appropriate to include a Capital Maintenance Provision in the 2019 GRA.

I went through that transcript very carefully and nowhere in that transcript does it suggest that consensus was reached by all the stakeholders.

The next spot on the CMP was that it had not been vetted by the public. It is a very significant change to add the CMP to the requested rate change calculations and it's a theoretical change and approach from what we've discussed at prior GRA hearings. I believe -- we believe -- that the public deserves to have its voice heard on this significant change.

And it's not an overly complex suggestion or idea, and I'm -- I'm sure that the public could understand what's being suggested by the CMP if given the opportunity to hear it.

DR. BYRON WILLIAMS: I wonder if we could just stand down for a couple seconds til the noise ceases.

MS. ANDREA SHERRY: It could come on and off.

THE CHAIRPERSON: Let's wait five (5) minutes. I apologize.

(BRIEF PAUSE)

--- Upon recessing at 10:40 a.m.
--- Upon resuming at 10:49 a.m.

THE CHAIRPERSON: My apologies. We're trying to track this down, and I have met with the landlord. By the way, in the moment we were away, if anyone's interested, the FBI have arrested somebody in relation to the bombs in -- in the United States. They arrested somebody in Florida, so.

Anyways, sorry for the interruption, Ms. Sherry, if you could -- if you could continue.

MS. ANDREA SHERRY: Of course. So I think I have covered this slide, basically the CMP has not been vetted by the public. So I'm moving on to the next one.

The CMP does not align with accepted actuarial practice in Canada. The Actuarial Standards of Practice are silent on any addition of capital load into a rate indication. And we would argue that the Actuarial Standards of Practice are silent on this issue, because a capital load should not be part of a rate indication.

In response to CAC(MPI)-178, the Corporation made it clear that they were not aware of any literature in regards to a CMP. On to the next slide.

As Dr. Simpson alluded to as well, we feel that the use of an MCT target to set a Capital Maintenance Provision level is arbitrary, and it is Board approved. MPI is not regulated by OSFI so there is no set MCT level that MPI is required to be above and there's no way to determine one.

The Board has shown support for the determination of the RSR range based on the DCAT analysis. The MCT is formulaic with risk margins that are set to ensure private companies do not go insolvent and this is to protect the Canadian economy.

The risk margins within the MCT were not set for a monopoly Crown Corporation. Again, they were set for private companies to ensure they don't go insolvent.

The CMP does not align with the Board approved methodology for calculating the amount of capital the Corporation requires and is not consistent with work we have done to date.

We have done a lot of work on the DCAT analysis and the use of the DCAT to set the RSR range.

There's a yearly process where MPI comes before the Public Utilities Board with all of their analysis and looks at where their capital is, and whether it's within the RSR range. And at that time they can ask for rate changes if the capital is below the RSR range. The Board has shown support for this approach in the past.

The introduction and basis for a CMP in the 2019 GRA is incomplete and when we say this, we mean that they -- in the application and throughout the hearing process, there has been a lot of discussion about a capital plan which the Corporation does not have ready. If a CMP is something that the Public Utility Board feels should be within a rate application, it should come tied to a capital management plan.

On the next slide. We also feel that the introduction of a CMP increases the risk of intergenerational inequity and what we mean by that is that we're asking for more capital now because -- because the projections show that the capital of the Corporation could go down in future years. But again, due to the yearly process in Manitoba if that does occur, then they can ask -- MPI could ask for a rate increase at that time to increase their capital instead of asking for it now which separates the capital need from the people -- the policies that would be in place in the year that the capital need is actually required.

And moving on to the recommendations. We ask or we suggest that the Public Utility Board order that the CMP be removed from the 2019 GRA and that the DCAT methodology be used to set the RSR range.

We also ask that the PUB approve a decrease in rates based on the 50-50 interest rate forecast and accepted actuarial practice in Canada which would include the investment income on the RSR.

That concludes mine.

(BRIEF PAUSE)

DR. WAYNE SIMPSON: So the last part of mine, the looking forward, is the interest rate forecasting and the 2019 DCAT report. Interest rate forecasting is important both in terms of the establishing the base scenario and in working through the adverse scenarios and their implications for the establishment of the RSR on the basis of satisfactory financial conditions.

The recent DCATs, of course, have been conducted under an unusual period of low interest rates, an unusual period that emanates from the 2008 recession. It wasn't as deep in Canada as it was in other parts of the world, our neighbours to the south, but it certainly was significant. The growth out of that was relatively slow and interest rates have been kept low by the Bank of Canada to stimulate the economy.

That has had two (2) consequences. One (1) was the -- that one (1) of the scenarios, the adverse scenarios that had been identified, interest rate declined scenario, necessarily lacked historical evidence and continues to be based on ad hoc assumptions, as discussed in previous GRAs; that has been less of an issue in this DCAT, essentially, because the interest rate declines scenario is no longer the most prominent individual adverse scenario. It's now the high loss ratio or claim scenario.

It's also been a challenging period for interest rate forecasting to establish the DCAT base scenario and set the dr -- the breakeven rate indication. It -- quick -- I would acknowledge hindsight is 20/20. It's not hard to acknowledge that the SIRF has been too optimistic about economic recovery and rising interest rates since the 2008 great recession.

And MPI has advocated instead, the use of a naive interest rate forecast, which essentially says that interest rates will remain constant at some point; in this case initially February of 2018, the end of February and now I see updated now interest rate held constant at its September 30th level in the -- in the PreAsk 1 from the PUB.

And that goes up until the 2022 fourth quarter. The forecasting here is a four-year exercise. The Board Order in 2017 said that the 50/50 forecast should be used for rate setting in capital -- and target capital. The 50/50 forecast weights the SIRF at 50 percent and the naive fore -- interest rate forecast at 50 percent. So they get equal weighting to kind of moderate the interest the -- forecasts of the SIRF to reflect the fact that the SIRF has, in the past, consistently overestimated economic and interest rate recovery.

So the question then is: Why is the naive interest rate forecast being used in the -- in the current DCAT and GRA? Well, the standard forecast error is slightly lower for the naive forecast based on a historical period starting in 2005, which mostly includes the period since 2008 and the period of low interest rates. Slightly lower than the 50/50 and the SIRF.

But if we look, for example, as I put it in here at the last two (2) years, the 2017/2018 GRAs, the SIRF has clearly outperformed the naive forecast which you would expect because this is the period when interest rates have begun to recover in the fashion that's been predicted for a long period of time by the SIRF and the result of that is going to be that naive forecast is going to be an understatement of interest rates.

And you can see that if you look at the difference. Under the SIRF in 2017, it was .12 percent, that is to say, it overestimated interest rates by .12 percent. In 2018 it underestimated interest rate -- interest rates by .14 percent.

Now, compare that to the naive, this is the figures from INV-11. The naive forecast consistently and significantly underestimated interest rate growth by .45 percent in the 2017 GRA and by .6 percent in the 2018 GRA.

So not only has the naive forecast being considerably -- the errors have been considerably larger, the forecast errors, but they've also been consistently in the direction of underestimating interest rate growth as the economy recovers.

In addition to that, the naive forecast is deficient in the sense that it doesn't pay attention to other signs of economic recovery in the domestic policy response by the Bank of Canada in a fashion that forecasters would, and in particular, that's reflected in the standard interest rate forecast from the -- the five (5) banks and the -- and global insight.

So, what do we mean by monetary policy response? Well, if you read the Bank of Canada monetary policy reports, they always start with the following statement:

> "The bank carries out monetary policy through changes in the target for the overnight rate of interest. These changes are transmitted to the economy through their influence on the market interest rates and that overnight rate of interest for that reason is often referred to as the policy rate."

The bank has already raised the

overnight rate three (3) times now, this year, January, July and as recently as Wednesday following two (2) increases last year in July and September and this policy rate as of Wednesday stands at 1.75 percent as of July the 12th of -- July the 11th of 2017 it was at .5 percent.

And the recent statement from the September 5 release:

"Recent data reinforced governing Council's assessment that higher interest rates would be warranted, not one (1) increase, higher interest rates will be warranted to achieve the inflation target."

And certainly much of the discussion subsequent to this rate increase on Wednesday is that future interest rate increases -- increases in the policy rate are forthcoming.

What is MPI's response to this? CAC(MPI)1-6, the Bank of Canada's policy rate is not material. However, the Government of Canada 10 year benchmark rate is tracking upward movement of -- very closely to the Bank of Canada policy rate.

And I would argue that the policy rate is, in fact, material and the naive forecast will continue to be significantly biased downward if it -- if it is used for the DCAT and the breakeven rate indication.

THE CHAIRPERSON: Sorry, Dr. Simpson, I just want to make sure that the record is clear.

You said it would be "significantly biased downward," your presentation says "biased downward," which one is it? There's a difference --

DR. WAYNE SIMPSON: The nai --

THE CHAIRPERSON: -- between biased down and --

DR. WAYNE SIMPSON: The -- the -- what did I say --

THE CHAIRPERSON: Significantly biased downward. Sorry, in your oral testimony you said "would be significantly biased downward."

I just want to know if we are relying on the oral testimony or we're relying on the words in your presentation?

DR. WAYNE SIMPSON: Well, there's no statistical test here. So I'm not -- I'm not claiming statistical significance. I am simply saying that the -- the differences will be large.

THE CHAIRPERSON: Okay. The --

DR. WAYNE SIMPSON: And -- and -- and

the direction will be downward.

THE CHAIRPERSON: Okay. So we'll go on it will be biased downward then?

DR. WAYNE SIMPSON: Biased downward, that's right, yes.

THE CHAIRPERSON: Okay. I just want to -- I just want to make sure, because -- okay. Thank you.

DR. WAYNE SIMPSON: So here is the request to pro -- to track the policy rate changes, which is the red step function and the Government of Canada 10 year bond rate, which is the blue squiggly line and you can see from this the fairly strong evidence. This is the kind of evidence that you would use when, you know, simple visual evidence you'd start with if you were doing a -- a more complete analysis of the relationship between the policy rate and the -- and other interest rates, like the 10 year bond rate of the sort that the Bank of Canada and monetary policy people do on a regular basis.

And what you can see there is that the two (2) have moved pretty much in lockstep, that is to say, as the policy rate has gone up the Government of Canada 10 year bond rate has gone up. You can draw -- visually draw a line -- I haven't done that -- but you can draw a line through that squiggly movement of the Government of Canada 10 year bond rate to upward level.

And, of course, what is missing from there is the most recent increase and prospective future increases that are anticipated but not yet realized which we think will also move that Government of Canada 10-year rate higher, and that's reflected in the standard interest rate forecast, but not in the naive forecast. In fact, the naive forecast, I suppose would take the Government of Canada 10-year rate as of September, which is the -- the bottom of that last increase and -- and move it across and say, this is going to remain stable from the current moment until the fourth quarter of 2022.

Okay then, finally, does the interest rate forecast matter? Yes and no? Yes. Looking at figure INV-12, the breakeven rate indication and the GRA is set at .1 percent under the naive forecast, but is only minus .5 percent under the 50/50 forecast, and minus 1 percent under the SIRF.

In the PreAsk, the figures now are that the naive forecast will provide a rate -- breakeven rate indication of minus .26 percent and the 50/50 forecast would provide a breakeven rate indication of minus .6 percent.

But no in the sense that the -- the evidence to suggest that the -- provided by MPI suggests that total equity is higher under the 50/50 than under the naive forecast so that sat -- satisfactory financial condition for Basic in the DCAT report would not be adversely affect -- affected by the adoption of the 50/50 or indeed, the SIRF.

So, the first recommendation I had then -- and I'll repeat -- was that the current POP and DCAT methodologies not MCT level should continue to inform the setting of the RSR range and I would add to that that the 50/50 interest rate forecast should be used for the breakeven rate indication in the DCAT analysis.

The naive forecast is inferior to the 50/50 and SIRF forecasts recently, that is to say the last few years, and the naive forecast ignores recent monetary policy and economic events that indicate rising interest rates as forecast by the SIRF.

And I was thinking about the 50/50 forecast, which was simply said, let's take -- let's split the differences. Let's take the naive forecast and let's take the SIRF forecast to suggesting that, in fact, those are equally valid at this point in time, and I suspect if I had to -- if I were questioned on this, I would say if you give me a choice between the SIRF and the naive forecast and don't allow for the 50/50, I would say, well, I'll take the SIRF. I think it's going to a better forecasting job, and I've indicated why based on the last couple of years, which suggest to me that maybe those weightings of 50/50 are wrong, that probably the weighting towards the SIRF should be higher than -- than 50 percent.

But, the Board Order that exists on 50/50 is what it is and -- and I think that is a reasonable compromise at this time while we assess the ongoing evidence not only on the forecasting ability of the 50/50, the SIRF and the naive, but also on the, you know, the actual performance of the economy and where interest rates have gone.

CONTINUED BY DR. BYRON WILLIAMS:

DR. BYRON WILLIAMS: Just before we close, Dr. Simpson, you were referring to a PreAsk and would it be correct to suggest that that is MPI Exhibit 32, sir, or you'll accept that subject to check?

DR. WAYNE SIMPSON: I'll accept that

subject to check, yes.

DR. BYRON WILLIAMS: That concludes the direct presentation of Dr. Simpson and Ms. Sherry. There are available for cross-examination.

MS. KATHLEEN MCCANDLESS: Just to pop in and clarify something, I believe it's MPI Exhibit Number 26.

DR. BYRON WILLIAMS: Okay. So it's the first version, sorry, my apologies.

DR. WAYNE SIMPSON: Yeah, that -- that -- that was my recollection as well, but I didn't want to question Mr. Williams' fine memory and adequate -- more than adequate support.

THE CHAIRPERSON: Mr. Williams, you're done, then?

DR. BYRON WILLIAMS: That concludes our direct, sir.

THE CHAIRPERSON: Okay, thank you.

Mr. Scarfone...?

MR. STEVE SCARFONE: Yes, Mr. Guerra is going to conduct the cross-examination, Mr. Chair.

MR. ANTHONY GUERRA: Thank you, Mr. Chair.

THE CHAIRPERSON: Mr. Guerra...?

CROSS-EXAMINATION BY MR. ANTHONY GUERRA:

MR. ANTHONY GUERRA: And that good morning and thank you very much to you, Dr. Simpson and Ms. Sherry for presenting yourselves today and for your presentations. They're very helpful and I appreciate that you've taken some time out of your -- your day to spend with us this morning.

I do have some questions and I realize that you're presenting this morning as a panel. So I will do my best to try to direct the questions to who I think is the appropriate person, however, if -- if I have misdirected the question, if you could please let me know and jump in as appropriate, that would be greatly appreciated.

Mr. -- sorry, Dr. Simpson, just to confirm your background as it -- is as an economist and a professor; is that correct?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: You're not an actuary, is that correct?

DR. WAYNE SIMPSON: No.

MR. ANTHONY GUERRA: And for the purposes of this application, you've been retained by the CAC to provide critical review of -- in this case, the issue of interest rates; is that fair to say?

DR. WAYNE SIMPSON: Interest rate forecasting.

MR. ANTHONY GUERRA: Interest rate forecasting.

DR. WAYNE SIMPSON: And -- and in -- in the context of the DCAT, as well as -- most particularly the DCAT.

MR. ANTHONY GUERRA: But also the breakeven rate indication?

DR. WAYNE SIMPSON: Yeah, the GRA.

MR. ANTHONY GUERRA: And my understanding is that you are present today in your capacity as a -- an expert and professional, correct?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And you've expressed opinions and I expect that you will continue to express opinions as I question you and just to confirm, if you do express opinions, they will be your professional opinions, correct?

DR. WAYNE SIMPSON: Correct.

MR. ANTHONY GUERRA: And you will advise me if that's not the case. If you're expressing a, let's say for example, a personal opinion, correct?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: Thank you. And, Ms. Sherry, my understanding is that you are an actuary, correct?

MS. ANDREA SHERRY: I am and an accountant.

MR. ANTHONY GUERRA: And an accountant and I understand you're also a Fellow of the Chartered Insurance Professionals, correct?

MS. ANDREA SHERRY: Correct.

MR. ANTHONY GUERRA: And you're not an economist, though, correct?

MS. ANDREA SHERRY: No, I'm not.

MR. ANTHONY GUERRA: And my understanding is that you were retained by the CAC to provide a critical review of the issues regarding the Capital Maintenance Provision, correct?

MS. ANDREA SHERRY: Among other things, yes.

MR. ANTHONY GUERRA: What other things were you retained by the CAC to comment on?

MS. ANDREA SHERRY: I can't remember the exact words in my retainer letter, but I did do a critical review of the entire GRA from my perspective as an industry professional since -- for a long time and as an accountant and as an actuary and -- an insurance experts, all of those things.

MR. ANTHONY GUERRA: Is -- I'm sorry, I don't mean to interrupt.

Is it fair to say that your -- your opinions, though, don't necessarily extend to issues like the interest rate forecasting, that's more Dr. Simpson's opinion in this case?

MS. ANDREA SHERRY: We corroborated on that. I do have experience with interest rates, and investments from my prior experience. I am not an economist and do not profess to be, however, I do have experience with that.

MR. ANTHONY GUERRA: And again, the opinions that you've expressed in your report and the opinions that you've expressed in your testimony before the -- the Board this morning, those are your professional opinions?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And when I go through some questions with you, if you are professing or expressing an opinion that is not your professional opinion, you'll advise me?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: Thank you. Is it fair to say that the report titled The Role of the

DCAT and Interest Rate Forecasting in the 2019 GRA that, Dr. Simpson, you were the lead author of that report?

DR. WAYNE SIMPSON: It was a joint effort of the two (2), of myself and Ms. Sherry, yes.

MR. ANTHONY GUERRA: Okay, so to confirm then that you're not saying -- there -- there wasn't a lead author for -- for -- for the purposes of either of those two (2) reports?

DR. WAYNE SIMPSON: You didn't use the term "lead author" before. If you say "lead author," yes, I was the lead author, but we -- we collaborated, just as Ms. Sherry was the lead author on the other report but we collaborated.

MR. ANTHONY GUERRA: Okay, well, now I guess my question, which is: Ms. Sherry, you were, in fact, lead author of the -- the report titled The Capital Maintenance Provision proposal by MPI; that's correct?

MS. ANDREA SHERRY: If you mean by "lead author" I did the first draft and then worked with Dr. Simpson to complete the paper then yes.

MR. ANTHONY GUERRA: Okay. And -- and just for ease of reference throughout the --throughout the questioning, I'm going to refer to the -- the Role of the DCAT and Interest Rate Forecasting in the 2019 GRA report as the DCAT report, are you okay with that?

DR. WAYNE SIMPSON: Sure.

MR. ANTHONY GUERRA: Thank you. And I'm also going to refer to the -- the second report, the Capital Maintenance Provision Proposal by MPI as the CMP report.

You're okay with that as well?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: Thank you. So turning to the CMP report, there are a number of arguments made against the use of a CMP in the 2019 General Rate Application, you'd agree with me on that?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And, Ms. Sherry, you reviewed the General Rate Application for 2019 that was filed by MPI; correct?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And you understand in terms of the Capital Maintenance Provision what MPI is proposing; correct?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: You'd agree with me, Ms. Sherry, that the purpose of MPI's Capital Maintenance Provision in this case is to ensure that it has the same ratio of capital available to the capital required in its rate stabilization reserve as at February 28th, 2020, as it had in February 28th, 2019?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And you'll agree with me that the CMP looks at the RSR balance at the end of a fiscal year?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And then when it looks at that balance, it estimates what it would -- the amount that it would need to keep that balance and the same capital position at the end of the next fiscal year; correct?

MS. ANDREA SHERRY: To keep the same MCT ratio.

MR. ANTHONY GUERRA: Yes. Thank you and I appreciate that because we -- we use the MCT ratio or the Minimal Capital Test to measure the relative strength of that capital; correct?

MS. ANDREA SHERRY: I'm not sure if you're asking if I agree with the premise or if I agree that MPI is suggesting that.

MR. ANTHONY GUERRA: What I'm suggesting is that the MCT ratio is used to measure the relative strength of the capital between one fiscal year and the other?

MS. ANDREA SHERRY: By a private companies?

MR. ANTHONY GUERRA: By MPI in this case.

MS. ANDREA SHERRY: I'm not sure that I agree with the premise of the question. You're suggesting that MCT could be used to determine the strength of the capital position of MPI and I am actually arguing against that, that it shouldn't be used.

MR. ANTHONY GUERRA: I argue --

MS. ANDREA SHERRY: So I can't answer that question.

MR. ANTHONY GUERRA: Well, I appreciate that -- that you're arguing that it should not be used, but the question was, again, directed to what is being used and MPI's proposing that it measure the relative strength of its capital from one (1) fiscal year to another you with this MCT ratio.

You would agree with that?

MS. ANDREA SHERRY: I would agree that MPI is proposing that, yes.

MR. ANTHONY GUERRA: Okay. And you'd

agree that MCT is one (1) way of looking at the relative strength of that capital from one (1) year to another, correct?

MS. ANDREA SHERRY: Not for a Crown corp -- Crown monopoly Corporation, I would disagree with that.

MR. ANTHONY GUERRA: Okay, so but --

MS. ANDREA SHERRY: That's the whole premise.

MR. ANTHONY GUERRA: No, I appreciate that. But you're -- but what I would agree -- what you would agree with me on is that it is one (1) way to -- to look at the relative strength of capital from one (1) year to another?

MS. ANDREA SHERRY: For private companies that are regulated by OSFI.

MR. ANTHONY GUERRA: You would also agree with me, though, that a -- without a Capital Maintenance Provision MPI's Basic -- sorry MPI would expect that it's MCT ratio for Basic would decline over the next five (5) years.

MS. ANDREA SHERRY: That is what MPI's projections are showing.

MR. ANTHONY GUERRA: And you would agree that the Board, and in this case the Public

Utilities Board, has appreciated MPI's need to protect Basic's capital position from depletion?

MS. ANDREA SHERRY: Yes, but did not necessarily say how that would be done or how the capital would be determined. To my knowledge, and correct -- please correct me if I'm wrong, the Public Utility Board has never stated that the MCT should be the basis on which the capital of Manitoba Public Insurance should be judged, whether it's the right level.

MR. ANTHONY GUERRA: Is -- is it fair to say, Ms. Sherry, that a decline in the MCT ratio -- if -- if we're using that ratio, I appreciate that yo -- that your position is that it shouldn't be, but if it -- if it is used that the decline in the ratio or a depletion in the capital position of Basic isn't a bad thing necessarily?

MS. ANDREA SHERRY: Sorry, repeat the question.

MR. ANTHONY GUERRA: Is it fair to say that your position is that a decline in the MCT ratio -- if -- if that's the ratio that's used or a depletion in capital, if you consider the appreciation of the -- the Board in terms of the need to protect Basic's capital position is not necessarily a bad thing from your perspective?

MS. ANDREA SHERRY: What I'm suggesting is that if you look at the risks of the Corporation through -- and I'm suggesting through a thorough DCAT analysis, you would be able to see how much capital the Corporation needs to hold in order to ensure it is covered for those risks.

So, certain moves by the Corporation, certain changes in the risk profile of the Corporation could change what the RSR range would be based on that DCAT analysis. So, if the -- the capital of the Corporation is within the RSR range that is determined through that thorough analysis, then I would say that they are adequately capitalized.

MR. ANTHONY GUERRA: Right. But you'd also say that, let's say, for example, the -- the -- the balance of the RSR translated into an MCT ratio of 35 percent, falls in the next year to 30 percent, but that doesn't necessarily translate or necessarily result in a -- in a -- in an unsatisfactory situation for MPI, correct?

MS. ANDREA SHERRY: Because the MCT just -- is not really applicable to MPI, I would agree with that.

MR. ANTHONY GUERRA: An -- and you'd

also agree --

MS. ANDREA SHERRY: It's not the relevant factor to be looked at.

MR. ANTHONY GUERRA: And you'd also agree, though, that -- that the capital depletion of Basic, if -- if it were to deplete from one (1) year to another, that -- that's not necessarily a bad thing either.

MS. ANDREA SHERRY: I think it depends on the risk profile of the Company at the time.

MR. ANTHONY GUERRA: Right. It -- it depends on where the RSR targets are, correct?

MS. ANDREA SHERRY: Correct.

MR. ANTHONY GUERRA: And that's really all that matters is whether or not the balance of the RSR is within the range established by the Dynamic Capital Adequacy Test, correct?

MS. ANDREA SHERRY: In terms of whether the Corporation is adequately capitalized, correct.

MR. ANTHONY GUERRA: If it's in -- within that range it's adequately capitalized and we don't need to worry about a rebate or rebuilding fee, correct?

MS. ANDREA SHERRY: Because the

process is yearly I believe it can be analysed every year and action taken if required based on the results.

MR. ANTHONY GUERRA: So if the RSR balance is within this target range, the upper and lower thresholds, MPI's holding sufficient capital and that's really the end of the story, correct?

MS. ANDREA SHERRY: Just one moment.

(BRIEF PAUSE)

MS. ANDREA SHERRY: Sorry. Sorry about that. I'm -- and again I'm sorry, could you please repeat the question?

MR. ANTHONY GUERRA: If the RSR balance is within the range, the upper and lower threshold targets for the RSR, as established by the Dynamic Capital Adequacy Test or DCAT, your position would be that MPI is holding sufficient capital and there's no need to talk about anything else in terms of a rebuilding fee or a rebate, end of story.

MS. ANDREA SHERRY: So, one (1) caveat to that would be that as long as the DCAT is performed thoroughly, properly, the adverse scenarios are accurate, adequate -- as long as the DCAT analysis is

-- is ver -- very robust and the RSR range determined from it, then I would agree with one (1) caveat and that is that the rates still may need to be changed depending on the rates determined based on accepted actuarial practice.

MR. ANTHONY GUERRA: If the RSR -- sorry --

DR. WAYNE SIMPSON: Could I just add something here?

MR. ANTHONY GUERRA: Absolutely.

DR. WAYNE SIMPSON: The -- one -- the initial pretext of the question revolved around a declining MCT and I think in the GRA that is projected based upon the interest rate forecast, a naive interest rate forecast.

In my view, I think, our view, that would -- that builds in a degree of pessimism about interest rates. It essentially builds in a portion of the interest rate decline scenario that properly belongs in the DCAT to set the RSR range because, as I think I've -- we've -- I've tried to point out in my presentation, the naive forecast is pretty pessimistic on interest rates, and that'll have some adverse effects on -- on MPI's capital position that would -- that I don't think will be realized.

MR. ANTHONY GUERRA: Right. But, Dr. Simpson, are you saying then that using the naive interest rate forecast if it were to result in a decrease in the MCT ratio from one (1) year to a next, that that would be an area that MP -- MPI should be concerned about?

DR. WAYNE SIMPSON: I think that a -- a better forecast of interest rates such as the 50/50 or SIRF would be the thing I would be more interested in in dealing with their projections when I'm -- I wouldn't want to build in the kind of adverse scenario that's implied by the naive forecast.

And I would reserve the pessimism about interest rates for the specific scenarios of the DCAT where the ad hoc interest rate decline forecast essentially mimics the -- the naive forecast.

MR. ANTHONY GUERRA: But getting back to my question about the MCT ratio -- declined in the MCT ratio from year to year is not necessarily concern for -- for you, Dr. Simpson?

DR. WAYNE SIMPSON: That's correct. I'm only questioning the pretext that it will decline under more realistic -- under better interest rate forecasts.

MR. ANTHONY GUERRA: I appreciate

that. Thank you.

And so just if I -- I have your position correctly, Ms. Sherry, if the RSR balance were to go below the DCAT and I appreciate that we're talking but a robust and detailed DCAT, but nonetheless a DCAT established RSR target, at that point in time, it might be appropriate for MPI to come to the Board and seek a rebuilding fee as part of its rate indication, correct?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: Is -- is it fair to say then, Ms. Sherry, that you -- you don't have a scenario in mind where it makes sense for -- for MPI to -- to be utilizing Capital Maintenance Provision?

MS. ANDREA SHERRY: No, I don't.

MR. ANTHONY GUERRA: And is it fair to say that a discussion about the inclusion of a build or release provision on a Capital Maintenance provision wouldn't change your opinion, which is CMP is not appropriate for MPI?

MS. ANDREA SHERRY: It would not change my opinion. I do you think that a proper capital management plan would be a good thing for MPI, but I do not think that the Capital Maintenance Provision as it's -- is now is part of that.

MR. ANTHONY GUERRA: Thank you. We heard you testify earlier today about the technical conference directed by the Board on the issue of CMP. Do you remember that?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And my understanding is that you have -- you went through the transcript of that technical conference very carefully, is that correct?

MS. ANDREA SHERRY: I did.

MR. ANTHONY GUERRA: I was there. I don't think you were there though.

MS. ANDREA SHERRY: I was not. I couldn't be, unfortunately.

MR. ANTHONY GUERRA: Not a problem. But you're confident that you were aware of the issues that were discussed at the technical conference, correct.

MS. ANDREA SHERRY: Yes. It has been a few months since I read it, but I did read it very carefully.

MR. ANTHONY GUERRA: And you're aware that there was a representative of SGI present at the technical conference?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: And that that representative was there to talk about the use of a Capital Maintenance Provision by SGI?

MS. ANDREA SHERRY: M-hm, I read that with great interest.

MR. ANTHONY GUERRA: Is it fair to say then, that despite the discussion that -- that -- that took place at that conference that you have made aware -- were made aware of by the transcript that there was nothing that was discussed at the -- at the conference that changed your opinion about the appropriateness of a CMP for MPI?

MS. ANDREA SHERRY: No.

THE CHAIRPERSON: Sorry, can we, instead of using the letters, can we indicate what's meant by CMP because we've got --

MR. ANTHONY GUERRA: Apologies --

THE CHAIRPERSON: Two (2) different CMPs in -- in reference in the hearing.

MR. ANTHONY GUERRA: Yes, I'm --

MS. ANDREA SHERRY: Sorry --

MR. ANTHONY GUERRA: I'll refer to CMP's as Capital Maintenance Provision from now on. Thank you, and I apologize for that.

CONTINUED BY MR. ANTHONY GUERRA:

MR. ANTHONY GUERRA: Sorry -- just to ans -- just to get back to the question, I believe your answer was yes, but do you want me to ask the question again?

MS. ANDREA SHERRY: Yes, please.

MR. ANTHONY GUERRA: Okay. So is it fair to say then that notwithstanding what you've read in the transcript of that technical conference and the discussion from the representative of SGI, that nothing in that transcript changed your opinion about the appropriateness of a CMP for MPI?

MS. ANDREA SHERRY: No.

THE CHAIRPERSON: All right. Once again --

MR. ANTHONY GUERRA: Oh, my apologies. I'm sorry --

THE CHAIRPERSON: Capital Maintenance Provision?

MR. ANTHONY GUERRA: Capital Maintenance Provision.

THE CHAIRPERSON: Or Capital Management Plan?

MS. ANDREA SHERRY: Okay.

THE CHAIRPERSON: Capital Maintenance

Provision. Okay. I just want to make sure for the transcript because --

MR. ANTHONY GUERRA: Hard knocks.

THE CHAIRPERSON: Okay.

CONTINUED BY MR. ANTHONY GUERRA:

MR. ANTHONY GUERRA: Now, I would like to take you to the report that was prepared -- the CMP report that I referred to earlier. I -- I define that as a term so I'm going to stick with that.

And, in particular, can I turn your attention to page 6? I believe that's CAC Exhibit Number 9, Ms. Schubert.

Now, I'm looking at -- looking under heading number 7, The Introduction of a CMP in the 2019 GRA.

MS. ANDREA SHERRY: M-hm.

MR. ANTHONY GUERRA: Now, the -- the first paragraph there says:

"With a CMP in place, the Corporation is building capital by collecting extra premium from those policyholders in place during the rating year in question. The capital collected is built up until a rebate is required."

Ms. Sherry, can you explain to -- to me and to -- to the Board how a CMP builds up capital until a rebate is required?

MS. ANDREA SHERRY: My understanding of the CMP was that it would be collected now and the RSR would be larger because the CMP was there and that it could be applied for up to a point where the RSR would actually be above the range calculated.

MR. ANTHONY GUERRA: Okay, but you'd agree with me that -- that scenario that you've talked about doesn't happen unless there's a change in the risk profile that lowers -- the -- the higher end -- the upper threshold RSR target, correct?

MS. ANDREA SHERRY: That could be unless a CMP was asked for in future rate applications as well.

MR. ANTHONY GUERRA: To -- to build up the RSR above the upper threshold?

MS. ANDREA SHERRY: Or just to get it close enough that it could potentially go above the thresholds.

MR. ANTHONY GUERRA: I want to draw your attention to CAC Exhibit Number 27, that's the presentation that you provided or -- or presented on the -- on the Capital Maintenance Provision, and in particular slide number 8, Ms. Schubert?

(BRIEF PAUSE)

MR. ANTHONY GUERRA: Sorry. I may have given you the wrong indication here.

(BRIEF PAUSE)

MR. ANTHONY GUERRA: It's the Capital Maintenance Provision presentation. It's the heading that is -- I have it as slide 8, but perhaps I'm wrong. And the CMP does not align with -- yes, that's right. Thank you.

So the heading says The CMP Does Not Align With the Board Approved Methodology for Calculating the Amount of Capital the Corporation Requires, nor is it consistent with the work to date.

And in point 1 you -- you go on to state:

"A great deal of work has been done on the use of the DCAT to set the RSR range."

Ms. Sherry, you -- you're not saying

that MPI is seeking to replace the DCAT established targets with the CMP, are you?

MS. ANDREA SHERRY: What I'm saying is that a great deal of work has been done to use the DCAT so set the RSR range, which is the determination of whether the Corporation holds adequate capital.

MR. ANTHONY GUERRA: You're aware, however, though, that MPI does plan to continue using the DCAT analysis to confirm the most appropriate RSR targets, correct?

MS. ANDREA SHERRY: Correct. What I'm saying here is that the CMP or the Capital Maintenance Provision does not align with that. Does not align with all of the work that we've done to determine where the capital of the Corporation needs to be.

MR. ANTHONY GUERRA: Okay, I want to shift your attention now to the discussion about the Minimum Capital Test, or MCT, to determine the RSR, Rate Stabilization Reserve targets.

Ms. Sherry, you would agree with me -- or sorry, Dr. Simpson, this may also pertain to your evidence as well, you would agree with me, though, that absent significant changes in the risk profile of the Corporation, the Minimum Capital Test accurately estimates the RSR targets in future years based on growth on the balance sheet.

MS. ANDREA SHERRY: I actually would not agree with that. I would say that the MCT, as I stated earlier, is an Office of the Superintendent of the Financial Institute to determine the capital adequacy of private companies and whether they are at risk of insolvency.

The risk margins set out in the MCT are set with that in mind, based on data from private companies. I cannot say that it applies to a monopoly Crown Corporation.

MR. ANTHONY GUERRA: I am going to draw your attention to the -- sorry, I'm sorry.

MR. WAYNE SIMPSON: I just thought I'd add that I think what the DCAT is showing in recent years is precisely that that's not correct.

In other words, you said other things held the same ceteris paribus assumption, but other things are not the same. The risk challenges facing MPI are changing and the claims scenario, the high loss ratio scenario has now become the most important scenario in place of the interest rate decline scenario, which in turn replaced the equity decline scenario.

And what we've seen, perhaps a pat on

the back to MPI's own operations in terms of asset liability management, is that they've reduced some of the risks in that area, so that the equities and interest rates are not as serious risks, with the result that overall the risks facing the Corporation appear to be declining and appear to be emphasizing more of the claims risk.

So the idea that the MCT could pick up any of this seems to me to be -- shown to be incorrect.

DR. BYRON WILLIAMS: Mr. Guerra, I apologize for interrupting.

Dr. Simpson did use a Latin term and just for the court reporter, I wonder if you could spell it, and then I do apologize for interrupting, sir.

MR. ANTHONY GUERRA: Not at all.

MR. WAYNE SIMPSON: Economists use the term ceteris paribus C-E-T-E-R-I-S space P-A-R-I-B-U-S or at least older economists like me, to simply mean that other things held constant, and that the statement essentially said, well, if nothing changes from year to year, you might use the MCT levels that you've established from the DCAT for the lower and upper threshold at one point in time to project forward what the -- what the threshold should be at some future point in time.

Just as in exact parallel you could use the POP, the Percentage Of Premiums approach to do that. The -- the 10 percent, 20 percent of underwriting income of the POP approach again, could be projected forward and would give you some measure of, as the Company grows, how this presumed need for protection against risk would grow.

But it bears no relationship to the actual risks facing the Corporation that have been dented -- identified by the DCAT, and in fact those MCT levels associated with the upper and lower thresholds will be changing over time and have been changing, based on changes in the risk profile letter identified by the DCAT.

MR. ANTHONY GUERRA: Thank you, I appreciate your answer and certainly won't quarrel with you in any accolades to -- to MPI in terms of its asset management.

But I do want to bring your attention to the DCAT chapter of the application, and in particular figure number 10. Ms. Schubert, if you can pull that up and I apologize for not giving you that in advance.

(BRIEF PAUSE)

MR. ANTHONY GUERRA: It should be on page 14 at the bottom of the -- yeah. There we go, thank you.

So, Dr. Simpson, my understanding is that this figure shows a comparison of the upper and lower DCAT targets for the 2018 and 2019 General Rate Application years. Do you see that?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And what I think you'll agree with me on is that the total equity position from those years does change quite dramatically between 2018 and 2019, but when comparing the lower RSR targets, both the MPI and the PUB proposed targets, there is a very minute shift in the MCT ratio, correct?

DR. WAYNE SIMPSON: In minute you mean 3 or 4 percent?

MR. ANTHONY GUERRA: Yes.

DR. WAYNE SIMPSON: Sure. Can I add something? Are you going further with this figure or is that the end of the question?

MR. ANTHONY GUERRA: That -- that was

the end of my question, Dr. Simpson.

DR. WAYNE SIMPSON: Could I point something else out?

MR. ANTHONY GUERRA: Yes.

DR. WAYNE SIMPSON: The -- the lower RSR target for both MPI and PUB is based on the DCAT methodology and is identifying declining risk.

The upper RSR target PUB is also identifying declining risk from 325 to 251, the MCT falls accordingly.

The upper RSR target from MPI also shows supposedly declining risk, but this -- the only reason it's doing that is because the MCT ratio has been arbitrarily adjusted from 100 percent to 85 percent.

I'm curious to know why that was done, but my obvious presumption is that as the DCAT identifies declining risk profile of the Corporation, they felt that the 100 percent MCT ratio didn't adequately reflect that. But that's -- that's a pretty arbitrary assumption, and it's only informed by the DCAT.

MR. ANTHONY GUERRA: I appreciate that. Thank you.

Ms. -- Ms. Sherry, if I can direct your

attention to the presentation that was provided on the DCAT, and in particular slide number 5, please.

So we -- we heard testimony this morning from -- from you that MCT is a test for -- for private insurance companies in a competitive industry, correct?

MS. ANDREA SHERRY: Correct.

MR. ANTHONY GUERRA: And my understanding is that your -- your position is that the MCT is not appropriate for -- for MPI because MPI has a different set of risk profiles or different risk profile than those private insurers?

MS. ANDREA SHERRY: To be clear...

MR. ANTHONY GUERRA: Yes.

MS. ANDREA SHERRY: ...I believe that MPI faces all of the risks of any other property and casualty insurer.

However, the calculation of the margins to determine how much capital should be held for those risks are not necessarily in line with the Minimum Capital Test calculation of the margins for those risks because the MCT was -- was set up or created to ensure that private companies do not go insolvent.

So the risk margin calculations are based on private company data and expectations that are not necessarily applicable to a Crown monopoly.

MR. ANTHONY GUERRA: And fair enough. I'd like to draw your attention, Ms. Sherry, to MPI Exhibit Number 18, which was an Information Request that was made by MPI, it's MPI-CAC-1-1, and in particular I'm looking at page 3 of that Information Request.

So Ms. Sherry, you were asked to identify the specific risks facing MPI that are not captured in the MCT, and my understanding, your response is really the last sentence of that paragraph A, which is to say, the point is that the MCT is a solvency test and that is not applicable to monopoly Crown insurers. That's consistent with what I just heard you say, correct?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: So your concern is not necessarily that the MCT fails to capture the risks faced by MPI, but that it's a solvency test and MPI never really can be insolvent?

MS. ANDREA SHERRY: There's two (2) pieces to that.

The first is that the risks outlined in the MCT are those faced by property and casualty insurers in Canada. And those risks, MPI would have those risks as well.

However, the calculation of the MCT and what it is -- the way it is calculated, the way the risk margins are determined and the purpose of that test is not for a monopoly Crown company such as MPI.

If MPI wants to use the MCT they would have to look at how all of the risk margins were calculated, what data they were based on, everything else. There are differences from a private to a public company.

MR. ANTHONY GUERRA: I would submit to you, though, that the risk margins are actually calculated in exactly the same way. So you -- you wouldn't agree with that, correct?

MS. ANDREA SHERRY: I think that the risk margins would have to be reviewed very carefully to be used for a Crown.

MR. ANTHONY GUERRA: And you agree with me that the private insurers who use the MCT test typically have ratios in excess of 150 percent?

MS. ANDREA SHERRY: Yes.

MR. ANTHONY GUERRA: You would also agree with me, though, that the Dynamic Capital Adequacy Test, or the DCAT, is -- is also in itself a test to assess the risk of insolvency for a

Corporation like MPI, correct?

MS. ANDREA SHERRY: Sorry. Can you repeat the question? I want to make sure I heard it properly.

MR. ANTHONY GUERRA: You'd agree with me that the DCAT or Dynamic Capital Adequacy Test is in it -- itself a test to assess the risk of insolvency for a Corporation like MPI?

MS. ANDREA SHERRY: I don't necessarily think of the DCAT as an insolvency test, I think of it as a way for a company to ensure that it knows where its risks are most prominent and that the company can take action to reduce their risk in a private environment.

MR. ANTHONY GUERRA: The DCAT, though, in this case, was commissioned to assess the future financial condition of Basic, was it not?

MS. ANDREA SHERRY: MPI built a DCAT model to look at where the RSR should be to ensure that the Company had enough capital to cover those risks.

MR. ANTHONY GUERRA: I.e., forestall insolvency.

MS. ANDREA SHERRY: Again, I don't think of MPI as going insolvent. That's not what I would say.

MR. ANTHONY GUERRA: And that's because if MPI were to become insolvent or were to have insufficient capital to pay its debt as it arose, your position is that the Government of Manitoba would be able to swoop in and pay those debts, correct?

MS. ANDREA SHERRY: The reason I don't think of MPI going insolvent is because you have a yearly process where you come before the Public Utility Board, and that yearly process allows the review to occur and if there was the threat of insolvency of MPI, I'm sure that the Public Utility Board would allow them to take some rate in that year.

But ultimately, I don't think of MPI as having the ability to go insolvent in the same way as a private company would, because the private company would have such -- more of an economic impact on the Canadian economy, potentially, and again to your -- I agree with what you said in the sense that you are backed by the taxing authority of the Government of Manitoba.

MR. ANTHONY GUERRA: So, I mean really, at the end of the day, the insolvency position of MPI is really only a concern of -- if the solvency position of the Government of Manitoba became a concern, correct?

MS. ANDREA SHERRY: I would certainly hope it doesn't get to that point.

And again, I would say because you come here every year, the Public Utility Board is not going to let MPI go insolvent. But I suppose if the absolute worst thing were to happen and the Government of Manitoba went insolvent, then yes, MPI would be insolvent.

MR. ANTHONY GUERRA: And I appreciate that, it's unlikely that that would happen, but...

MS. ANDREA SHERRY: Yes.

DR. WAYNE SIMPSON: These are the implausible catastrophe scenarios that I was referring to in my presentation.

MR. ANTHONY GUERRA: Implausible that the Government of Manitoba would come to the rescue of MPI?

DR. WAYNE SIMPSON: Well, you referred to the Government of Manitoba going insolvent. I was referring to that.

MR. ANTHONY GUERRA: I see. Dr. Simpson, do you know what the interest rates are going to be on September 1st, 2019?

DR. WAYNE SIMPSON: No.

MR. ANTHONY GUERRA: And I think I heard you speak earlier about the great recession of 2008. Is that how you characterized the global economic downturn of 2008?

DR. WAYNE SIMPSON: That's how it's often characterized. The actual dating of it varies from country to country, but the only dip in GDP in Canada was, I believe 2008, yes.

MR. ANTHONY GUERRA: So you would equate that with the great recession that I think most people understand from the 1930s?

DR. WAYNE SIMPSON: No, that was called the Great Depression.

MR. ANTHONY GUERRA: My apologies.

DR. WAYNE SIMPSON: But certainly significantly more severe, and as I pointed out in previous proceedings, the -- the difference between the two (2), in fact, demonstrates what we've learned from economics and from the Great Depression in the sense that I think the monetary policy responses, not so much of Canada, but around the world and in particular in the United States, quantitative easing, low interest rates was exactly the prevention of -- of large banks failing, too big to fail.

All were evidence that we weren't going

to repeat the same mistakes which made something like the Great Depression less likely to ever occur.

MR. ANTHONY GUERRA: So, going forward, are you okay then using the term "great recession" to describe the events of 2008?

DR. WAYNE SIMPSON: Yes, that's -- that's been used quite widely.

MR. ANTHONY GUERRA: And -- and you're okay with -- with that description or that title?

DR. WAYNE SIMPSON: Yes, with the -- perhaps the caveat that the -- in Canada the recession, and particularly in Manitoba, the recession was really neither particularly deep nor prolonged, both because of the nature of our banking system and the nature of the Manitoba economy.

MR. ANTHONY GUERRA: You would agree with me though, Doctor, that the great recession from 2008 resulted in a period where it was difficult for the major banks to accurately forecast interest rates, correct?

DR. WAYNE SIMPSON: They overestimated interest rates based on the -- their experience and their forecasting models, yes.

MR. ANTHONY GUERRA: And an overestimate of interest rates is -- is not an accurate forecast, correct?

DR. WAYNE SIMPSON: No, it's biased -- it wasn't biased upward, it was -- it was inaccurate. Yes, that's correct.

MR. ANTHONY GUERRA: The banks forecast their rates through the standard interest rate forecast, or SIRF?

DR. WAYNE SIMPSON: That's right.

MR. ANTHONY GUERRA: And they look at the Government of Canada 10-year yield rates?

DR. WAYNE SIMPSON: Sorry, let me backtrack. The -- the bank interest rate forecasts are components of SIRF, five (5) of the six (6) components of SIRF.

SIRF is an -- an average of the forecasts of the five (5) banks and global insight. So it's -- it's a SIRF that relies on the bank forecasts. I think you stated it the other way around.

MR. ANTHONY GUERRA: And I appreciate the clarification. And specifically what we're looking at is the Government of Canada 10-year bond yield rates, correct?

DR. WAYNE SIMPSON: The benchmark rate, that's correct.

MR. ANTHONY GUERRA: I want to draw your attention to the investments chapter, figure number 11, if I may, Ms. Schubert. Thank you.

What I understand here is this is a table showing historical analysis of the standard interest rate forecast, the 50/50 interest rate forecast and naive interest rate forecast from 2005 to 2018 GRA years.

Do you see that, Dr. Simpson?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And would you agree with me, having reviewed the numbers here, and you can take a moment if you -- if you need to, that the SIRF forecasts in the 2005 to 2016 GRA years were less accurate than the forecasts of the naive interest rate forecast in those years?

DR. WAYNE SIMPSON: In every year? Is that what you're asking?

MR. ANTHONY GUERRA: Every year, 2005 to 2016.

DR. WAYNE SIMPSON: And you're comparing the SIRF to the naive?

MR. ANTHONY GUERRA: Correct.

DR. WAYNE SIMPSON: Not -- not in 2014.

MR. ANTHONY GUERRA: Right. You're right about that, 2014 it does appear that ---

DR. WAYNE SIMPSON: So my answer is, no, I disagree.

MR. ANTHONY GUERRA: Okay, let's stop there then and go back to 2005.

You would agree with me that the SIRF forecast in 2005 was less accurate than the naive forecast in 2005?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: 2006 it was the same, the SIRF forecast was ---

DR. WAYNE SIMPSON: Yes. I'll stipulate all years to 2013.

MR. ANTHONY GUERRA: And then 2015?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And then 2016?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And looking at the 5050 forecast, the 2005 GRA, 50/50 forecast is less accurate than naive forecast?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: 2006? Less accurate?

DR. WAYNE SIMPSON: I'll stipulate all

years up to 2000 -- probably 2014 again, yes. So 2005 to 2013 they were less accurate.

MR. ANTHONY GUERRA: And then they -- they aren't less accurate in 2014, as you've correctly mentioned, but 2015 and 2016, the 50/50 forecast is less accurate than naive, correct?

DR. WAYNE SIMPSON: Yes. I would also say that especially from 2008 to 2016 this is the period where the overnight rate, and the policy rate was driven down to a very low level, .5 percent, I'm not sure if it went lower than that, to stimulate recovery from the -- the great recession.

And it's only in 2017 that that into -- overnight rate or policy rate begins to rise. It rose twice in 2017, and three (3) times in 2018.

MR. ANTHONY GUERRA: You would agree with me though, Dr. Simpson, that in the years that we referenced where the -- the SIRF and the 50/50 forecasts were less accurate than the naive forecast, that those forecasts were biased forecasts in those years, correct?

DR. WAYNE SIMPSON: Well, bias -- to establish bias you would need more than one (1) year, you can't compare things year by year and establish bias.

To establish bias you would have to show that over an extended period of time a -- a forecast produced more positives than negatives or vice versa.

MR. ANTHONY GUERRA: So when we look at the SIRF forecast, for example, in the 2005 to 2013 GRA years, and we're seeing that in every one of those instances the SIRF is off, are you saying that that's not evidence of bias?

DR. WAYNE SIMPSON: Well, there's one negative in there. You're saying that they're all positive? No, there's one (1) negative. 2010.

MR. ANTHONY GUERRA: I wasn't asking questions about positive or negative. I was asking about the bias, but you're ---

DR. WAYNE SIMPSON: Bias is about positives and negatives, right? Bias is about -- about whether the forecast errors are consistently one (1) way or the other, positives being biased upward and negatives being biased downward.

MR. ANTHONY GUERRA: That's how you define a biased interest rate forecast?

DR. WAYNE SIMPSON: That's how -- a bias would be defined by a pattern, yes.

MR. ANTHONY GUERRA: And so your

evidence is that you don't see a pattern of bias in the SIRF forecast between the 2005 and 2013 GRA years?

DR. WAYNE SIMPSON: Oh, I didn't say that. I'm saying -- you said that -- that -- you were going year-by-year. I said well, there's a negative in 2010. But there are more positives than negatives in there, yes. I can stipulate to that.

MR. ANTHONY GUERRA: Is that evidence of a bias then, sir -- doctor -- Dr. Simpson?

DR. WAYNE SIMPSON: It's evidence of the bias that generated out of the -- out of the great recession, that's correct.

MR. ANTHONY GUERRA: And the same then would apply with the 50/50 forecast in those years as well? There is evidence of a bias in that forecast, correct?

DR. WAYNE SIMPSON: Right. Although, and interestingly, the naive forecast is also biased because if, on that basis, the pattern is almost all positives as well.

MR. ANTHONY GUERRA: So my understanding is ---

DR. WAYNE SIMPSON: So they're all biased, by that standard, although that's a pretty primitive both analysis of bias and a pretty small sample in a very specific period out of which we have recovered.

DR. WAYNE SIMPSON: Okay. My understanding, Dr. Simpson, correct me if I'm wrong, is that your -- your evidence today, your position today is that the 2017 and 2018 GRA years, now the forecasts of the SIRF in those years, are -- are superior to the forecast the naive in those years?

DR. WAYNE SIMPSON: Yes. The difference -- the forecast error, if you will, is lower in both 2017 and 2018 and one (1) is positive and one (1)is negative. Whereas the naive forecasts are both negative.

MR. ANTHONY GUERRA: And if I can just draw your attention to the presentation you gave on the DCAT, which is CAC Exhibit Number 26, slide 12.

So the -- the last paragraph of your slide there says that:

"SIRF also pays attention to other economic signs of recovery in domestic monetary policy response by the Bank of Canada."

Do you see that, sir?

DR. WAYNE SIMPSON: Right.

MR. ANTHONY GUERRA: And you'll agree

with me that your position is that the fact that the SIRF pays attention to those economic signs of recovery in domestic monetary policy are -- are what make it more superior to the naive forecast, for example, in the 2017 and 2018 GRA years?

DR. WAYNE SIMPSON: Yes, I mean, looking ahead is one (1) of the aspects of forecasting as opposed to being blind.

MR. ANTHONY GUERRA: You would agree with me, Dr. Simpson, that the SIRF has always paid attention to economic signs of recovery in domestic monetary policy though, correct?

DR. WAYNE SIMPSON: Yes, it -- I would presume so, yes.

MR. ANTHONY GUERRA: So it would've done so in the 2005 GRA -- GRA year, for example?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And it would have done so in the 2006 GRA year, for example?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And it would have done the same thing up until the 2013 GRA year, for example?

DR. WAYNE SIMPSON: Sure. I'm assuming they take all of the information, you know, the banks have a large stake in getting interest rates right and I suspect they devote considerable resources and hired reasonably talented people to -- to do these things, and -- and, therefore, they would take into account all of the information available to them, including any signs from the Bank of Canada that they were changing their stance or position, which probably there weren't many signs during the period from 2008 through to 2016, although you'd have to go back through the -- the Bank of Canada's reports to substantiate that.

MR. ANTHONY GUERRA: Ms. Schubert, can you put back investment figure number 11, please? Yes, thank you.

The period before the 2008 recession, which is shown on this -- in this table, is the 2005 GRA to the 2007 GRA, 2008 GRA.

Would you agree with that, Dr. Simpson?

DR. WAYNE SIMPSON: Right.

MR. ANTHONY GUERRA: And you would agree with me at that point in time the SIRF forecast and the 50/50 forecasts are still less accurate than the naive forecast, correct?

DR. WAYNE SIMPSON: Yes, they are.

DR. BYRON WILLIAMS: I just -- I just

want to make sure that the premise isn't that Manitoba Public Insurance was using the SIRF premise, the SIRF forecast for the GRA's in 2005 through 2008, because I believe the evidence of Mr. Johnston would've been different then that.

So that's just the -- in -- I just want to make sure that that premise isn't being advanced.

MR. ANTHONY GUERRA: I have not advanced that premise, but thank you, I appreciate the -- the comment, Mr. Williams.

CONTINUED BY MR. ANTHONY GUERRA:

MR. ANTHONY GUERRA: My understanding, Dr. Simpson, is that you're not here today to advance or advocate MPI's use of the SIRF in the 2019 GRA, correct?

DR. WAYNE SIMPSON: I'm advocating that the SIRF -- I guess I'm advocating two (2) things. I'm advocating that the -- the SIRF is better than the naive forecast, and that it should be part of the interest rate forecast and that existing Board order for 50/50 is certainly better than the naive for that reason.

MR. ANTHONY GUERRA: But you're not -- your presentation does not say that you recommend that the Board should apply the SIRF forecast in this rate application year, correct?

DR. WAYNE SIMPSON: That is correct.

MR. ANTHONY GUERRA: In fact, it advocates for the use of the 50/50 forecast, correct?

DR. WAYNE SIMPSON: I wasn't thinking of other alternatives, then, sir, 50/50 or naive, no.

MR. ANTHONY GUERRA: But it advocates for use of the 50/50 forecast, correct?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And that's because your opinion is still that the banks remain too optimistic about the growth of interest rates, correct?

DR. WAYNE SIMPSON: I think that's part responding to the existing conditions, which is, is the Board Order for 50/50.

And perhaps a little bit of caution, as I said in my presentation, if I were allowed to pick weights, that they probably wouldn't be 50/50. But I would give more weight to the SIRF than the naive because I think it -- I think it's a better forecast for the reasons I've indicated.

MR. ANTHONY GUERRA: Sorry, is it your evidence that the reason why 50/50 is recommended is that that was contained in the Board Order from the last rate application year?

DR. WAYNE SIMPSON: Yes, I've taken that as one of the three (3) options.

MR. ANTHONY GUERRA: And is it your evidence then today, sir, that -- that despite the -- the Board Order, the better approach is actually the SIRF forecast?

DR. WAYNE SIMPSON: If I were given a choice between the SIRF and the naive that would -- that would definitely be the case, yes. I would -- I would say the SIRF is a better forecast than the naive under the current circumstances.

MR. ANTHONY GUERRA: Is the SIRF forecast, though, better than the 50/50 forecast for this rate application year?

DR. WAYNE SIMPSON: I have not made that claim.

MR. ANTHONY GUERRA: But you recommend it, sir?

DR. WAYNE SIMPSON: I'm sorry, I recommend?

MR. ANTHONY GUERRA: 50/50?

DR. WAYNE SIMPSON: I recommended 50/50, yes.

MR. ANTHONY GUERRA: Are you not then saying with your recommendation that you believe that that's the best interest rate forecast?

DR. WAYNE SIMPSON: Well, I -- I have -- I have stated that I recommend the 50/50 in part, simply because I don't think the naive forecast is a reasonable forecast to use under these circumstances.

I think I'll just leave it at that.

MR. ANTHONY GUERRA: So figure 11, which is on the -- on the screen right now, does reference the -- the last two (2) GRA years, so, 2017 and 2018.

And -- and when I look at the -- the comparison between the SIRF forecast and the 50/50 forecast, what I understand is that in the last two (2) GRA years the 50/50 forecast has, in fact, been less accurate than the SIRF forecast.

Is that not correct?

DR. WAYNE SIMPSON: You're correct.

MR. ANTHONY GUERRA: Is it my understanding, Dr. Simpson, that your position is that there was a correlation between the overnight interest rate from the Government of Canada, or the Bank of Canada, I should say, and increases in the Government of Canada's 10-year bond yields?

DR. WAYNE SIMPSON: Based on my reading of the bank's policy and -- and the evidence that they have before them, yes.

MR. ANTHONY GUERRA: Okay. And I would like to draw your attention to CAC Exhibit number 26, which is that the DCAT presentation, and in particular, slide number 14, Ms. Schubert. Thank you.

So what we see from your presentation is that there's a table showing the correlation between the overnight rates and the Government of Canada 10-year bond yields for the -- the last two (2) years.

Do you see that, Dr. Simpson?

DR. WAYNE SIMPSON: Yes. Since -- since the bank -- well, you can see where the bank started increasing the policy rate where the first step occurs.

MR. ANTHONY GUERRA: You would agree with me, though, that when establishing the break-even rate indication, MPI forecast interest rates for the twelve (12) to eighteen (18) month period in advance -- or sorry, that follows because of the new money yield that is used for setting rates that are calculated, in this case, September 1st, 2019.

DR. WAYNE SIMPSON: Right. And for

the DCAT they forecast out four (4) years, right?

MR. ANTHONY GUERRA: Right. So for the break-even rate indication the -- the important period to look at is the twelve (12) to eighteen (18) month period, correct?

DR. WAYNE SIMPSON: Okay.

MR. ANTHONY GUERRA: You would agree with that?

DR. WAYNE SIMPSON: Yes.

MR. ANTHONY GUERRA: And you would also agree, though, that it's possible for the overnight rate to increase and the Government of Canada 10-year bond yield to decrease within that twelve (12) to eighteen (18) month period, correct?

DR. WAYNE SIMPSON: I -- I don't see where you see that.

MR. ANTHONY GUERRA: Well, I'm going to draw your attention to CAC Exhibit Number 5, which is an Information Request response to CAC-MPI-2-1.

DR. WAYNE SIMPSON: I'm just eyeballing this -- this graph. What -- what period are you referring to?

The first step increase occurs, and if you look out twelve (12) or eighteen (18) months, the -- the blue line, squiggly line, is higher than it was at that point.

I mean, where in that -- where in those two (2) lines are you -- are you -- even if you're cherry picking the numbers, which I suspect is what's happening, I don't see where that is happening, but you're going to tell me.

MR. ANTHONY GUERRA: Well, yeah, I'm going to tell you to look at CAC Exhibit Number 5.

DR. WAYNE SIMPSON: Okay.

MR. ANTHONY GUERRA: Which is the Information Request response to CAC-MPI-2-1, and in particular, figure number 2.

My understanding, Dr. Simpson, is those are the instances where the overnight rate increase resulted in a decrease in the Government of Canada 10-year bond yields in a twelve-month period.

Do you see that?

DR. WAYNE SIMPSON: So what -- what are we looking at? We're looking at specific instances where -- because the -- the 10-year bond rate moves around a great deal, and these are what; they're daily rates?

They're picking a specific date? Yes, it looks like they're specific daily rates. That's a lot of volatility in the 10-year bond yield, which I wouldn't think would be the basis for a forecast.

As I said before, when you look at the data the blue line moves around a lot because it's -- it's very short -- high frequency data, and the -- the red line doesn't move very much, because it's policy data. It's the Bank of Canada settings, which are only a set number of times a year.

And there's a clear pattern to both of those, which is upward in -- recently, but because the -- the squiggly line, the blue, -- the blue line moves around a lot, you probably can find specific times and it looks like you're suggesting October 29 -- 2009 to October 2010, which is not in that graph, of course, where -- where that -- that may have occurred.

But I don't see anything there between -- well, whatever the start of that graph was, 2016/2017 and -- and the current date.

So I -- this is -- sure, this -- this can happen. It won't happen if you -- if you look longer term, lower frequency data, if you use monthly or annual averages, that will not happen. And, of course, we're looking forward in forecasting, you know, reasonably -- reasonably low frequency data, I would say.

In other words, monthly or annual. But

there's no -- there's no data there that refers to the -- the graph you were showing before.

MR. ANTHONY GUERRA: So your -- your position, though, is that in the case of interest rate forecast it's important to look forward, correct?

DR. WAYNE SIMPSON: Interest rate forecasts look forward, yes.

MR. ANTHONY GUERRA: We shouldn't consider the history, and in this case the history before the 2017 GRA, correct?

DR. WAYNE SIMPSON: Oh, forecasts are based -- are based on -- on more than just one (1) or two (2) years. They're based on experience.

Actually, the Bank of Canada's forecasts -- not Bank of Canada's. The Canadian Banks' forecasts and the Bank of Canada's forecasts would be based not only on historical record, but they'd be based on their modelling of the Canadian economy. And the modelling of the Canadian economy would include, among other things, the monetary policy and the Bank of Canada's responses to changes in economic conditions.

That would probably be more important than -- than data going back to 1994, but the structure of the economy would be estimated using a large volume of past data, and then the models would generate what they think is the future progress of interest rates.

So it wouldn't be the kind of simplistic forecasting that is done by looking at -- at simply the pattern of rates that have occurred over some specified period, it's based on -- on modeling the Canadian economy.

MR. ANTHONY GUERRA: Thank you, Dr. Simpson.

Ms. Sherry, are you aware of any instances -- sorry, before I -- before I say that, do you recall how many times you've -- you've appeared before the Board to provide advice as an expert?

MS. ANDREA SHERRY: I believe this is my third (3rd) year at the hearing. I'm looking at Byron because -- is it three (3) years or four (4) years?

MR. ANTHONY GUERRA: So it's been a few years now, correct?

MS. ANDREA SHERRY: It's been a few years, yes.

MR. ANTHONY GUERRA: Ms. Sherry, are you aware of any instances where you have not challenged an assumption or made a recommendation and a GRA, or Generate Rate Application, that would have supported a higher rate indication?

MS. ANDREA SHERRY: I know that there have been instances where I've found things in the GRA that could potent -- that I felt should be changed that might increase the indication, but not materially. And it certainly wasn't what I felt was the most important component of my review.

MR. ANTHONY GUERRA: Thank you. Just one moment, please.

(BRIEF PAUSE)

MR. ANTHONY GUERRA: Thank you, Dr. Simpson, Ms. Sherry, those are my questions.

MS. ANDREA SHERRY: Thank you.

THE CHAIRPERSON: Thank you.

We'll adjourn for lunch for an hour. Thank you.

--- Upon recessing at 12:15 p.m.

--- Upon resuming at 1:16 p.m.

THE CHAIRPERSON: If everyone's ready, Mr. Watchman...?

CROSS-EXAMINATION BY MR. ROBERT WATCHMAN:

MR. ROBERT WATCHMAN: Thank you, Mr. Chair. Good afternoon, Ms. Sherry, Dr. Simpson. I have a few questions for you about the two (2) reports that were filed, and please either feel free to respond to the question as you think appropriate.

And I would like to start with your report on the Capital Maintenance Provision. So if we could have that -- for the record, it's CAC Exhibit 10.

And just turning to the second page, we see the first -- halfway down the page, the first issue that's listed there:

"The CMP was never approved by the PUB nor was consensus reached on it by the stakeholders."

You see that there?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And I'm just going to focus on the -- the first part of that title, the CMP or Capital Maintenance Provision was never approved by the PUB.

And why do you say that this is an issue with the introduction of a Capital Maintenance Provision in the 2019 GRA?

MS. ANDREA SHERRY: For me the issue was that I felt it was implied in the GRA that the Capital Maintenance Provision was approved and consensus was reached. And, I wanted to make it very clear that that was not the case. That was my right thought there.

MR. ROBERT WATCHMAN: All right. So approved as a result of the technical conference that was held?

MS. ANDREA SHERRY: No, I was thinking more of the Board Order where the Board says that it supports the Corporation's needs to keep its capital level where it should be and that that was not, in my mind, an approval.

MR. ROBERT WATCHMAN: So you're not aware of anything that would preclude to the Corporation from presenting a Capital Maintenance Provision in a GRA application?

MS. ANDREA SHERRY: No.

MR. ROBERT WATCHMAN: Now, at -- towards the bottom of the page, just about five (5) or six (6) lines down, there's a sentence that reads:

"On review of the transcript of this technical conference and the notes distributed, it is clear that no

consensus was reached and the
exchanges did not indicate that MPI
would introduce a CMP in the 2019
GRA."

Can you tell us then what were your expectations with respect to a Capital Maintenance Provision in the 2019 GRA?

MS. ANDREA SHERRY: My impression from reading the transcript and Wayne can comment on that as well, was that it was still an idea, just an idea, potentially for discussion in relation to the RSR as part of this year's application.

But I did not expect there to be a Capital Maintenance Provision built into the application this year. That was my impression.

MR. ROBERT WATCHMAN: Yes, understood. Can you indicate what you anticipated would be the next steps in the process?

MS. ANDREA SHERRY: Potentially discussion at this year's hearing, and -- and perhaps another technical conference because I didn't feel -- I didn't interpret the transcript to show that it reached a point of clarity.

MR. ROBERT WATCHMAN: Now just skipping a few lines ahead. There's a sentence that reads:

"The technical conference did not
conclude that a CMP, or Capital
Maintenance Provision, was required
in addition to the RSR, Rate
Stabilization Reserve."

Can you tell us in what respect the proposed Capital -- and Capital Maintenance Provision is in addition to or additive to the Rate Stabilization Reserve.

MS. ANDREA SHERRY: Sure. So the RSR range which we're not actually at a place of certainty with how that would be set, but the RSR if in the proper range would be enough to cover its purpose, what the purpose of the Rate Stabilization Reserve is. And that would stand on its own and then the Capital Maintenance Provision would be on top of that to maintain the minimum capital test ratio for the Corporation over the projected two (2) year period.

MR. ROBERT WATCHMAN: Okay. Now, and just for the sake of the record, when we referred to RSR range, more accurately, what we're talking about is the Basic total equity target capital range, correct?

MS. ANDREA SHERRY: Correct.

MR. ROBERT WATCHMAN: And just continuing over to the top of the next page, the second issue listed there is:

"The CMP has not been vetted by the public."

And I take it that you are advocating for public consultation before the Corporation came forward with the cap -- Capital Maintenance Provision -- provision -- proposal.

MS. ANDREA SHERRY: I am, yes.

MR. ROBERT WATCHMAN: And if we look down on that page, the third paragraph under Issue 2, and there is reference there to the Capital Maintenance Provision we understand is in use by Saskatchewan Government Insurance?

MS. ANDREA SHERRY: M'hm.

MR. ROBERT WATCHMAN: And in the second sentence there you say:

"This is not valid because SGI does not put through rate changes every year and their methodology has only been reviewed in one (1) rate program 2014."

Can you tell us why that's an issue with the introduction -- why you believe that that would be an issue for the introduction of a Capital Maintenance Program in respect of the Manitoba...?

MS. ANDREA SHERRY: So really speaks to my main point is that MPI comes to the Public Utilities Board every year with the full analysis of their results, a full analysis of their capital position and can every year ask the Public Utility Board for a rate increase if they need more capital, or -- really, if they need more capital. So -- or their rates are inadequate at that time.

My point is that the SGI, the Saskatchewan Government Insurance, they do not go every year to any sort of Public Utility Board for a rate increase or to do a full analysis of their program. They don't have an application anywhere near of the -- anywhere near the thoroughness of MPI's and, again, they don't -- they don't produce any application every year.

So I can't speak to Saskatchewan Government Insurance's particular situation but they don't get that opportunity every year to ask for a rate increase. So, potentially, they need some sort of Capital Maintenance Provision because there are years between rate applications. It's -- it's two (2) very different situations.

MR. ROBERT WATCHMAN: Thank you. And you go on in that paragraph to state:

"It has -- it has not been put
through
Saskatchewan Capital -- Capital
Maintenance Provision] -- it has not
been put through any sort of public
review in Saskatchewan."

But it -- was it -- is it not reviewed by the Saskatchewan Rate Review Panel.

MS. ANDREA SHERRY: It was in 2014, from what I understand, that was the only year and --

MR. ROBERT WATCHMAN: And --

MS. ANDREA SHERRY: -- and it was the first year that the idea was put forth.

MR. ROBERT WATCHMAN: And is that not a form of public review?

MS. ANDREA SHERRY: Yes, the Public Utility Board, this is a forum for public review hear and every attempt is made to make sure that the public knows about these hearings and can attend, can read the transcripts on line, et cetera.

What I was more alluding to was potentially focus groups; finding out what the public actually thinks prior to going forward with something like this.

MR. ROBERT WATCHMAN: And, Kristen, if we could just scroll down to the bottom of that page under the third issue.

> "The CMP does not align with accepted actuarial practice in Canada."

And in the last sentence on that page you indicate that:

> "This response makes it clear that the use of a CMP, Capital Maintenance Provision, is not normal actuarial practice and is not supported by any type of analysis or research in the industry."

See that?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And I take it you based that conclusion on the response that was received from MPI to CAC(MPI)-178?

MS. ANDREA SHERRY: Partly, yes.

MR. ROBERT WATCHMAN: Partly. And were there other reasons for you to make that conclusion?

MS. ANDREA SHERRY: Well, it really

came out through the Information Requests received that when I gave it more thought in terms of the actuarial standards of practice and that's why I say it does not align because the standards of practice do not talk about any sort of capital load and no actuary doing actuarial rate indications based on the standards of practice would include a capital load, when they do that rate indication.

So, the fact that there is no -- nothing in the standards to say Add a capital load to your rate indication, to me, implies that adding one does not follow the actuarial standards of practice and I've never -- the comment here makes it very clear, I would never see that done.

MR. ROBERT WATCHMAN: Now, does the concept of a Capital Maintenance Provision arise or commonly arise in the competitive automobile indus -- insurance industry?

MS. ANDREA SHERRY: No.

MR. ROBERT WATCHMAN: And are you aware of any private sector automobile insurance company in Canada using a Capital Maintenance Provision.

MS. ANDREA SHERRY: No.

MR. ROBERT WATCHMAN: So then should

private sector practices, in this regard, necessarily dictate what would be an appropriate practice for MPI Basic?

MS. ANDREA SHERRY: We've done a lot of work moving towards rate making on accepted actuarial practice. It's only been one (1) or two (2) years where we've actually had that.

I think that that move was very important to help bring stability in terms of the projection period that you had to do to get to an indication. So, I think that to see -- adding a Capital Maintenance Provision just takes away from the progress that we've made in terms of moving to accepted actuarial practice.

MR. ROBERT WATCHMAN: Okay. Let me approach it from a different perspective.

Would normal actuarial practice in Canada with respect to a Capital Maintenance Provision more properly evolve from practices of public sector automobile insurers in Canada. So, namely, the four (4) that we know of: Insurance Corporation of British Columbia, Saskatchewan Autofund --

MS. ANDREA SHERRY: I think that the public companies, you just mentioned are -- are very different from MPI and that has to be taken into consideration. I don't think just because one (1) of them does it MPI should do it.

I just talked about a difference with SGI in terms of their filing processes and that they don't have a rate application every year; that's a huge difference because they don't have that opportunity to come back.

ICBC is a very different product, completely different product than what MPI has and I'm not sure of their filing procedures to be honest with you, but I think that it -- your -- just because they're public companies doesn't mean that their processes should be the same, and I would say that MPI's processes are the most advanced if you look at the public companies so.

MR. ROBERT WATCHMAN: Okay but --

DR. WAYNE SIMPSON: Could I add something here?

MR. ROBERT WATCHMAN: Certainly.

DR. WAYNE SIMPSON: I think what we've tried to say elsewhere is that we don't think that the process is like -- well, the MCT, for example, should be applied to a Crown monopoly when it's appropriate for a -- a private insurer in a competitive setting. And I don't see anything in that distinction that suggests that, you know, a Capital Maintenance Provision would more naturally come out of a -- a public setting than a private one.

The -- in the private setting, they can't make their own rates because they've got to be competitive and in a private setting they can go under if they are undercapitalized, but neither of those things really apply in a public setting and -- and those arguments, therefore, wouldn't be valid for the establishment of a CMP.

MR. STEVE SCARFONE: Sorry to interject to, Mr. Watchmen. Mr. Chairman, I just want to caution the Board in having the comments of Dr. Simpson tempered somewhat with -- remembering what he's been qualified to give expert evidence on.

I don't think the Board should entertain his comments as it concerns the proper capitalization of an insurance company.

THE CHAIRPERSON: That's fine, Mr. Scarfone, and, you know, quite frankly, if you want to bring that to our attention as well in final argument --

MR. STEVE SCARFONE: Yes.

THE CHAIRPERSON: -- I think that would be appropriate.

MR. STEVE SCARFONE: Thank you.

DR. BYRON WILLIAMS: I just -- Mr. Chair, if I might, I'll just say that Dr. Simpson's expertise in applied econom -- econometrix speaks to risk and as they apply to firms in the marketplace and I think that's exactly the type of conversation that he's making.

THE CHAIRPERSON: Well --

DR. BYRON WILLIAMS: But we'll both speak to it at clos --

THE CHAIRPERSON: Well, there's two (2) ways of doing it, I can make a ruling on it now where we can move forward with the -- with the evidence and at the time of final submission, we can -- you can have the position of both parties because this may not be the final -- final argument on -- on the scope of testimony.

DR. WAYNE SIMPSON: Yeah, I'm sorry, if I was overstepping my bounds. I -- I intended it to be more comment about industrial organization and the difference between competitive firms and a private industry and -- and public monopolies which is a -- something economists talk about quite a bit.

CONTINUED BY MR. ROBERT WATCHMAN:

MR. ROBERT WATCHMAN: Thank you. Ms. Sherry, now you understand that the individual who provided information about the Saskatchewan Autofund Capital Maint -- Maintenance Provision was Mr. Chris McCullough.

MS. ANDREA SHERRY: M'hm.

MR. ROBERT WATCHMAN: And that he is an actuary?

MS. ANDREA SHERRY: Yes, I know Chris quite well.

MR. ROBERT WATCHMAN: Okay. And is it your position then that his work is not compliant with accepted actuarial practice in Canada because of -- because it includes a -- a Capital Maintenance Provision?

MS. ANDREA SHERRY: I don't want to say that it's not compliant because the standards of practice do not say anything about a capital load. I would say that it does not align. And I'm not sure how Saskatchewan Government Insurance, if they do their -- how they build that -- the CMP into that. I would have to look at that.

I certainly would never say Chris is not compliant.

MR. ROBERT WATCHMAN: Now -- but do

you accept that a normal practice could develop amongst the public automobile insurers in Canada as contrasted with the private sector automobile insurers in Canada?

MS. ANDREA SHERRY: It would definitely be possible to work on something that would apply to a Crown monopoly. It's difficult because, as I said, the product's difference in BC. Unless you had a process that was more similar, it would be very difficult to do that.

MR. ROBERT WATCHMAN: Thank you. If we could just scroll down then, Kristen, to the top of the next page, and the issue there:

"The use of an MCT target to set a CMP level is arbitrary and not Board approved."

That was -- your -- the issue as you described it?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: Now, given that the MCT or minimal -- Minimum Capital Test is an established metric of a Canadian property-casualty insurance company's relative strength, why do you say its use in relation to a Capital Maintenance Provision is arbitrary?

MS. ANDREA SHERRY: Well, there's a few reasons. One is the setting of 100 percent is arbitrary because what the proper level should be if you were to use the MCT for a public auto insurer how do you know what that should be.

The second reason is because the MCT and -- and I've talked a lot about this today, so apologies if I'm being repetitive, but the MCT was created for private insurance companies to -- to prevent insolvency that would hurt the Canadian economy. So it's -- it's to set an MCT level that would be right for a public auto insurer, I -- I don't think that's relevant.

MR. ROBERT WATCHMAN: And if I could just go -- take a step back, your comment concerning alignment with actuarial practice.

Are you saying that work can be in compliance with accepted actuarial practice, but not aligned with accepted actuarial practice?

MS. ANDREA SHERRY: Well, I'm using the word "aligned" to mean -- or saying that something is not aligned to mean that it is not mentioned.

MR. ROBERT WATCHMAN: Thank you.

MS. ANDREA SHERRY: Noncompliance would be if it is actually laid out and you do something directly against what the directions are.

MR. ROBERT WATCHMAN: In the second paragraph under Issue Number 4, you state:

> "The application
> second sentence] the application
> does not put forth a clear
> explanation for the use of an MCT
> ratio that would be appropriate to
> determine a rate increase."

Do you see that?

MR. ROBERT WATCHMAN: What additional explanation do you believe would be helpful in this regard?

MS. ANDREA SHERRY: I don't know if there is a clear explanation that could be given, to be quite honest with you. But how -- to just say that we need the MCT to be at the same level one (1) year after the other and say that that's any sort of clear explanation of why that would be required, I -- I don't think it is. And that's what I was referring to in that sentence.

MR. ROBERT WATCHMAN: If I could just then refer you down to the last paragraph under Issue Number 4.

> "The determination of a required

rate increase to ensure a constant
MCT is contrary to the PUB's
preference that the DCAT analysis be
used to determine rate need based on
the Corporation's risk profile."

Can you expla -- can you explain for us why you make that observation?

MS. ANDREA SHERRY: I don't have the Board Orders in front of me but there was one (1) Board order that -- actually it was -- disallowed using the 100 percent MCT as the upper. Look at Board --

"The Board withdraws its support for
the use of the MCT in an MCT
threshold ratio."

And that was Order 162/'16. Thank you. I knew I saw it some where. So that would be one (1) area where I was drawing from that the Board has not endorsed the MCT as -- as -- the use of the MCT at least in setting the RSR range and has endorsed this adverse scenario analysis that the DCAT provides.

MR. ROBERT WATCHMAN: Okay. And yes, and perhaps I should have focused. It's the reference there to "rate need."

Would it be more fair to say that the

PUB's stated preference was for the establishment of the Basic target capital thresholds through the adaptation of the Dynamic Capital Adequate Test?

MS. ANDREA SHERRY: Yep, potentially I wasn't as clear as I should have been there. What I was alluding to was that if the RSR range is set, and the capital of MPI is below the lower -- the minimum, then would need rate; that's what I was basing that on.

MR. ROBERT WATCHMAN: Thank you. If we could then move to the next Issue Number 5, and it reads that:

> "The CMP does not align with the Board approved methodology for calculating the amount of capital the corporation requires, nor is it consistent with work to date."

Do you see that statement?

MS. ANDREA SHERRY: I do.

MR. ROBERT WATCHMAN: And...

THE CHAIRPERSON: Sorry, Mr. Watchman, could I interrupt for a second. I just want to look at the last sentence. This is I -- I had a little confusion and I'll go into it later.

But, the heading of your -- of your

previous page. Sorry, in -- in your presentation was:

"The CMP does not align with
accepted actuarial practice."

And your comment was it's -- what you meant was, it does -- it wasn't mentioned. Can you go back, Kristen, to this screen where we were.

MS. ANDREA SHERRY: So to be clear, the actuarial standards of practice lay out very clearly what an actuarial rate indication includes. It doesn't specifically say, don't include these things, but it is very clear on what should be included.

THE CHAIRPERSON: Right, okay. But -- and this isn't the page, Kristen. I think it was number 5. And here, sorry, when you say:

"The proposed CMP does not align
with this directive."

What are you saying? The directive does not include the words that would capture a CMP?

MS. ANDREA SHERRY: Good point.

THE CHAIRPERSON: Yes, I mean, I'm having trouble because use the word "align" --

MS. ANDREA SHERRY: Yeah.

THE CHAIRPERSON: -- and in my mind you're using it in two (2) completely different ways and I -- I just want to -- you know, and that's why I interrupted. I want to understand how you're using "align" here versus how you use "align" previously.

MS. ANDREA SHERRY: So at some point during this process I was asked for the definition I used "align." I can't remember where it is. That would be very handy right now.

(BRIEF PAUSE)

THE CHAIRPERSON: Yes, sorry, I also notice it's in the title of Number 5:

"The CMP does not align with the Board approved methodology."

MS. ANDREA SHERRY: Right. So that's what you're talking about, though, is it not? The -- that --

THE CHAIRPERSON: Well, --

DR. BYRON WILLIAMS: Mr. Chair --

THE CHAIRPERSON: -- but what --

DR. BYRON WILLIAMS: -- just for Ms. Sherry's reference.

THE CHAIRPERSON: Yes.

DR. BYRON WILLIAMS: It's the response to PUB/CAC-1-8.

THE CHAIRPERSON: Okay.

DR. BYRON WILLIAMS: They provide the response that I think you were referring to. I -- I apologize for interrupting your conversation.

THE CHAIRPERSON: No, I appreciate it.

(BRIEF PAUSE)

THE CHAIRPERSON: And in my mind, if -- if what you're looking at is B -- Kristen, can you go down. Is there more to B or is that it? Sorry, can you go down to -- to page 28.

MR. ROBERT WATCHMAN: That -- that's the end of the --

THE CHAIRPERSON: That's the end of B. Sorry, well then go back to -- if -- if we're looking at B, does not contain section...

So that -- that would go into your arg -- your -- your question of it doesn't include it but later on when you say it doesn't align with the directive, is it that --

MS. ANDREA SHERRY: Well, the definition of "align" can mean a lot of things. So definition I --

THE CHAIRPERSON: Yes.

MS. ANDREA SHERRY: -- used or got off the internet was:

"To bring into agreement close cooperation."

So if something's not -- does not contain it that would not align. If something is not in agreement or close cooperation, it does not align. I think it's relevant in both.

THE CHAIRPERSON: Okay.

MS. ANDREA SHERRY: I could have chosen different words and said that it was not supported by or was not included in.

THE CHAIRPERSON: Okay. Okay, thank you. Sorry, to interrupt, Mr. Watchman.

CONTINUED BY MR. ROBERT WATCHMAN:

MR. ROBERT WATCHMAN: Kristen, if we could just return to -- right there.

So under Issue Number 5 in the first paragraph you reviewed the methodology that was approved by the Board and then you make that statement:

"The proposed CM -- CMP does not align with this directive."

Do you see that?

MS. ANDREA SHERRY: M-hm.

MR. ROBERT WATCHMAN: Now -- but the methodology that's referred to, again, is methodology for establishing lower and upper Basic target capital thresholds; correct?

MS. ANDREA SHERRY: Right.

MR. ROBERT WATCHMAN: So can you tell us what it -- what specifically about a proposed Capital Maintenance Provision in the 2019 GRA is not aligned with the Board's prior approved methodology for establishing Basic target -- target capital range?

MS. ANDREA SHERRY: My understanding of the Rate Stabilization Reserve and the path we've taken, to this point, is that we were working towards a methodology that could be used every year to determine what -- whether the Corporation's capital was sufficient. That's my understanding of what the Rate Stabilization Reserve and all of the work we've done on the DCAT was for; that was the goal.

Adding a Capital Maintenance Provision that would be in addition to the capital that is determined -- how the capital is determined to be sufficient or not and then we have this other piece on top, that, to me, does not align with the direction we were going, with the Rate Stabilization Reserve and the DCAT and the determination of whether the Corporation's capital was sufficient.

MR. ROBERT WATCHMAN: All right but the -- the purpose of a cap -- Capital Maintenance Provision, as you've indicated, is to keep the available capital at a steady level relative to required capital based upon an MCT ratio?

MS. ANDREA SHERRY: Right.

MR. ROBERT WATCHMAN: So that's its purpose. The setting of Basic target capital range is something different; correct?

MS. ANDREA SHERRY: Yeah.

MR. ROBERT WATCHMAN: So -- so they're both related to the Rate Stabilization Reserve but they are two (2) different things; correct?

MS. ANDREA SHERRY: I'm not sure that the Capital Maintenance Provision relates to the Rate Stabilization Reserve. I think it's separate and on top.

MR. ROBERT WATCHMAN: Okay. Well, it maintain --

DR. WAYNE SIMPSON: I agree.

MR. ROBERT WATCHMAN: Okay, well --

MS. ANDREA SHERRY: It is -- the RSR is determined or the Rate Stabilization Reserve is one

(1) piece and it's where the Corporation's capital is right now. And whether it's sufficient is determined by a range.

The Capital Maintenance Provision that is suggesting is using an MCT ratio and keeping it consistent year-over-year and it is separate. From what I understand if -- well, I know this to be true, that the CMP is not even included in the DCAT. So they are separate.

DR. WAYNE SIMPSON: I -- I think the only overlap and this is what I objected to in the slides I presented was that this desire to express the upper and lower thresholds in terms of the MCT and, in fact, to use the MCT to establish the upper threshold in MPI's mind, in their methodology, and that kind of conflates the two (2) issues, but if you take that out and say that the DCAT establishes the RSR lower and upper thresholds in dollar terms or percent of premiums, or whatever you want to think of it, because that would be another way of doing it, then it -- it -- then there's no necessary -- there's no implied like, I think then between the RSR determination and the CMP.

(BRIEF PAUSE)

MR. ROBERT WATCHMAN: Now, turning the page still under the Issue Number 5 in the middle paragraph there, you review the forecasted levels of Basic total equity in the GRA and then towards the end of that paragraph state:

"This indicates that there is no urgency to implement any sort of capital build provision."

Do you see that?

MS. ANDREA SHERRY: M-hm.

MR. ROBERT WATCHMAN: And by "capital build provision," I take it you're referring to the Capital Maintenance Provision?

MS. ANDREA SHERRY: I am.

MR. ROBERT WATCHMAN: And are you advocate -- advocating more time to develop a broader consensus of stakeholders for a Capital Maintenance Provision or you think it should simply be deferred without any further action being taken?

MS. ANDREA SHERRY: I think from my commentary today, I would -- I feel that there is no place for the Capital Maintenance Provision and that I am hopeful that the Public Utility Board will agree with that and make it a nonissue going forward.

My point here is that -- sorry, actually it's my next point where -- where I was commenting that it's -- it's just a piece of a very big puzzle if they actually want to go forward with anything, it should be part of a complete robust capital management plan.

DR. WAYNE SIMPSON: I'd just add again, that where it says "capital build provision" there, in the past when -- when the surplus, as I called it elsewhere, lies below the lower threshold then we talk about a RSR rebuild provision; in other words, not relating it specifically to capital in any way -- to capital maintenance.

MR. ROBERT WATCHMAN: Now, in the -- continuing on in the next paragraph you refer to the Corporation's Capital Maintenance Provision request and about four (4) lines from the bottom a sentence that reads:

> "It is difficult to reconcile these assertions with the reality that the DCAT analysis has shown that the risk profile of the Corporation requires a decrease in the RSR range."

Do you see that?

MS. ANDREA SHERRY: M-hm.

MR. ROBERT WATCHMAN: And -- but is it fair to say that that decre -- decrease resulted from the implementation of the asset liability management study?

MS. ANDREA SHERRY: That would definitely be a part of it, yes.

MR. ROBERT WATCHMAN: Okay. So these -- that is not one -- one would consider a normal evolutionary type of change. It was a change that was specifically made by the -- by the Corporation consciously?

MS. ANDREA SHERRY: Yes. And it reduced the risk profile of the Company so that the RSR range could go down.

MR. ROBERT WATCHMAN: Now, you continue on saying that:

> "The RSR range will go up in dollar terms as the size of the Corporation increases. This negates the need for a CMP."

Do you see that?

MS. ANDREA SHERRY: I do.

MR. ROBERT WATCHMAN: And why do you say that the need for a Basic Capital Maintenance

Provision for a given fiscal year is negated by the fact that the approved total equity target range will adjust to respond to changes in risk profile in future fiscal years?

MS. ANDREA SHERRY: One (1) of the arguments that I've seen for a Capital Maintenance Provision is that the Corporation will grow, and therefore, they need more capital to ensure their stability.

But if the Corporation is growing and, for example, the high loss ratio adverse scenario in dollar terms that we'll go up because you have more people, more -- the loss ratio creates more losses, the adverse scenario dollar amount will go up. So, the RSR range will go up with that.

MR. ROBERT WATCHMAN: Now, in the absence of a CMP if the Basic capital -- capital level declines to the point where a Rate Stabilization Reserve rebuilding fee is triggered --

MS. ANDREA SHERRY: M-hm.

MR. ROBERT WATCHMAN: -- which would occur then in the next GR -- GRA --

MS. ANDREA SHERRY: Right.

MR. ROBERT WATCHMAN: -- does that not raise concerns with respect to intergenerational equity?

MS. ANDREA SHERRY: When a rate -- an actuarial rate indication is done, you project everything to the rating year in question. So you're protecting what those people will cost the system, whoever is in that book, whoever's in that policyholder group in that year, that's what you're projecting for. So you're projecting losses, premium, expenses, everything in that year.

It doesn't matter what happened in prior years, it matters what happens in that year for the actuarial rate indication. So if the capital need, let's say, a horrible hail storm hits and the capital need of the Company changes significantly due to that one (1) event in the one (1) year, then their rating for that in the next year as part -- would have to be treated as a catastrophe load, et cetera, et cetera. But then they would be adding -- asking for an RSR rebuild at that point.

So that's pretty tightly connected, isn't it? Like from one (1) year to the next. What we're talking about is building up capital now for some -- for something that they might need in five (5) years, ten (10) years, or maybe never.

If -- if we treat every single year we

look at the RSR and we say, are you in a good place? We have our actuarial rate indication for the year in question, is your capital in a good place? Is it in with the RS -- is it the RSR range and we do that every year, that's pretty tightly connected to the group of policies as we move through time.

MR. ROBERT WATCHMAN: Now, my understanding in terms of the rationale that the Corporation has with respect to the request for a Capital Maintenance Provision is that, all things being equal, the capital levels will decrease over time, sort of naturally or by evolution.

Do you accept that rationale?

MS. ANDREA SHERRY: Capital is hard to predict. You don't know for sure what the investments are going to be, what your book of business is going to be, what your losses are going to be. You can't -- I mean, I can't predict that.

MR. ROBERT WATCHMAN: Okay. But is -- isn't that the very thing that a Capital Maintenance Provision is intending to address?

MS. ANDREA SHERRY: That would be my whole point is that they don't need that. If they have the RSR, and we watch from year to year if the capital does, in fact, really decrease and gets to that minimum then they would need some capital at that time.

MR. ROBERT WATCHMAN: Now, if we just scroll down to the next heading, Introduction and Basis for CMP in the 2019 GRA is incomplete.

You see that?

MS. ANDREA SHERRY: I do, yeah.

MR. ROBERT WATCHMAN: And you observe at the bottom of the page, the last sentence:

> "Neither a capital release provision nor a capital management plan have been reviewed and analysed."

Correct?

MS. ANDREA SHERRY: Correct.

MR. ROBERT WATCHMAN: Now, is it your opinion that it's inappropriate to consider the introduction of the Capital Maintenance Provision outside of that overall Capital Management Plan?

MS. ANDREA SHERRY: I -- I don't want to implement a Capital Maintenance Provision at all, and therefore, I wouldn't think a capital release for -- I think that a Capital Management Plan would be a good thing to have.

It would lay out what would happen if the RSR drops below the minimum, what would the response be, do we look at -- what kind of forecasts we would rely on to make those decisions or the public -- I think it would be good to have a plan.

I just -- I don't think that the Capital Maintenance Provision should be part of that time. And the fact -- my point here is the fact that it was thrown out with the -- without a full picture of what that means.

MR. ROBERT WATCHMAN: So I take it that it's your position that an overall plan that would have provisions for triggering rebuilding fees or rebates is sufficient to maintain Basic's capital position at the appropriate levels over time?

MS. ANDREA SHERRY: I do.

MR. ROBERT WATCHMAN: Scrolling down to the next section, Issue Number 7, the introduction of a CMP in the 2019 GRA would introduce intergenerational inequity.

And in the first paragraph, the second sentence reads:

"The capital collected is built up until a rebate is required."

Do you see that? And I think in questioning by My -- My Friend Mr. Guerra, you indicated that such a provision or such a buildup could trigger a rebate and our question, or my question more specifically, is whether you believe that the regular inclusion of a Capital Maintenance Provision in the approved rate will necessarily lead to an accumulation of Basic total equity and eventually Rate Stabilization Reserve rebate.

MS. ANDREA SHERRY: It won't necessarily. It's a possibility.

(BRIEF PAUSE)

MR. ROBERT WATCHMAN: Okay. So just -- if I could just review before leaving this area.

Do you accept that Basic actuarial liabilities still tend to naturally grow over time?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And they are accompanied by a comparable growth in investment assets?

MS. ANDREA SHERRY: M-hm. Yes.

MR. ROBERT WATCHMAN: Based on that, do you agree that Basic's capital position, as measured by the Minimum Capital Test, will therefore tend to naturally decline over time in the absence of a Capital Maintenance Provision, all other things being equal?

MS. ANDREA SHERRY: If we're just looking at the MCT?

MR. ROBERT WATCHMAN: Yes.

MS. ANDREA SHERRY: I'm trying to think of all the risks and what could happen to them. But, I think that would be true.

DR. WAYNE SIMPSON: Can I just add on this point, because I interjected before on this.

I just wonder how much of that scenario is predicated on the use of the naive interest rate forecast? Which, as I said, seems to be quite a pessimistic forecast in the context, like -- like the interest rate declined scenario. Seems to be a similarly -- an adverse event.

In other words, on the context of this adverse event, the MCT might decline. Would the MCT decline under the 50/50 and SIRF forecasts? I don't know but I -- I would like to -- I would like to know.

(BRIEF PAUSE)

MR. ROBERT WATCHMAN: Now, just in that paragraph just before conclusion, the final part of that sentence reads that:

"Holding capital on top of what is
held within the RSR range is
improper use of ratepayer's money."

Correct?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And it seems that that would perhaps advocate more for a rebate mechanism than being a position contrary -- to contradict the request for the Capital Maintenance Provision.

MS. ANDREA SHERRY: I'm not sure I understand your question, sorry.

MR. ROBERT WATCHMAN: So that statement, isn't it more directed to the requirement or the need for a rebate mechanism, as opposed to the Capital Maintenance Provision?

MS. ANDREA SHERRY: No. What I meant by that statement was that you have, basically, what I was referring to earlier in the sense that you determine the RSR range, you know what capital -- what the total equity is of the Corporation, if it's within that range, then the Corporation is adequately capitalized.

My comment there is that if you take more from the tax -- from the ratepayers now, that MPI does not actually need now, I feel that that is improper use of the ratepayers' money and potentially not good for the Manitoba economy.

MR. ROBERT WATCHMAN: Okay, I'm going to now change to the report on the role of DCAT and interest rate forecasting, for the record that's CAC Exhibit Number 9.

And again, just the first -- sorry, the second issue stated there is: How should the RSR be set and a chronology of proposals.

Do you see that?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: And just in terms of where we are now, is it true that in the General Rate Application, the -- the Corporation first determines the Basic total equity target capital range expressed in dollar terms?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: And then converts their proposed lower and upper threshold from the dollar equivalent into a Minimum Capital Test ratio?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: And just looking, if we could skip a few pages ahead to page 4, starting in the third block there you -- you referred to the MCT methodology, and is that what you mean by the MCT methodology that the Corporation uses?

DR. WAYNE SIMPSON: Yes, at the level of the DCAT, that's right.

MR. ROBERT WATCHMAN: Right, sorry, and I should've pointed out, I'm talking about the last sentence in that block.

"Indeed, there is little to recommend the MCT methodology over the long-standing percentage of premiums approach, since both approaches are indexed to the size of MPI's operations, but both lack any apparent link."

DR. WAYNE SIMPSON: Sorry, let me revise my answer then.

No, it's in -- the previous sentence talks about the MCT levels of 34 percent and 85 percent, which might be projected forward as the lower and upper RSR targets and that I -- that's what I'm referring to as using the MCT to set the lower and upper thresholds, that methodology.

And I'm -- I'm saying that that is in the respects that I'm talking about here, very much similar to the percentage of premiums approach. I mean, you could -- you could express the targets in terms of percentage of premiums too and project that forward. And instead of using the 10 and 20 percent figures from Kopstein, you could use whatever that comes out of the DCAT.

That would be, in terms of objectivity, transparency and simplicity, pretty much the same thing.

MR. ROBERT WATCHMAN: Okay. So, but just in terms of how the target capital threshold might be set, you would agree that simply selecting an arbitrary MCT ratio level is less desirable than the approach that the Corporation has used in terms of first determining a dollar and then translating it into a percentage.

DR. WAYNE SIMPSON: Using -- using the DCAT and especially -- in particular for the lower threshold with 1:40 tolerance level, yes.

MR. ROBERT WATCHMAN: So you would agree that that's preferable?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: Thank you. Now, at the bottom of the page you -- the last sentence, you state:

"The absence of such events, the current POP, Percentage Of Premiums, and DCAT methodologies should continue to inform the setting of the RSR range."

And as you've indicated, one (1) of the shortcomings of the POP is it's not linked to risk, whereas DCAT is.

So can you just perhaps explain for the Board what role you recommend for the POP methodology in setting the target capital levels.

DR. WAYNE SIMPSON: What -- well, this is much like the -- the recommendation of the 50/50 interest rate forecast in the sense that -- that I take what is currently -- I incur -- interpret is current board operation, which is the consideration of the POP because it has never said it isn't using the POP and it's been discussed over and over again in -- in previous GRA's just as I opted for the 50/50, because it is part of an existing Board Order.

I think in that context until there is a, you know, a clear indication that the DCAT is the sole methodology to inform the setting of the RSR range, I would say that -- that the POP continues to be used.

That said, given all the effort that has been put into the DCAT and its apparent strength in identifying the actual risks of the Corporation and -- and how they should be incorporated into setting the RSR, I would favour using the DCAT to set the RSR, both the lower and the upper thresholds in the fashion that we seem to be moving towards.

MR. ROBERT WATCHMAN: Now, Ms. Sherry, would you say that the determination of target capital or capital targets or ranges is a requirement of the Dynamic Capital Adequacy Test generally?

MS. ANDREA SHERRY: No, it's not.

MR. ROBERT WATCHMAN: And would it be fair to say that the main objective of a Dynamic Capital Adequacy Test investigation is to test satisfactory financial condition of the insurer?

MS. ANDREA SHERRY: Yes, it is. It's definitely to find out where the company is at risk and then to respond to that risk.

MR. ROBERT WATCHMAN: Now, -- and it's fair to say that the target capital analysis that is done to estimate the Basic tar -- target capital range either as done in the GRA or by MPI using the iterative method as previously approved by the pope -- by the PUB is a -- is an adaptation of Dynamic Capital

Adequacy Testing?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: Now, in your work is a -- an actuary, you have occasion, though, to prepare an analysis or analyses supporting a benchmark Minimum Capital Test solvency ratio for private sector and automobile insurance, or private-sector insurance companies?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And that's for approval by the Office of the Superintendent of Financial Institutions?

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: And in broad terms, can you describe how the approach you will follow in that work compares with the Board's previously approved iterative methodology for estimating the Basic target capital threshold levels?

MS. ANDREA SHERRY: The Minimum Capital Test in a private company is a regulatory requirement. It doesn't actually feed the risk management of a company though.

The regulator is -- is moving to using a DCAT-like process where the company would create a DCAT.

I can get all into where ORSA and OSFI is going, but the DCAT itself is what actually would drive the risk management of a company more than the MCT. The MCT is a regulatory number we have to report to OSFI.

And yes, we care. A private company cares very much if their MCT drops, because it could have implications if it's a stockholder company on price of a stock, for example, or implications of wh Me St h e Ar N Dy Ro Fu A' r Se H Er Ra Rt Ye .d or AAA or A and what your outlook is.

But the MCT in itself is just the one (1) number, right? And if it's a good number, then the company is happy. If it's not a good number then you have to go back to your risk management and find out what the issues are.

But in a company where the MCT is running well, that's where the DCAT comes in and you use that to actually analyze where are our biggest risks, what are they?

And we want to reduce that risk. So if it's BC earthquake or Alberta PPA or whatever it is we have to manage that so that our DCAT process -- that's what we use it for.

MR. ROBERT WATCHMAN: Thank you.

DR. BYRON WILLIAMS: Just for the record, and I do apologize. The acronym PPA?

MS. ANDREA SHERRY: I'm sorry, private passenger auto.

CONTINUED BY MR. ROBERT WATCHMAN:

MR. ROBERT WATCHMAN: But would it be fair to say that your work in this regard does adapt the Dynamic Capital Adequacy Testing to ensure a proper target capital analysis?

MS. ANDREA SHERRY: Sorry?

MR. ROBERT WATCHMAN: Does the -- in your work, do you also adapt -- are you not also adapting the Dynamic Capital Adequacy Test for the purposes of target capital determination?

MS. ANDREA SHERRY: Do we use the DCAT?

MR. ROBERT WATCHMAN: Yes.

MS. ANDREA SHERRY: Yes.

MR. ROBERT WATCHMAN: I'm going to now switch to the topic of interest rate forecasting, and that's Issue Number 3 in this report.

And I'm just going to go down to the -- scroll down to the fourth -- the fourth paragraph there, beginning almost -- approximately in the middle, and this is in the context of discussion about the standard interest rate forecasts.

And the statements are made that since the 2008 recession, do you see that?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: The SIRF, or Standard Interest Rate Forecast, has predicted that interest rates will rise going forward as the economy recovers.

In hindsight, the SIRF has been too optimistic about economic recovery and has overestimated interest rates as now familiar in figure INV-10, or figure INV-10 illustrates.

> "The foundation for rising interests remains solid."

And I'm just going to pause there. Did you intend to say "the foundation for rising interest rates remains solid"? Is that...

DR. WAYNE SIMPSON: Yes, thank you for correcting my typo. Sorry, I must've missed that in ten (10) readings. Sorry about that.

MR. ROBERT WATCHMAN: It happens.

DR. WAYNE SIMPSON: Interest rates.

MR. ROBERT WATCHMAN: So:

> "The foundation for rising interest

rates remains solid as there are limitations on the extent to which interest rates can fall without severe monetary disruption and economic recovery has historically been associated with rising interest rates to prevent an excessively rapid economic expansion and undo inflationary pressure.

Those foundations remain and the SIRF continues to predict rising interest rates, albeit at a slower pace than earlier forecasts."

Can you, Dr. Simpson, elaborate on what the fundamentals of economic theory suggests is a best estimate interest rate forecast at the present time?

DR. WAYNE SIMPSON: Well, as I've said, these are not normal times. We think that -- economists think and Bank of Canada thinks, I think interest rate forecasters think that we're approaching something closer, more closely resembling normal times.

But we're coming out of a -- both a reasonably sharp recession, not a long-lasting reception, (sic) but reasonably sharp, which had a fairly slow recovery by historical standards, and a period of low interest rates that probably is -- has not been observed, at least since the 1950s.

So, I think there has to be some caution in interest rate forecasting and to some extent I think the SIRF reflects this. I think the SIRF forecasts have become a little bit more cautious, I think that's evident in -- in the -- in the figure, in 10. But -- and I guess that's essentially what this statement says.

MR. ROBERT WATCHMAN: Now, if we could just scroll to the top of the next page, and that -- that following paragraph spoke about the Corporation's analysis of the standard error of competing interest rate forecasts.

And your comment at the end was that over the la -- latest two (2) GRAs you state that:

"The SIRF has actually been quite close to the actual rate both years, while the naive forecast has consistently under estimated it."

Do you believe then that this latest pattern is a meaningful departure from that of the earlier periods?

DR. WAYNE SIMPSON: Yes, I think

there's no question in the sense that the long period of a low policy rate and low interest rates has ended and the last two (2) years the period where the -- the overnight rate or policy rate has begun to rise.

The economy has moved -- moved towards capacity and listening to the latest comments by the Bank of Canada Governor, Stephen Poloz, is pretty much considered to be at capacity now and inflationary pressures are beginning to drive concerns that interest rates need to be higher.

MR. ROBERT WATCHMAN: Now, the Corporation, in its rebuttal to your report, and for the record, we don't have to go there, but for the record, it's MPI Exhibit 19, the Corporation raises the concern of recency bias when giving consideration to this latest pattern.

What can you tell us about "recency bias" and can you share with the Board any limitations you believe might place on what considerations should be given to the most recent data?

DR. WAYNE SIMPSON: Well, I think there's always some degree of recency bias in the sense that we tend to rely on the recent past, as opposed to the distant past.

We don't go back very much to the great

depression anymore because it happened a long time ago. So there is some recency bias.

I think we've gotten embedded in some notion that, you know, forecasting interest rates is simply a simple timeseries extrapolation process, whereas what it actually is, is a sophisticated process of modelling economies to see what's happening.

And while that modelling is based upon the historical data, not only of interest rates, but of all the other things that they can measure in the economy, I think the outcomes they try to project are those which reflect the -- the more recent economic conditions.

And in this case, very much the -- the movement of the economy towards a full capacity and, for want of a better term, the natural unemployment rate -- or the non-accelerating inflation rate of unemployment, I think is the term that's often used nowadays.

MR. ROBERT WATCHMAN: Now, if we could turn to the next page, the second paragraph there, and this is a -- a discussion about forecast bias, and about halfway down that paragraph it reads, "but recent naive forecast." Do you see that?

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN:

"But recent naive forecasts which have under-predicted interest rates by 0.45 percent and 0.60 percent and recent economic events, all of which point towards higher interest rates as the economy approaches full capacity imply a much higher probability that the naive forgot -- forecast will under-predict then over-predict interest rates."

DR. WAYNE SIMPSON: Yes.

MR. ROBERT WATCHMAN: And can you tell us what the foundation is for the statement that it is a much higher probability, that the naive forecast will be bias relative to the ---

DR. WAYNE SIMPSON: Well, simply -- simply it's more likely to be -- to have -- to produce a low interest rate forecast than one that is equal to what is actually going to be observed. It's going to under-predict it. Higher probability, in other words, if you had to put odds on under-predict versus over-predict they would not be 50/50. They would be something much higher for under-prediction.

MR. ROBERT WATCHMAN: And just so we're clear, that -- that your view in that regard is based on economic theory or statistical analysis?

DR. WAYNE SIMPSON: It's based on an understanding of how monetary policy operates, how that transmits to other interest rates like the Government of Canada benchmark rate and how the economy is performing and how that informs the Bank of Canada and causes them to react.

MR. ROBERT WATCHMAN: And sorry, Kristen, if we just scroll up there to the bottom of the first paragraph on that page.

And the last sentence in that paragraph reads:

"The naive interest rate forecast used by MPI explicitly ignores this important information from our central banking authority and other sources."

And with respect to the information, the central banking authority information, you're talking about the monetary policy reports, correct?

DR. WAYNE SIMPSON: From the Bank of Canada, that's right.

MR. ROBERT WATCHMAN: And ---

DR. WAYNE SIMPSON: And the -- and the increases in the policy rate. The actual decisions to increase the policy rate, which they justify.

MR. ROBERT WATCHMAN: And My Friend had asked you some questions about the correlation between the overnight lending rate and long-term bond yields.

And could you tell us then how closely you feel they are related and how does this inform the Board for purposes of interest rate forecasting for this GRA?

DR. WAYNE SIMPSON: Well, it would depend on the frequency which -- which measure the two (2) rates, because the -- the 10-year bond rate is going to move a lot. It's a market rate, and as a result it's quite volatile.

And if you look at the correlation between a volatile rate and a fair -- a very stable rate, which is the policy rate, then you're going to find fairly low correlation.

That correlation is going to go up as you measure the long-term bond rate less frequently. For example, as you go to monthly rates, quarterly rates, annual rates. Then you'll get a much higher correlation between the two (2) series, because the policy rate can only change when the Bank of Canada meets to consider that, and that only happens once -- what is it, every second month, or I think maybe eight (8) times a year.

So it's infrequent and it's not going to -- it's only changed five (5) times in two (2) years, the bank -- the 10-year bond rate changes daily.

MR. ROBERT WATCHMAN: Now, Kristen if we go to the last page, under recommendations, and recommendation 2, you recommend the use of the 50/50 interest rate forecast. And that the -- the last sentence there reads:

> "The naive interest rate forecast ignores recent monetary policy and economic events that indicates rising interest rates that are more consistent with the standard interest rate forecast."

Can you tell us why that observation doesn't lead you then to advocate the use of the standard interest rate forecast as opposed to the 50/50.

DR. WAYNE SIMPSON: When I wrote this it was slightly less apparent to me that events were moving towards a higher -- immediate higher interest rates.

Since then, we've had an actual rate increase. We've had some very good economic news in terms of growth and unemployment. We've also had some news that inflation is beginning to push the 3 percent boundary, at least the consumer price index.

And so that information wasn't available to me at the time, I suspect -- I can say that if I wrote this today I would -- I would argue for the standard interest rate forecast rather than the 50/50.

MR. ROBERT WATCHMAN: Okay, so in -- perhaps just ignoring for the moment or setting aside the Board's prior position on interest rate forecasting, what would your best estimate be for the interest rate forecast?

DR. WAYNE SIMPSON: The SIRF. I don't think I can do better than the banks. They spent a lot of money on this and they employ experienced and credible people.

MR. ROBERT WATCHMAN: Thank you, Dr. Simpson. Thank you, Ms. Sherry.

Mr. Chair, those are all my questions.

THE CHAIRPERSON: Okay, I would ask

the Board if they have any questions.

Ms. Sherry, maybe I can start with you. I take it from your testimony that we really can't compare MPI to anybody else?

MS. ANDREA SHERRY: Thank you. No, I don't think you can.

THE CHAIRPERSON: We can't compare them -- well, they can't use MCT because they're not a private sector company.

MS. ANDREA SHERRY: Agreed.

THE CHAIRPERSON: We can't compare them to BC because it's a different operation?

MS. ANDREA SHERRY: Product's different.

THE CHAIRPERSON: Product's different. We can't compare them to SGI because the process is different. SGI doesn't have annual -- annual hearings.

MS. ANDREA SHERRY: There is certain things that you can compare and look at, but one (1) of the differences between SGI and MPI is that they don't have rate hearings every year.

So their capital rate requirements, the process is completely different, but if you want to look at potentially loss development factors for certain coverages, I think that would be relevant for SGI and MPI.

THE CHAIRPERSON: But in terms of MTC or -- I'm doing it myself, I apologize.

Or -- or the Capital Maintenance Provision circumstances are different, so we shouldn't be doing the comparisons.

MS. ANDREA SHERRY: I don't think -- yeah, I don't think -- my answer is yes.

THE CHAIRPERSON: For the -- for the Capital Maintenance Provision, you said that you thought from coming after the technical conference there would be a discussion raised that -- a discussion raised at this hearing, rather than having it part of the application, is that correct?

MS. ANDREA SHERRY: Unfortunately I wasn't able to attend the conference, so just reading the transcript, I came away from that feeling nothing had been decided or that further discussions would occur. When I read it, it was not to me -- there was nothing conclusive.

So I was surprised to see the Capital Maintenance Provision in the filing.

THE CHAIRPERSON: How would there be a discussion at this hearing other than if it was in the application?

MS. ANDREA SHERRY: Honestly, I don't know. I was potentially thinking there would be another technical conference to further the discussion but...

THE CHAIRPERSON: In terms of the Capital Maintenance Provision, as I understand it, one (1) of the strong reasons you think it -- it would be inappropriate is because they appear before this Board every year.

The fact is, if there's a problem from year to year, they can always approach the Board as part of their General Rate Application and ask for a higher rate, is that correct?

MS. ANDREA SHERRY: They already have the RSR, so if the RSR is within the range set by the Public Utility Board, then yes, year to year you check where it is, you know what the capital position of the Company is and if they need a capital build.

THE CHAIRPERSON: In terms of -- of the RSR and a -- the use or need of a rebuilding fee, do you see a rebuilding fee as a last resort?

MS. ANDREA SHERRY: I see it as something that may be necessary if the capital is not within the range.

THE CHAIRPERSON: And how often would you see it being used? Is it something from year to year if they need it and they run out, you have a rebuilding fee and potentially a few years later you have a rebuilding fee, it would be better to have that then perhaps have a higher rate and money taken from consumers that -- that wasn't required?

MS. ANDREA SHERRY: My feeling is that if you look at it every single year, the requirement would be quite small, if you needed a capital rebuild.

And I don't think you would need it every year. I think it -- like I spoke to you a bit earlier, is that capital position is dependent on so many things. MPI could have a great year and their capital all of a sudden is better and that holds them for a few years.

It's -- there's so many things that could occur. It can drop suddenly because of a severe event or series of events, really bad winter, whatever. But the point is that every year you look at it and you analyze it and -- and you decide where your capital is and if it's sufficient. And if it's not, then you take a point or two (2).

THE CHAIRPERSON: Should we be -- should the Board be focusing on having the lowest fee possible to keep money in the economy and with consumers recognizing the risk that we may need a rebuilding fee every -- once every four (4) or five (5) years?

MS. ANDREA SHERRY: To me, that would make more sense to keep the rebuilding fee closer to the year, yes.

THE CHAIRPERSON: Okay. Can we go, Kristen, can we go to Figure 1 of -- yes, it's CAC-26. It's the overnight and 10-year bond rate. Figure 1. Unfortunately, there is no page number. Sorry, is it page 14? Yes, that's the one. Thank you.

Dr. Simpson, I'm looking at the -- at the overnight rate, sorry, for 2016. Would I be correct -- the red line.

Would I be correct -- this isn't the right chart but if I -- would I be correct that if I went back about eight (8) years that line sitting, it's about that flat.

DR. WAYNE SIMPSON: Yes, subject to check, I would think that's pretty accurately describes. In other words, they didn't go below .5 --

THE CHAIRPERSON: Five, right.

DR. WAYNE SIMPSON: I think that is pretty -- as low as they felt they could go based --

because of monetary con -- considerations.

THE CHAIRPERSON: If we were looking at interest rates at that time, was the naive forecast the right rate?

DR. WAYNE SIMPSON: In hindsight, it was a -- it was a better forecast than the -- than the SIRF, just because of the -- of those circumstances described by that flat line, sure.

THE CHAIRPERSON: One (1) of the problems I'll admit I have is that in my first hearing here, which was in 2016, there was a lot of testimony that SIRF was the right rate because interest rates have to go up because they've been flat for so long.

And I believe my comment at the time was, that's fine, but I've gone through the transcript for the last five (5) years and I've heard the same statements made. They have to go up at some point and my question for you, like, I think my question to you at that time was, why?

I mean, they could be flat for another two (2) years. Why was -- SIRF -- why was everybody pushing SIRF at that time? Was this just hope?

DR. WAYNE SIMPSON: Well, it's more than hope, because as I said before, that -- there's -- there's money on the line with the banks and other financial institutions in getting good forecasts to base their decisions on, and interest rate forecasts are one (1) of those.

So it isn't that they do this, you know, just based on hope. I mean, the -- the projections were that the economy would recover and as soon as the economy recovered to the -- certainly to the point we're at, but even the point we were at last year, then there would be -- the Bank of Canada would start to increase interest rates.

That didn't happen as quickly as people expected this, you know, this -- this was not a -- something that had a historical precedent.

THE CHAIRPERSON: I made note of your last comments, "banks spend a lot of money on this." They spend a lot of money on that and they got it wrong for eight years, is that right?

DR. WAYNE SIMPSON: That's right. That's right.

THE CHAIRPERSON: So, when -- when -- in the -- in the 2016 hearing, which I guess is a little early for the increase and MPI brought forward Dr. Cleary who said 50/50, the comment on some was well, no, but it's -- it's still SIRF.

That's when interest rates were flat.

Interest rates have now gone up and 50/50 is the -- until your comment today, 50/50 was the way to proceed, is that right?

DR. WAYNE SIMPSON: Yes. One (1) thing I'd say is that most of my comments are made in the context of the DCAT, which has the four-year horizon as opposed to the breakeven rate indication which has the twelve (12) to eighteen (18) month horizon.

I think there was more confidence, certainly in 2016, that interest rates would rise over the next four (4) years and that they'd rise in the next year.

THE CHAIRPERSON: Sir, what is the importance of having the four-year ri -- horizon versus the twelve (12) to eighteen (18) month horizon, considering that we are here every twelve (12) months?

DR. WAYNE SIMPSON: Well, the four-year horizon on the DCAT, and perhaps Ms. Sherry could speak to this as well, I take the one that says that -- that it's going to take time for management action and it's going to take time for these adverse scenarios to play out, and they want to capture them in a meaningful way that -- that can't necessarily be captured over twelve (12) months, even though the initial signs of that could be there in twelve (12) months in the sense of the -- of the signs that point towards what's going to come.

For example, if you're talking about a claims forecast which will play out over a longer period of time, the next year you'll have the information on that claims foreca -- that claims outcome, that high-loss ratio adverse event, you'll have some of that information in twelve (12) months, even if it hasn't entirely played out.

And similarly with, say, the equity decline. You could have a drop, a sharp drop in equities, and we've had some kind of technical corrections of that, that sort of warn us that that could happen.

You can see evidence of that even though it's the final impacts of that haven't played themselves out in a twelve-month period.

So I think that's why the four-year period is there. Although most of the RSR is based on a two-year -- now on the two-year outcomes.

THE CHAIRPERSON: Ms. Sherry, did you want to add something? I see you --

MS. ANDREA SHERRY: I think he did a great job of it. Basically that's the answer, is that you want to see how the scenario plays out and you want -- so if something happens now, how does that play out, how does the market respond, how does the Company respond. It takes time to see that.

THE CHAIRPERSON: In terms of the change in the way MPI has changed their asset liability management, and the fact that they're trying to relate liabilities to specific investments, does that lead to a change from four (4) years to a shorter period of time?

Does it have any -- sorry, I guess I should ask: Does it have any impact?

MS. ANDREA SHERRY: I don't believe it would, no.

THE CHAIRPERSON: But your long-term liabilities have been matched now.

MS. ANDREA SHERRY: Right.

THE CHAIRPERSON: So, does the interest rate factor play as big a role as it did before when you had equities and the liabilities all co-mingled?

DR. WAYNE SIMPSON: My general sense, and I profess no great expertise on the financial model, but as you run these scenarios through the financial model, these adverse scenarios, it will make a difference. Yes.

They won't be as -- as severe as they would have been before, that's -- that's my sense of of the -- of the -- of some of the declining risk that's associated with the lower RSR thresholds.

MS. ANDREA SHERRY: If that -- if the asset liability management is within the model that is used to perform the DCAT, then yes, it would lower the risk and therefore have an impact.

THE CHAIRPERSON: Okay. What is the upside or downside if instead of going -- we're going to go naive or 50/50 or SIRF, that we just pick an interest rate of a specific point now and say that's the rate we're going to put into our projections, we'll be back here a year from now and we'll see whether we need to raise rates or lower rates to take into account the rate we selected.

MS. ANDREA SHERRY: That's essentially what you do when you do the rate indication, is you have to -- you project for the rate and year in question what the return would be.

But I think what you're suggesting wouldn't be necessarily possible for the DCAT and honestly, Luke would be able to answer this question much better than I can, in terms of how the projected

-- you have to pick which one you're going with so that you can project it for the four-year time horizon.

DR. WAYNE SIMPSON: That is the naive forecast.

THE CHAIRPERSON: That's the naive. Okay.

MS. ANDREA SHERRY: And that's why I guess it has a bigger impact on DCAT, yes.

THE CHAIRPERSON: Those are my questions.

Mr. Williams, did you have any redirect?

DR. BYRON WILLIAMS: No re-examination, Mr. Chair.

THE CHAIRPERSON: Thank you, everyone, I believe that we're adjourned until 9:00 a.m. on Monday morning. Thank you all, have a good weekend.

--- Upon adjourning at 2:46 p.m.

Certified Correct,

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Cheryl Lavigne, Ms.