

MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA PUBLIC INSURANCE CORPORATION (MPI)  
GENERAL RATE APPLICATION FOR  
2017-2018 INSURANCE YEAR  
HEARING

Before Board Panel:

Robert Gabor, Q.C. - Board Chairperson  
Karen Botting - Board Member  
Anita Neville - Board Member  
Allan Morin - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
November 1, 2016  
Pages 1981 to 2110



“When You Talk - We Listen!”



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

## APPEARANCES

Kathleen McCandless ) Board Counsel  
Matt Ghikas ) Manitoba Public  
Michael Triggs (np) ) Insurance  
Byron Williams ) CAC (Manitoba)  
Jared Wheeler (student-at-law) )  
Raymond Oakes (np) ) CMMG  
Erika Miller ) CAA  
Christian Monnin (np) ) Bike Winnipeg

	TABLE OF CONTENTS	
		Page No.
1		
2		
3	List of Exhibits	1984
4		
5	CAC (MANITOBA) PANEL 2:	
6	WAYNE SIMPSON, Sworn	
7	ANDREA SHERRY, Sworn	
8		
9	Examination-in-Chief by Mr. Byron Williams	
10	(Qual. Re: Ms. Sherry)	1989
11	Ruling (Qual. Re: Ms. Sherry)	1996
12	Continued Examination-in-Chief	
13	by Mr. Byron Williams (Qual. Re:	
14	Dr. Simpson)	1996
15	Cross-examination by Mr. Matt Ghikas	
16	(Qual. Re: Dr. Simpson)	2002
17	Ruling (Qual. Re: Dr. Simpson)	2005
18	Continued Examination-in-Chief	
19	by Mr. Byron Williams	2006
20	Cross-examination by Mr. Matt Ghikas	2027
21	Cross-examination by Ms. Kathleen McCandless	2077
22	Re-Direct Examination by Mr. Byron Williams	2105
23		
24	Certificate of Transcript	2110
25		

1	LIST OF EXHIBITS		
2	EXHIBIT NO.	DESCRIPTION	PAGE NO.
3	MPI-72	Response to Undertaking 31	1986
4	MPI-73	Response to Undertaking 32	1986
5	MPI-74	Response to Undertaking 35	1986
6	MPI-75	Response to Undertaking 37	1986
7	MPI-76	Response to Undertaking 39	1986
8	MPI-77	Response to Undertaking 41	1987
9	MPI-78	Response to Undertaking 36	1987
10	MPI-79	Response to Undertaking 38	1987
11	MPI-80	Response to Undertaking 33	1987
12	CAC-25	'Actuarial Rate Making' by Andrea	
13		Sherry	2006
14	CAC-26	PowerPoint prepared by Dr. Wayne	
15		Simpson using DCAT to address risk	2006
16	MPI-81	Excerpt from OSFI guidelines	2058
17			
18			
19			
20			
21			
22			
23			
24			
25			

1 --- Upon commencing at 10:32 a.m.

2

3 THE CHAIRPERSON: Okay. Perhaps we'll  
4 start.

5 Ms. McCandless, did you want to start?

6 MS. KATHLEEN MCCANDLESS: Yes. Good  
7 morning. I believe Mr. Pelly is on the line. Brian,  
8 can you hear me?

9 MR. BRIAN PELLY (BY PHONE): Yes, I'm  
10 here.

11 MS. KATHLEEN MCCANDLESS: Okay. Thank  
12 you.

13 THE CHAIRPERSON: Great. Thank you,  
14 Brian.

15 Mr. Ghikas --

16 MR. MATT GHIKAS: Thank you.

17 THE CHAIRPERSON: -- welcome back from  
18 Vancouver. Thanks for --

19 MR. MATT GHIKAS: Thank you. Happy  
20 Halloween, everyone. I have a few undertakings to  
21 deal with this morning. I believe hard copies were --  
22 were circulated just now.

23 The first one was the response to  
24 Undertaking 31, and it would be MPI Exhibit 72.

25

1 --- EXHIBIT NO. MPI-72: Response to Undertaking 31

2

3 MR. MATT GHIKAS: The next one is the  
4 response to Undertaking number 32, and that would be  
5 MPI Exhibit number 73.

6

7 --- EXHIBIT NO. MPI-73: Response to Undertaking 32

8

9 MR. MATT GHIKAS: The next one is the  
10 response to Undertaking number 35, and that would be  
11 MPI Exhibit number 34 -- sorry, 74.

12

13 --- EXHIBIT NO. MPI-74: Response to Undertaking 35

14

15 MR. MATT GHIKAS: And the response to  
16 Undertaking number 37 is MPI Exhibit number 75.

17

18 --- EXHIBIT NO. MPI-75: Response to Undertaking 37

19

20 MR. MATT GHIKAS: The response to  
21 Undertaking number 39 is MPI Exhibit number 76.

22

23 --- EXHIBIT NO. MPI-76: Response to Undertaking 39

24

25 MR. MATT GHIKAS: The response to

1 Undertaking number 41 is the response to MPI -- sorry,  
2 is MPI Exhibit 77.

3

4 --- EXHIBIT NO. MPI-77: Response to Undertaking 41

5

6 MR. MATT GHIKAS: The response to  
7 undertaking number 36 is MPI Exhibit 78.

8

9 --- EXHIBIT NO. MPI-78: Response to Undertaking 36

10

11 MR. MATT GHIKAS: The response to  
12 Undertaking number 38 is MPI Exhibit 79.

13

14 --- EXHIBIT NO. MPI-79: Response to Undertaking 38

15

16 MR. MATT GHIKAS: The response to  
17 Undertaking number 33 is MPI Exhibit 80.

18

19 --- EXHIBIT NO. MPI-80: Response to Undertaking 33

20

21 MR. MATT GHIKAS: There are a couple  
22 of other documents that were included there. Those  
23 were -- are actually aids to cross and I will put them  
24 after they've been put to the witness, so I'll deal  
25 with those in due course. Thank you, Mr. Chairman.

1 THE CHAIRPERSON: Thank you, Mr.  
2 Ghikas. Can I just ask: Are there other undertakings  
3 outstanding or are we caught up?

4 MR. MATT GHIKAS: There is at least  
5 one (1) more. Undertakings...

6

7 (BRIEF PAUSE)

8

9 THE CHAIRPERSON: Yeah, I -- I don't  
10 want to rush it. I'm just trying to figure out where  
11 we're at with them.

12 MR. MATT GHIKAS: I'll give you an  
13 update in a moment, Mr. --

14 THE CHAIRPERSON: Okay.

15 MR. MATT GHIKAS: -- Mr. Chairman, at  
16 the break perhaps.

17 THE CHAIRPERSON: Sure. Okay. Mr.  
18 Williams, good morning.

19 MR. BYRON WILLIAMS: Good morning.  
20 Everyone sounds unusually cheerful. We must be either  
21 coming off a weekend, or near the end of the hearing.

22 THE CHAIRPERSON: I -- I think that  
23 everyone is happy that we survived Halloween with our  
24 houses intact.

25 MR. BYRON WILLIAMS: Good morning, and

1 to members of the panel, and I -- I wish to introduce  
2 Ms. Andrea Sherry and Dr. Wayne Simpson, who will be  
3 appearing, and I'd ask if they could be sworn?

4

5 CAC (MANITOBA) PANEL 2:

6

7 WAYNE SIMPSON, Sworn

8 ANDREA SHERRY, Sworn

9

10 EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS (QUAL. RE:  
11 MS. SHERRY):

12 MR. BYRON WILLIAMS: In terms of  
13 qualifications we'll proceed with Ms. Sherry first.  
14 And I'd ask, Diana, to pull up CAC Exhibit 9, which is  
15 the curriculum vitae of Ms. Sherry.

16 Ms. Sherry, you -- in terms of  
17 education you received a B.Com in actuarial  
18 mathematics in 1990?

19 MS. ANDREA SHERRY: Yes.

20 MR. BYRON WILLIAMS: And you became a  
21 fellow of the Causality and Actuarial Society, and of  
22 the Canadian Institute of Actuaries in the year 2000?

23 MS. ANDREA SHERRY: That's correct.

24 MR. BYRON WILLIAMS: And you became a  
25 chartered risk manager and a fellow chartered

1 insurance professional in 2005?

2 MS. ANDREA SHERRY: Correct.

3 MR. BYRON WILLIAMS: And you received  
4 your certified management accountant designation in  
5 2008?

6 MS. ANDREA SHERRY: Correct.

7 MR. BYRON WILLIAMS: Okay. And if we  
8 could just turn, Diana, to the -- to the back of Ms.  
9 Sherry's CV to the MPI experience?

10 Ms. Sherry, between 1991 and 1998 you  
11 served as an associate actuary at MPI?

12 MS. ANDREA SHERRY: That's correct,  
13 yeah.

14 MR. BYRON WILLIAMS: And your role  
15 there involved the calculation of policy liabilities,  
16 the forecast of premiums, and claim's amounts?

17 MS. ANDREA SHERRY: True, yeah.

18 MR. BYRON WILLIAMS: And you were also  
19 involved with the preparation of extension rates  
20 reports, rate making methodology reports, and claim's  
21 forecasting reports. Agreed?

22 MS. ANDREA SHERRY: Agreed.

23 MR. BYRON WILLIAMS: And you assisted  
24 in the preparation of the PUB Application as well  
25 during that time period?

1 MS. ANDREA SHERRY: Yeah.

2 MR. BYRON WILLIAMS: Okay. Diana, if  
3 we could turn one (1) page over to the -- the work  
4 with Federated Insurance Company of Canada.

5 Ms. Sherry, you were -- served as an  
6 actuary with Federated Insurance Company between 1999  
7 and 2004?

8 MS. ANDREA SHERRY: Yeah.

9 MR. BYRON WILLIAMS: And you were  
10 their first in-house actuary responsible for actuarial  
11 systems?

12 MS. ANDREA SHERRY: Yeah.

13 MR. BYRON WILLIAMS: That involved,  
14 among other things, calculation of indications and  
15 rate filings with regulators?

16 MS. ANDREA SHERRY: Yes.

17 MR. BYRON WILLIAMS: You also  
18 monitored the IBNR adequacy on a monthly basis?

19 MS. ANDREA SHERRY: Yes.

20 MR. BYRON WILLIAMS: Diana, just  
21 scrolling up the -- yeah, that's perfect. You served  
22 as both assistant vice-president and corporate --  
23 corporate actuary for Saskatchewan Government  
24 Insurance between '04 and '08?

25 MS. ANDREA SHERRY: Yes.

1 MR. BYRON WILLIAMS: And you operated  
2 as the valuation actuary both for the auto fund and  
3 SGI Canada Insurance Services?

4 MS. ANDREA SHERRY: Yes.

5 MR. BYRON WILLIAMS: You prepared  
6 regular rate indications and rate filings for the  
7 Province of Alberta?

8 MS. ANDREA SHERRY: Yes.

9 MR. BYRON WILLIAMS: You were  
10 responsible for the implementation of CLEAR for the  
11 Basic coverage?

12 MS. ANDREA SHERRY: Yes.

13 MR. BYRON WILLIAMS: And you're quite  
14 involved with termination analysis in the long-term  
15 reserving model and implementation of recommended  
16 termination rate changes, agreed?

17 MS. ANDREA SHERRY: Agreed.

18 MR. BYRON WILLIAMS: Diana, moving to  
19 the top of the page and actually onto the next page.  
20 That's perfect there.

21 From 2008 through tve -- 2011 you  
22 served as vice-president solvency and vice-president  
23 corporate actuary for Aviva, A-V-I-VA, Canada?

24 MS. ANDREA SHERRY: Yes.

25 MR. BYRON WILLIAMS: As part of your

1 duties you managed the Solvency II and economic  
2 capital teams?

3 MS. ANDREA SHERRY: Yeah.

4 MR. BYRON WILLIAMS: You worked within  
5 enterprise risk management to ensure continued  
6 viability of the Company from a regulatory and  
7 economic capital basis?

8 MS. ANDREA SHERRY: True, yeah.

9 MR. BYRON WILLIAMS: And you were  
10 responsible for economic capital and stress scenario  
11 testing, or you oversaw?

12 MS. ANDREA SHERRY: Yeah.

13 MR. BYRON WILLIAMS: And we don't need  
14 to turn to the next page, Diana.

15 But in terms of -- you also manage the  
16 capital and investment compliance and corporate teams?

17 MS. ANDREA SHERRY: Yes.

18 MR. BYRON WILLIAMS: And in that role,  
19 you're responsible for the determination of trend,  
20 loss ratio, and other inputs to the planning model?

21 MS. ANDREA SHERRY: Yes.

22 MR. BYRON WILLIAMS: You were  
23 responsible for continuous monitoring of capital  
24 levels and investment -- and the investment portfolio?

25 MS. ANDREA SHERRY: Yeah.

1 MR. BYRON WILLIAMS: And  
2 implementation of a reinsurance plan?

3 MS. ANDREA SHERRY: Yes.

4 MR. BYRON WILLIAMS: And for one (1)  
5 of the companies, Aviva, being traders, you were  
6 responsible for signing off on the dyna -- dynamic  
7 capital adequacy reports?

8 MS. ANDREA SHERRY: Yes.

9 MR. BYRON WILLIAMS: And finally to  
10 your current position with Wawanesa Insurance --  
11 Mutual Insurance Company, is the proper title now VP  
12 Inpure -- Insurance Solutions?

13 MS. ANDREA SHERRY: Yes.

14 MR. BYRON WILLIAMS: And you're  
15 responsible for actuarial pricing and product  
16 development for all Canadian jurisdictions?

17 MS. ANDREA SHERRY: And the US.

18 MR. BYRON WILLIAMS: And the US. And  
19 you're responsible for underwriting, structure, and  
20 function across the organization?

21 MS. ANDREA SHERRY: Yes.

22 MR. BYRON WILLIAMS: And working with  
23 the director of Enterprise Risk Management you're  
24 responsible for the implementation of an ERM  
25 environment?

1 MS. ANDREA SHERRY: Yes.

2 MR. BYRON WILLIAMS: Ms. Sherry, just  
3 to finish up. In terms of your work be -- with or  
4 before the Manitoba Public Utilities Board you have  
5 consulted with CAC (Manitoba) on MPI rate applications  
6 for the last five (5) years, including reviews of  
7 claims liabilities, rate setting methodology, and RSR-  
8 related issues?

9 MS. ANDREA SHERRY: Yeah. Yes.

10 MR. BYRON WILLIAMS: You coauthored  
11 with Dr. Simpson a report on RRR -- RSR issues in  
12 2014?

13 MS. ANDREA SHERRY: Yes.

14 MR. BYRON WILLIAMS: And you were  
15 qualified as an expert and provided testimony to the  
16 PUB last year on RSR-related issues on evidence that  
17 you had developed with Dr. Simpson?

18 MS. ANDREA SHERRY: Yes.

19 MR. BYRON WILLIAMS: Mr. Chair and  
20 members of the panel, I'd ask that Ms. Sherry be  
21 qualified as having expertise in actuarial manners,  
22 specifically: 1) valuation, including the calculation  
23 of policy liabilities, forecast premiums, and claims  
24 amounts based upon trends.

25 So that's valuation, including the

1 calculation of policy liabilities, forecast premiums,  
2 and claims amounts based upon trends.

3                   Secondly, solvency and economic capi --  
4 capital, including oversight of capital stress testing  
5 and economic capital calculations and, finally,  
6 actuarial pricing and product development. Actuarial  
7 pricing and product development.

8                   MR. MATT GHIKAS: No comments from me,  
9 Mr. Chairman.

10

11 RULING (QUAL. RE. MS. SHERRY):

12                   THE CHAIRPERSON: We will qualify Ms.  
13 Sherry as a witness -- as an expert based on the  
14 wording proposed by Mr. Williams.

15

16 CONTINUED EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS  
17 (QUAL. RE: DR. SIMPSON):

18                   MR. BYRON WILLIAMS: And in terms of -  
19 - and turning to Dr. Simpson. Certainly we'd like to  
20 pull up his CV at CAC-10. We're proposing that he be  
21 qualified as an expert in applied econometrics.

22                   Dr. Simpson, would it be correct to  
23 suggest that epl -- applied microeconomics is the  
24 study of the behaviour of individual agents whether  
25 firms or households in the market using modern theory

1 and empirical metal -- methods and that --

2 DR. WAYNE SIMPSON: Sorry --

3 MR. BYRON WILLIAMS: -- and that --

4 yes, go ahead.

5 DR. WAYNE SIMPSON: Too quick. Yes.

6 MR. BYRON WILLIAMS: And it seeks to  
7 apply that analysis to practical problems such as risk  
8 management and investment strategies?

9 DR. WAYNE SIMPSON: Yes.

10 MR. BYRON WILLIAMS: And would it be  
11 fair to say that -- suggest that applied econometrics  
12 uses specific statistical techniques, particularly  
13 regression methods, to analyze and predict economic  
14 behaviour and to apply it to practical social  
15 problems?

16 DR. WAYNE SIMPSON: Yes.

17 MR. BYRON WILLIAMS: Thank you. In  
18 terms of your education, you received an -- an MSC in  
19 economics from the London School of Economics, not  
20 that long ago, in 1974?

21 DR. WAYNE SIMPSON: Not that long ago,  
22 yes.

23 MR. BYRON WILLIAMS: And a PhD from  
24 LSE, or London School of Economics in 1977?

25 DR. WAYNE SIMPSON: That's correct.

1 MR. BYRON WILLIAMS: And you are a  
2 full professor in the Department of Economics at the  
3 University of Manitoba?

4 DR. WAYNE SIMPSON: Yes.

5 MR. BYRON WILLIAMS: You've taught  
6 there since 1979?

7 DR. WAYNE SIMPSON: Yes.

8 MR. BYRON WILLIAMS: And you served as  
9 department head on two (2) separate occasions?

10 DR. WAYNE SIMPSON: Two (2)  
11 consecutive occasions, yeah.

12 MR. BYRON WILLIAMS: Running --

13 DR. WAYNE SIMPSON: Both five (5) year  
14 terms.

15 MR. BYRON WILLIAMS: Okay. And in  
16 total, from 1997 through 2008?

17 DR. WAYNE SIMPSON: Yes.

18 MR. BYRON WILLIAMS: And, sir, your  
19 areas of expe -- academic expertise in specialization  
20 include labour economics, applied econometrics,  
21 applied microeconomics, and economic and social policy  
22 analysis?

23 DR. WAYNE SIMPSON: Yes.

24 MR. BYRON WILLIAMS: You have co-  
25 authored or authored three (3) books and more than

1 fifty (50) peer-reviewed articles on these and related  
2 topics?

3 DR. WAYNE SIMPSON: Yes.

4 MR. BYRON WILLIAMS: Among those peer-  
5 reviewed articles are two (2) papers on the impact of  
6 risk on the behaviour of the firm?

7 DR. WAYNE SIMPSON: Yes.

8 MR. BYRON WILLIAMS: You are currently  
9 on the editorial board of Canadian Public Policy?

10 DR. WAYNE SIMPSON: Yes.

11 MR. BYRON WILLIAMS: And that is  
12 Canada's foremost peer-reviewed academic journal for  
13 economic and social policy?

14 DR. WAYNE SIMPSON: Yes.

15 MR. BYRON WILLIAMS: And you served a  
16 three (3) year term as -- on the executive counsel of  
17 the Canadian Economics Association?

18 DR. WAYNE SIMPSON: Yes, that just  
19 expired.

20 MR. BYRON WILLIAMS: And you were the  
21 2014 recipient of the McCracken Award for the  
22 development and analysis of economic statistics from  
23 the Canadian Economics Association?

24 DR. WAYNE SIMPSON: That's correct.

25 MR. BYRON WILLIAMS: Apart from your

1 busy academic career, Dr. Simpson, you have worked at  
2 the Bank of Canada, the Federal Department of Labour,  
3 and the Economic Council of Canada?

4 DR. WAYNE SIMPSON: Yes.

5 MR. BYRON WILLIAMS: You have also  
6 served as a consultant both to the private sector and  
7 government primarily in the areas of labour economics  
8 and policy evaluation?

9 DR. WAYNE SIMPSON: Yes.

10 MR. BYRON WILLIAMS: And in recent  
11 years you have served as an expert advisor to Prairie  
12 Research Associates and Human Resources and Skill  
13 Development Canada?

14 DR. WAYNE SIMPSON: Yes.

15 MR. BYRON WILLIAMS: Before the Public  
16 Utilities Board, Dr. Simpson, you provided expert  
17 opinion on behalf of CAC (Manitoba) at both the 2007  
18 and 2016 hearing on Payday loan fees?

19 DR. WAYNE SIMPSON: Yes.

20 MR. BYRON WILLIAMS: You appeared as  
21 an expert in the 2014 NFAT review of Manitoba Hydro's  
22 Preferred Development Plan on behalf of CAC  
23 (Manitoba)?

24 DR. WAYNE SIMPSON: Yes, I did.

25 MR. BYRON WILLIAMS: And you have been

1 qualified as having expertise in applied  
2 microeconomics and applied econometrics before the PUB  
3 on a number of occasions?

4 DR. WAYNE SIMPSON: Yes, I have.

5 MR. BYRON WILLIAMS: In terms of MPI,  
6 you testified with Dr. Hum in the 2010 GRA on matters  
7 related to investments?

8 DR. WAYNE SIMPSON: Yes.

9 MR. BYRON WILLIAMS: And you provided  
10 evidence related to the RSR at the 2007 GRA with Dr.  
11 Hum?

12 DR. WAYNE SIMPSON: Yes.

13 MR. BYRON WILLIAMS: At the 2013 GRA  
14 on your own behalf?

15 DR. WAYNE SIMPSON: That's correct.

16 MR. BYRON WILLIAMS: And in 2014 with  
17 Ms. Sherry?

18 DR. WAYNE SIMPSON: That's correct,  
19 yeah.

20 MR. BYRON WILLIAMS: And, sir, your  
21 professional expertise in applied microeconomic and  
22 applied econometrics, I'll suggest to you, provides a  
23 foundation for the analysis of issues related to the  
24 management of risk by firms and to the assessment of  
25 risk using modern economic and statistical techniques?

1 DR. WAYNE SIMPSON: Yes.

2 MR. BYRON WILLIAMS: Mr. Chair and  
3 members of the panel, I'd ask that Dr. Simpson be  
4 qualified as an expert in applied econometrics and  
5 applied microeconomics.

6 THE CHAIRPERSON: Thank you, Mr.  
7 Williams.

8 Mr. Ghikas...?

9 MR. MATT GHIKAS: I have a few  
10 questions, Mr. Chairman. Thank you.

11

12 CROSS-EXAMINATION BY MR. MATT GHIKAS (QUAL. RE: DR.  
13 SIMPSON):

14 MR. MATT GHIKAS: Good morning, Dr.  
15 Simpson and Ms. Sherry. My name's Matt Ghikas. I'm  
16 the lawyer for MPI in this proceeding.

17 Before we start, Ms. Sherry, would you  
18 mind pulling your -- your mic just a little closer to  
19 you? I was having trouble hearing you before.

20 MS. ANDREA SHERRY: Okay.

21 MR. MATT GHIKAS: Okay.

22 MS. ANDREA SHERRY: Is that better?

23 MR. MATT GHIKAS: That is. Thank you.

24 Now, Dr. Simpson, your -- the books  
25 that you've identified in -- in your CV, the three (3)

1 books there on the second page of -- of your CV, none  
2 of those relate to finance or capital market  
3 conditions, correct?

4 DR. WAYNE SIMPSON: That's correct.

5 MR. MATT GHIKAS: And they're --  
6 they're not related to the insurance industry, are  
7 they?

8 DR. WAYNE SIMPSON: No.

9 MR. MATT GHIKAS: They're focused on  
10 labour economics?

11 DR. WAYNE SIMPSON: Broadly defined,  
12 the income maintenance one would be more carefully  
13 classified as social and economic policy.

14 MR. MATT GHIKAS: Thank you. And your  
15 -- your CV lists an impressive list of articles. Mr.  
16 Williams counted them as being more than fifty (50)  
17 peer-reviewed articles.

18 And again there is -- there's a  
19 substantial focus in those on labour economic issues,  
20 poverty and immigration, correct?

21 DR. WAYNE SIMPSON: I would say that  
22 is the -- the preponderance of them, yes.

23 MR. MATT GHIKAS: Yeah. And -- and  
24 again, none of them are on finance or capital market  
25 conditions?

1 DR. WAYNE SIMPSON: No.

2 MR. MATT GHIKAS: And none are  
3 specifically related to the insurance industry?

4 DR. WAYNE SIMPSON: That's correct.

5 MR. MATT GHIKAS: And the same  
6 comments would apply with respect to the articles and  
7 books, articles in refereed journals and other  
8 articles that comprise seven and a half (7 1/2) pages  
9 of your CV?

10 DR. WAYNE SIMPSON: You mean the ones  
11 that aren't peer reviewed?

12 MR. MATT GHIKAS: Correct.

13 DR. WAYNE SIMPSON: Subject to recall,  
14 I would say yes.

15 MR. MATT GHIKAS: Okay. Thank you.  
16 And in terms of your research grants, the same  
17 comments would apply?

18 DR. WAYNE SIMPSON: Yes.

19 MR. MATT GHIKAS: And your work in --  
20 as you indicated this morning, your work as a  
21 consultant in the private sector and government was --  
22 and it indicates in your -- your note -- primarily in  
23 the areas of labour economics and social and policy  
24 evaluation, correct?

25 DR. WAYNE SIMPSON: That's correct,

1 other than the recent appearance before the PUB.

2 MR. MATT GHIKAS: Thank you. And  
3 you're not an actuary?

4 DR. WAYNE SIMPSON: That's correct.

5 MR. MATT GHIKAS: Okay. Thank you.  
6 Those are my questions for you right now, Dr. Simpson.  
7 Simply with -- you know, I'll -- what I  
8 asked, Mr. Chairman, I'm just asking to go to weight.  
9 And -- and certainly no objection to Dr. Simpson being  
10 qualified.

11

12 RULING (QUAL. RE: DR. SIMPSON):

13 THE CHAIRPERSON: Thank you, Mr.  
14 Ghikas. We'll -- we'll proceed on the basis that Dr.  
15 Simpson will be qualified as an expert for applied  
16 econometrics and applied microeconomics. And -- and  
17 any issues as raised we -- we will put to -- to weight  
18 if any come up during the testimony. Thank you.

19 Mr. Williams...?

20 MR. BYRON WILLIAMS: Yes. And just if  
21 we could introduce two (2) exhibits to the Board, a  
22 PowerPoint authored by Ms. Sherry titled 'Actuarial  
23 Rate Making' that we would ask be marked as CAC  
24 Exhibit 25.

25

1 --- EXHIBIT NO. CAC-25: 'Actuarial Rate Making' by  
2 Andrea Sherry

3

4 MR. BYRON WILLIAMS: And a PowerPoint  
5 prepared by Dr. Simpson using the DCAT to address  
6 risk, which we would ask be marked as CAC Exhibit 26.

7

8 --- EXHIBIT NO. CAC-26: PowerPoint prepared by Dr.  
9 Wayne Simpson using DCAT  
10 to address risk

11

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

13 MR. BYRON WILLIAMS: And before  
14 proceeding, Ms. Sherry, you are responsible for the  
15 written evidence 'A Note on Rate Making in Accordance  
16 with Accepted Actual -- Actuarial Practice in Canada  
17 and Impact of Investment Discount Rates', which was  
18 filed on September 26 and marked as CAC Exhibit 7?

19 MS. ANDREA SHERRY: I am, yes.

20 MR. BYRON WILLIAMS: And you were  
21 jointly responsible with Dr. Simpson for a report on  
22 the use of the DCAT to set the RSR target range?

23 MS. ANDREA SHERRY: Yes.

24 MR. BYRON WILLIAMS: And you were  
25 responsible for Information Request to the PUB marked

1 as PUB Exhibits 12-2 and then 12-3 with Dr. Simpson?

2 MS. ANDREA SHERRY: M-hm, yes.

3 MR. BYRON WILLIAMS: And that written  
4 material was prepared under your direction and  
5 control, and is accurate to the best of your knowledge  
6 and belief?

7 MS. ANDREA SHERRY: Yes.

8 MR. BYRON WILLIAMS: And Dr. Simpson,  
9 you were responsible for a note on interest rate  
10 forecast risk factor and the RSR target established by  
11 the dynamic capital asset test filed on September 26,  
12 '16?

13 DR. WAYNE SIMPSON: Yes.

14 MR. BYRON WILLIAMS: Just for the  
15 record, marked as Exhibit 6. And with Ms. Sherry, you  
16 were jointly responsible for the report on the use of  
17 the DCAT, D-C-A-T, to set the RSR target range?

18 DR. WAYNE SIMPSON: Yes.

19 MR. BYRON WILLIAMS: And you were  
20 responsible for Information Request responses to the  
21 PUB marked as PUB Exhibit 12-1 by yourself, and 12-3  
22 with Ms. Sherry?

23 DR. WAYNE SIMPSON: Yes.

24 MR. BYRON WILLIAMS: And that written  
25 material was prepared under your direction and

1 control, and accurate to the best of your knowledge  
2 and belief?

3 DR. WAYNE SIMPSON: Yes, it was.

4 MR. BYRON WILLIAMS: I would invite  
5 Ms. Sherry to proceed, to be followed by Dr. Simpson.

6 MS. ANDREA SHERRY: Thank you. Good  
7 morning, everyone, and thank you very much for having  
8 me today. I think we can go to slide 2 right away.  
9 Really, I just wanted to speak to actuarial rate-  
10 making first.

11 In my opinion, I believe that it would  
12 simplify MPI's process. They have an actuary's report  
13 in which the ultimate losses for historical accident  
14 years is calculated. So this could be the basis for  
15 actuarial rate-making if you project those forward.  
16 Actuarial rate-making would lead to a break-even  
17 position over time.

18 There would be an adjustment year, but  
19 what that adjustment would look like really would  
20 depend on a full actuarial analysis taking place,  
21 which would include looking at MPI's trending  
22 procedures and more accurately representing re-  
23 insurance in the actuarial indication. These points  
24 were made in information requests, PUB-I-4 in  
25 particular.

1                   And also, I think that going to rate  
2 making with accepted actuarial standards would be in  
3 accordance with accepted actuary practice in Canada,  
4 which it appears that MPI wants to do in other areas  
5 of their rate application.

6                   So rate making is prospective, and this  
7 quote is from the Casualty Actuarial Society, the  
8 statement of principals. And when I say  
9 "prospective," I mean looking forward. You're looking  
10 to the rating year in question. You're having  
11 foresight into that year. You're projecting in to  
12 that year.

13                   Actuarial rate-making does not look  
14 back. The goal is not to make up for losses that  
15 you've had in prior years. You are trying to  
16 accurately predict the losses and expenses of the  
17 rating year in question so that you can accurately  
18 charge people for that year.

19                   When you use fiscal or calendar years  
20 to do rate making, you're introducing prior year case  
21 reserves and IBNR adjustments. And just for the  
22 Board's benefit, so I -- "case reserves" is a common  
23 term. It's what adjusters set aside for claims that  
24 they know about, and obviously over time, as more  
25 information becomes known, those case reserves change.

1 So when I say "case reserve adjustments" I mean  
2 adjustments to case reserves on claims that have  
3 happened in the past.

4                   Now, IBNR stands for 'incurred but not  
5 reported', and there's really two (2) types of IBNR.  
6 There's what we call true IBNR, and that's unreported  
7 claims. So if you have a claim that occurs on the  
8 last day of a reporting period, for example, that  
9 claim is not reported til -- until five (5) days  
10 later. That's -- that actuary still has to project  
11 what those are, and how much they would be for the  
12 reporting period.

13                   And then there is IBNR that changes for  
14 -- for already reported claims. So again, like case  
15 reserves, more information becomes available. You can  
16 see more loss development for prior years over time.  
17 So IBNR is adjusted for that purpose, as well. So  
18 really, when you use fiscal or calendar year, you're  
19 including all of those for prior years in your rate  
20 making.

21                   Going to the next slide, I wanted to  
22 touch on the underwriting profit margin.

23                   MR. BYRON WILLIAMS: Ms. Sherry, just  
24 before you go to -- if you could go back to that last  
25 slide just for one (1) second?

1 MS. ANDREA SHERRY: Sure.

2 MR. BYRON WILLIAMS: And just  
3 directing your attention to the very last line of that  
4 last slide regarding inclusion of investment income.

5 MS. ANDREA SHERRY: Right.

6 MR. BYRON WILLIAMS: I wonder if you  
7 could comment on that?

8 MS. ANDREA SHERRY: Well, what I'm  
9 saying there is that by using calendar or fiscal years  
10 trying to break even on a financial statement basis,  
11 you're including investment income on what the -- the  
12 entire portfolio and what might have happened to that  
13 portfolio in the past. And again, rate making is  
14 prospective, you're looking forward. Does that help?

15 MR. BYRON WILLIAMS: Yes, and thank  
16 you.

17 MS. ANDREA SHERRY: So the  
18 underwriting profit margin, I would encourage MPI to  
19 use a formula that is very common to Canadian  
20 actuaries. In MPI's case, it really simplifies to the  
21 formula you see on the slide here, which is the  
22 negative expected before tax investment return rate on  
23 assets supporting total equity divided by the expected  
24 premium to surplus ratio.

25 You'll notice that in the investment

1 return rate is on assets supporting total equity, not  
2 just on assets supporting claims liabilities or  
3 policyholder liabilities. And it was confirmed in  
4 Information Request PUB-I-3 that this formula can be  
5 used by MPI. They are able to calculate this.

6 And in that information request, it was  
7 actually shown to reduce the rate indication.

8 Going to the next slide, touching on  
9 the discount rate. This quote is from the Canadian  
10 Institute of Actuaries standards of practice. And  
11 really what it's saying that -- is that the discount  
12 rate should be a new money rate, so it's what is  
13 expected to be earned on new investments with the  
14 income from the premium of the rating year in  
15 question. Right now, the Corporation's basing their  
16 discount rate on investments purchased in the past.

17 And that concludes my PowerPoint.

18 MR. BYRON WILLIAMS: Dr. Simpson...?

19

20 (BRIEF PAUSE)

21

22 DR. WAYNE SIMPSON: Okay. Good  
23 morning. I think I should say before I start that I  
24 produced these two (2) notes that Mr. Williams has  
25 referenced, but they're related. And they're both

1 related to the DCAT report and the establishment of  
2 the RSR target range proposals.

3                   And he -- Mr. Williams also mentioned  
4 the times that I've appeared before the PUB, in  
5 particular, 2007 and 2013, discussing the DCAT and the  
6 RSR and the evolution, essentially, of this kind of  
7 methodology which has been a long process. It's  
8 adapted an existing methodology but to the case of MPI  
9 as a -- as a Crown monopoly corporation.

10                   And I think it's -- it's a useful way  
11 of making transparent what the risks are that MPI  
12 faces and how it should deal with them. And the two  
13 (2) notes really are connected with that thought in  
14 mind. So the next slide.

15                   So where were we, I guess, when I came  
16 in? We are still there, to some extent, in the sense  
17 that the percentage of premium approach has still been  
18 used as, at least, a guide to the RSR range. The  
19 report in 1989 recommended that it be based on the  
20 percentage of premiums written, POP percentage of  
21 premiums, established a -- a target of 15 percent, the  
22 -- the midrange of a -- of a range of 10 to 20 percent  
23 of premiums.

24                   And this was a simple and transparent  
25 process which was only loosely connected to risk. I -

1 - I say here no connection. But, in fact, as the  
2 scale of operations grows, the scale of risk grows, in  
3 -- in level terms, and, therefore, there's some  
4 connection to risk, but no direct connection to what  
5 risks the Corporation actually faces.

6           And so the dynamic capital adequacy  
7 test, the DCAT, has been proposed and developed to try  
8 to deal with some of these questions. It requires a  
9 specification of specific risk scenarios and the  
10 identification of the three (3) most important ones,  
11 empirical justification insofar as that is possible.

12           And we've seen on other occasions that,  
13 for example, in the equity decline scenario, we can be  
14 fairly transparent about what the adverse events might  
15 be. And we can root out problems with the analysis to  
16 define what we think of as the modern era,  
17 essentially, in terms of the stock market, and we can  
18 -- we can think about what -- what modern risks they  
19 actually face in those contexts.

20           And then the specification of what we  
21 think are reasonable risk tolerances in terms of  
22 motorists, what they're willing to accept as a risk.  
23 And we seem to have centred, to some extent on the one  
24 (1) in forty (40) risk probability, a 2.5 percent  
25 probability of occurrence.

1                   And I'm going to use that in my  
2 illustrative calculations and emphasize that what I'm  
3 going to talk about next is -- is illustrative. These  
4 numbers are subject to refinement based on -- on  
5 developments that we've seen in the second DCAT  
6 report.

7                   Next slide, please. So what I'm going  
8 to do is combine the two (2) reports, the two (2) that  
9 I -- I gave: one, the established range for the risk  
10 stabilization reserve, and secondly, to address all  
11 risks including the interest rate forecasting risks,  
12 the IRFRF proposal.

13                   So my -- my notion is that the DCAT  
14 methodology can be used consistently to deal with  
15 these two (2) -- these two (2) problems. And we've  
16 spent a lot of time and energy in -- in developing the  
17 DCAT of these purposes.

18                   Next slide, please. So first,  
19 establishing a range for the RSR. What has MPI done?  
20 Well, they have taken a target which they defined as a  
21 target minimum, and after management action found it  
22 to be 181 million for the combined scenario with a one  
23 (1) in forty (40) risk tolerance.

24                   Then they have shifted slightly -- more  
25 that slightly perhaps -- to a criterion of 100 percent

1 minimum capital test to set a maximum for the RSR,  
2 which is 404 million in the original report and  
3 slightly more in the -- in the late report, which is  
4 somewhat problematic, I think, in the sense that,  
5 unlike the -- the target minimum, it has no direct  
6 link to the DCAT methodology in the sense of  
7 specifying a particular risk scenario, a specified  
8 tolerance range, and so on.

9                   So it -- it deviates from the  
10 methodology that I think makes the assessment of risk  
11 more transparent. And it's also unsubstantiated by  
12 the evidence of a specified risk.

13                   Next slide, please. Okay. The target  
14 minimum. Well, if I'm shooting at a target -- and I  
15 don't shoot very well, so I probably would miss it  
16 completely -- but I'd certainly try to aim at the  
17 centre. So when I think of a target, I think not of a  
18 minimum. I think of the midpoint.

19                   And so while the target has been  
20 interpreted in the DCAT report as a target minimum, I  
21 think more appropriately we should think of the target  
22 as a -- as a midpoint. And that's what I'm going to  
23 think of in terms of the one (1) in forty (40) risk  
24 tolerance.

25                   Next slide, please. So in CAC-MPI-245,

1 MPI was asked to provide some DCAT results for a  
2 variety of risk tolerances with the idea of showing  
3 that this could be used to set the RSR range  
4 consistently using the DCAT.

5           They provided results before management  
6 action. Would have preferably been after management  
7 action, but, you know, probably my imprecision in  
8 defining questions. And we have a combined scenario  
9 total equity figures for the two (2) year combined  
10 scenario.

11           And you'll notice a couple of things.  
12 First of all, on the left-hand side, we have a range  
13 of risk tolerances which go from one (1) in ten (10),  
14 relatively low -- relatively high tolerance of risk,  
15 to one (1) in two hundred (200), relatively lower,  
16 conservative tolerance of risk.

17           The line in red is the -- what I've  
18 taken as the target which is the target midpoint, one  
19 (1) in forty (40). And then 2018/'19 are the figures  
20 that I use along with the forecasts from the base  
21 scenario of 217 million to construct my illustrative  
22 figures. So this is an illustration of what can be  
23 done with the DCAT to set the RSR range.

24           Next --

25           MR. BYRON WILLIAMS: Before you leave

1 this page, Dr. Simpson, this is before management  
2 action. And -- and I understand you've done it for  
3 illustrative purposes. If you were doing a -- a  
4 target range, would you -- do you have any thoughts on  
5 before or after management action, sir?

6 DR. WAYNE SIMPSON: Yes. I think two  
7 (2) things need to be done. One is we need to think  
8 about it after management action, as is done in the  
9 DCAT report. And then secondly, we need to think  
10 about what the interest rate scenario is in the -- the  
11 base forecast or base scenario since that's a question  
12 of -- of concern.

13 And both of those issues have been  
14 addressed to some degree in the second DCAT report.  
15 And of course this doesn't deal with that because  
16 these numbers are from the -- from the first report.

17 Next slide, please. So from that and  
18 the 2016/'17 base forecast of 217 million before  
19 management action, we get the values for the various  
20 risk tolerances from 1:10 to 1:200. And this allows  
21 us to surround the 1:40 target midpoint with a range  
22 of values which we can use to construct what I call  
23 the wide range and the narrow range.

24 Next slide, please. So here we have  
25 the wide range, which we take the 1:10 and 1:200 risk

1 tolerances values of 152 million and 268 million from  
2 the previous slide, and the narrow range, which is  
3 risk tolerances from 1:20 to 1:100 from the previous  
4 page, 185 million to 249 million.

5           In each case we've used the midpoint,  
6 the target midpoint as the 1:40 risk tolerance. And  
7 I'd note that the range maximum is well below the 100  
8 percent MCT. In other words, the 100 percent MCT is  
9 associated with a risk tolerance vastly in excess of  
10 1:200.

11           And in -- in terms of the actual range,  
12 the spread of the values between the minimum and the  
13 maximum, you can see that if we look, for example, at  
14 percentage of premiums, it gives us a range of ninety-  
15 three (93) to a hundred and eighty-six (186). That's  
16 a -- that's a -- that's a spread of about 93 million.

17           That's not too far from the wide range.  
18 The spread there is what, 116 million. So that's  
19 pretty similar. This number would come down both at  
20 the minimum/maximum midpoint, of course, when you look  
21 at after management action. So it's -- it's above the  
22 POP range that was recommended by Kopstein, but it  
23 isn't so far above as the range based on the DCAT  
24 report.

25           Okay. Thank you. The next slide.

1 Yeah. So the second question is addressing all risks  
2 including the interest rate forecasting risk, the  
3 IRFRF. The MPI application contains two (2)  
4 components in terms of the request for the base rate  
5 increase.

6 The 2 percent overall increase in Basic  
7 Autopac, plus the IRFRF, I say whose form and  
8 magnitude be determined by a collaborative process  
9 between the PUB, Intervenors, and MPI. This is MPI's  
10 own words, but could be 2.3 percent or higher.

11 This provides a total rate increase of  
12 4.3 percent on top of the RSR range that I've -- I've  
13 already discussed that's based on the DCAT report.

14 MR. BYRON WILLIAMS: Again, just  
15 before you leave this pag -- page, this RSR range is  
16 based on the first DCAT report, not the -- the Octo --  
17 or not the revised one?

18 DR. WAYNE SIMPSON: That's right. The  
19 revised DCAT report has a -- has a change in the  
20 interest rate forecast, essentially, that affects that  
21 -- those numbers modestly. I think 22 million, did I  
22 say, something along those lines. And, of course,  
23 it's based in the maximum with 100 percent MCT  
24 assumption.

25 Next slide, please. So MPIs argument

1 is that the IRFRF is critical to mitigate the risk,  
2 these are their own words, of a deficiency in premiums  
3 resulting from the impact of a -- of an interest rate  
4 forecast with too steep a trajectory over the forecast  
5 period.

6                   The emphasis on the risk is mine.  
7 Also, necessary to prevent potential rate sock.  
8 Again, emphasis, mine. The amount of the IRFRF would  
9 ultimately reflect the PUBs assessment informed by  
10 input by the Corporation and other parties of the  
11 extent of risk and risk tolerance, emphasis mine, in  
12 the context of financial integrity and smooth and  
13 stable Basic insurance rates.

14                   That's PUB/MPI 225. And this, to me,  
15 sounds like the justification for the RSR because I  
16 think essentially it is.

17                   Next slide, please. Where does it come  
18 from? Well, not from other insurance agencies or  
19 jurisdictions in Canada, because they don't use the  
20 concept of this concept at all. It's something that  
21 has been developed by MPI, as they admit in CAC 194  
22 and PUB 225, for the special circumstances arising  
23 from an interest rate forecast with too steep a  
24 trajectory over the forecast period.

25                   To me, this sounds like the interest

1 rate decline scenario from the DCAT.

2 Next slide, please. And the interest  
3 rate decline scenario from the DCAT.

4 Next slide, please. And the interest  
5 rate decline scenario is already dealt with in the  
6 DCAT. This has resulted from what I characterize as  
7 extensive collaborative effort to develop a  
8 methodology that has been used in property and  
9 casualty insurance, but has been -- has evolved for  
10 the case of a Crown corporation to deal with the risk  
11 to determine the RSR.

12 And the DCAT report essentially  
13 identifies the three (3) most important risk factors,  
14 including the interest rate decline scenario which  
15 deals with the situation in which interest rates  
16 decline or remain at sustained low levels over the  
17 forecast period. Again emphasis mine.

18 It considers sustained low interest  
19 rates relative to some base consensus bank forecast as  
20 in the IRFRF, and an import -- it -- the interest rate  
21 decline scenario is an important component of the two  
22 (2) year combined scenario that ultimately is used to  
23 justify the RSR target of \$181 million. Next slide,  
24 please.

25 Next slide, please. Oh, okay. So I --

1 I've taken three (3) sort of points of commonality I  
2 think are fundamental to comparison of the IRFRF and  
3 the interest rate decline scenario. The first one (1)  
4 is the consensus forecast, which is the basis for  
5 both; the DCAT interest rate decline scenario uses  
6 this standard interest rate forecast, the consensus of  
7 the bank forecast as the basis for the base scenario.  
8 The test is whether total equity in the RSR is  
9 sufficient if interest rates rain -- remain below the  
10 surf at an interest rate floor that is calculated  
11 there in the DCAT report from the ten (10) year  
12 Government of Canada bond rate.

13                   And again in the IRFRF, the Standard  
14 Interest Rate Forecast is compared to either a Naive  
15 Forecast that says interest rates remain at their  
16 current levels throughout the period, or a 50/50  
17 scenario that is the average of the Naive and the S-I-  
18 R-F forecasts. Next slide, please.

19                   The second point is that this interest  
20 rate floor assumption is critical in both cases. I  
21 guess in the terminology of applied mathematics, this  
22 is the -- this is the constraint that binds. In the  
23 DCAT interest rate decline scenario, essentially the -  
24 - we go to the floor immediately. The floor is the  
25 ten (10) year Government of Canada bond rate from 1989

1 to the present now 1.9 -- 19 percent. Interest rates  
2 remain at that level throughout. As you can see  
3 there's a nice figure in the DCAT report, page 42,  
4 that makes this very clear.

5                   In the preferred IRFRF scenario, which  
6 is calculated as a 50/50 weighting between the SIRF  
7 and the Naive Forecast, interest rates rise from a  
8 current level of 1 percent to about 2 1/4 percent by  
9 2021. So it -- it overlaps the 1.19 percent figure  
10 used from the -- the DCAT interest rate decline  
11 scenario. In the interest rate decline scenario, it's  
12 1.19 percent. In the IRFRF it goes from 1 to 2 1/4  
13 percent. But these are similar assumptions about  
14 interest rates in both cases. Next slide, please.

15                   And this -- these are assumptions  
16 because the interest rate -- these interest rate  
17 floors that are crucial, as I said, to both sets of  
18 calculations are essentially arbitrary through no  
19 fault of MPI, be it there's simply no empirical  
20 foundation in the past history of interest rate  
21 movings -- movements because this current low interest  
22 rate environment is unique to the modern era. And I  
23 think it's important that we stick to the modern era  
24 because monetary policy has evolved a great deal since  
25 the second World War.

1                   And as a result, we can't really assign  
2 a proper risk tolerance to the interest rate decline  
3 scenario or the IRFRF 50/50 scenario in the fashion  
4 that we've done for other scenarios, such as the  
5 equity decline or high loss ratio scenarios, based  
6 upon -- in the equity decline case the actual  
7 experiences in the stock market since 1955, and in the  
8 high loss ratio the claims experiences that -- of  
9 MPI's own data.

10                   And so there's relatively shaky  
11 empirical foundations to try to assess the risk of  
12 both of these -- of these sets of calculations. And  
13 since one of the strengths of the DCAT methodology is  
14 the specification of risk tolerances and the  
15 development of empirical justifications, I think in my  
16 view this makes these -- this a relatively shaky area  
17 from the methodology we've established.

18                   The next slide, please, I think the  
19 last slide.

20                   So I guess the question here is: Why  
21 have the IRFRF? Well, I think -- I think,  
22 essentially, it's double counting. I think the  
23 elements of the IRFRF and the interest rate decline  
24 scenarios are essentially identical. And the risk --  
25 the single risk of interest rates falling short of the

1 consensus bank forecast is really being used twice,  
2 once to determine the IRFRF premium surcharge  
3 calculation, and one (1) to set a target for the RSR.

4 I think we should try to be consistent  
5 and use the DCAT for the purpose that we've developed.  
6 In which case, I wonder why the IRFRF argues that the  
7 -- that interest rates, in some sense, are a foregone  
8 conclusion, when in fact, the future is never a  
9 foregone conclusion.

10 And the DCAT base scenario, which I  
11 think is -- is a more reasonable way to think about  
12 this as essentially a risk, says that the standard  
13 interest rate forecast is a reasonable set of  
14 assumptions, this is from the DCAT report, used to  
15 forecast the insurer's financial position consistent  
16 with the insurer's business plan. This is the way the  
17 DCAT should proceed, and the way it has proceeded.

18 So given the uncertainty about future  
19 interest rates, and I think the -- the future's always  
20 uncertain, so there's nothing -- there's nothing new  
21 there, that these -- this uncertainty is best  
22 evaluated using the established DCAT methodology that  
23 we've developed cooperatively, and can be scrutinized  
24 and criticized based on the evidence as it's  
25 presented, and best provided for by an appropriate

1 risk stabilization reserve and an appropriate range  
2 for that reserve.

3 Thank you.

4 MR. BYRON WILLIAMS: The witnesses are  
5 prepared for -- ready to receive cross-examination.

6 THE CHAIRPERSON: Mr. Ghikas...?

7 MR. MATT GHIKAS: Thank you, Mr.  
8 Chairman.

9

10 CROSS-EXAMINATION BY MR. MATT GHIKAS:

11 MR. MATT GHIKAS: Dr. Simpson, let's  
12 start with you and your note on the interest forecast  
13 risk factor in the RSR, which is CAC Exhibit 6.

14 Would you agree with me, sir, that you  
15 never expressed a view in your note about the  
16 predictive power of the SIRF?

17 DR. WAYNE SIMPSON: In the note? No.

18 MR. MATT GHIKAS: All right. And you  
19 never once endorsed this -- the no -- the SIRF in your  
20 note, did you?

21 DR. WAYNE SIMPSON: No. I took it as  
22 -- as fact.

23 MR. MATT GHIKAS: And you never once  
24 indicated that you considered it to be a best  
25 estimate, did you?

1 DR. WAYNE SIMPSON: No.

2 MR. MATT GHIKAS: And you're familiar  
3 with that term, sir?

4 DR. WAYNE SIMPSON: Yes.

5 MR. MATT GHIKAS: And you would agree  
6 with me that you also didn't address whether a 50/50  
7 approach recommended by Dr. Cleary is a best estimate,  
8 did you?

9 DR. WAYNE SIMPSON: No.

10 MR. MATT GHIKAS: And your note  
11 doesn't even include the words 'best estimate', does  
12 it?

13 DR. WAYNE SIMPSON: No. Could you  
14 clarify what you mean by, "best?"

15 MR. MATT GHIKAS: Well, I asked you  
16 whether you were familiar with the term 'best  
17 estimate', and you indicated you were.

18 DR. WAYNE SIMPSON: Yes, I am.

19 MR. MATT GHIKAS: Okay. And what does  
20 it mean?

21 DR. WAYNE SIMPSON: I -- I'm not sure  
22 what -- what you mean by, "best estimate."

23 MR. MATT GHIKAS: What does it mean to  
24 you, sir?

25 DR. WAYNE SIMPSON: A best estimate is

1 typically a midpoint of a range of possible outcomes  
2 that's established, let's say, be regression estimate  
3 as the expected value or outcome, or mean outcome. I  
4 -- I'm assuming that's what you mean. I just -- I'm  
5 not sure what you mean by, "best." I thought I'd  
6 better clarify.

7 MR. MATT GHIKAS: An estimate that's  
8 neither conservative nor unconservative, correct?

9 DR. WAYNE SIMPSON: That's correct.

10 MR. MATT GHIKAS: Unbiased,  
11 statistically?

12 DR. WAYNE SIMPSON: Consistent,  
13 unbiased, yes.

14 MR. MATT GHIKAS: Right. So we're on  
15 the same page.

16 Your presentation this morning, it  
17 doesn't endorse the SIRF either, does it?

18 DR. WAYNE SIMPSON: No.

19 MR. MATT GHIKAS: And you don't say  
20 that the SIRF is a best estimate in your presentation  
21 this morning, sir?

22 DR. WAYNE SIMPSON: No. I'm taking  
23 the SIRF as -- as the best estimate provided by a  
24 consensus of bank forecasts.

25 MR. MATT GHIKAS: And -- and,

1 similarly, you didn't speak to whether the 50/50  
2 approach is the best estimate in your presentation  
3 this morning, did you, sir?

4 DR. WAYNE SIMPSON: No.

5 MR. MATT GHIKAS: You're a  
6 microeconomist and an econometrician, correct?

7 DR. WAYNE SIMPSON: Yes.

8 MR. MATT GHIKAS: Right. And you  
9 characterize in your note on the IRFRF that your core  
10 expertise includes, quote:

11 "The assessment of risk using modern  
12 economic and statistical  
13 techniques."

14 Would that be correct?

15 DR. WAYNE SIMPSON: Yes.

16 MR. MATT GHIKAS: And in fact, you  
17 received the McCracken Award for the development of  
18 analysis of economic statistics from the Canadian  
19 Economics Association, correct?

20 DR. WAYNE SIMPSON: Yes.

21 MR. MATT GHIKAS: And that would --  
22 modern economic and statistical techniques, sir, would  
23 involve looking at historical data to understand  
24 future risk exposure?

25 DR. WAYNE SIMPSON: That's correct.

1 MR. MATT GHIKAS: And you prepared  
2 your note after Dr. Cleary provided his evidence,  
3 correct, after he gave his written report?

4 MR. BYRON WILLIAMS: We'll -- we can --  
5 -- we can accept that --

6 DR. WAYNE SIMPSON: Oh, okay.

7 MR. BYRON WILLIAMS: -- on the --

8 DR. WAYNE SIMPSON: I -- I wasn't sure  
9 about the timing, but --

10

11 CONTINUED BY MR. MATT GHIKAS:

12 MR. MATT GHIKAS: Okay.

13 DR. WAYNE SIMPSON: -- I'll accept Mr.  
14 Williams's --

15 MR. MATT GHIKAS: All right. In your  
16 notes, sir, you don't include statistics on the SIRF's  
17 performance to date, do you?

18 DR. WAYNE SIMPSON: No.

19 MR. MATT GHIKAS: And you don't  
20 include any analysis of the SIRF's past performance?

21 DR. WAYNE SIMPSON: No. I think  
22 that'd be quite interesting, but, no, I don't.

23 MR. MATT GHIKAS: And you didn't  
24 mention the SIRF's past performance at all in your  
25 note, did you, sir?

1 DR. WAYNE SIMPSON: No.

2 MR. MATT GHIKAS: And you didn't  
3 include any statistics on the Naive Forecast  
4 performance, did you?

5 DR. WAYNE SIMPSON: There are no  
6 statistics. It says it'll be what it is.

7 MR. MATT GHIKAS: Right. And you  
8 didn't include analysis on whether the Naive Forecast  
9 was a better predictor of the actual performance of  
10 interest rates than the SIRF, right?

11 DR. WAYNE SIMPSON: No.

12 MR. MATT GHIKAS: And you didn't even  
13 mention the words "Naive Forecast," did you?

14 DR. WAYNE SIMPSON: Didn't mention the  
15 words "Naive Forecast" --

16 MR. MATT GHIKAS: In your note.

17 DR. WAYNE SIMPSON: I'll take -- I'll  
18 -- you've obviously read the note more carefully  
19 recently than I have. I'll take that as a yes,  
20 subject to check.

21 MR. MATT GHIKAS: All right. Diana,  
22 would you mind pulling up PUB Exhibit 12, please?  
23 These are the responses to Information Requests that  
24 you provided, Dr. Simpson. And if we go to page -- I  
25 believe it's PDF 2. It's the response to CAC-1.1.

1 DR. WAYNE SIMPSON: Okay.

2 MR. MATT GHIKAS: And there are three  
3 (3) questions there, and the one I'm interested is the  
4 second question at this point. You see the second  
5 question the PUB has asked you:

6 "Is Dr. Simpson of the view that the  
7 current so-called Standard Interest  
8 Rate Forecast is a best estimate  
9 forecast?"

10 DR. WAYNE SIMPSON: Best estimate,  
11 yes.

12 MR. MATT GHIKAS: You see that?

13 DR. WAYNE SIMPSON: Yeah.

14 MR. MATT GHIKAS: Okay. And your  
15 response is set out below, that:

16 "In so far as the SIRF is a  
17 consensus forecast of respected  
18 financial institutions with a large  
19 stake in accurate interest rate  
20 forecasting who have been conducting  
21 forecasts for a long time, I would  
22 not consider myself qualified to do  
23 better. I would also note that MPI  
24 has relied on these forecasts for  
25 some time -- e.g., in their DCAT

1 reports -- as the basis for their  
2 base forecast."

3 Do you see that?

4 DR. WAYNE SIMPSON: Yeah.

5 MR. MATT GHIKAS: And that you'd agree  
6 with me is the sum total of your analysis that you  
7 provided on whether the SIRF is a best estimate in --

8 DR. WAYNE SIMPSON: Yes.

9 MR. MATT GHIKAS: Thank you. And  
10 let's focus on that first sentence, sir, where you  
11 say:

12 "In so far as the SIRF is a  
13 consensus forecast of respected  
14 financial institutions with a large  
15 stake in accurate interest rate  
16 forecasting who have been conducting  
17 forecasts for a long time, I would  
18 not consider myself...to do better."

19 Let's -- Diana, would you mind -- sorry  
20 to jump around, but would you mind calling up MPI  
21 Exhibit 23, please? It's the PowerPoint presentation  
22 of Ms. Reichert and Mr. Johnston. And I'm interested  
23 in slide 11, please.

24 Okay. Dr. Simpson, this was in the  
25 application as well. Have you seen this before?

1 DR. WAYNE SIMPSON: Yes, I have.

2 MR. MATT GHIKAS: Okay. And you  
3 presumably saw that before you prepared your evidence?

4 DR. WAYNE SIMPSON: I believe so, yes.

5 MR. MATT GHIKAS: And you understand  
6 that that's depicting the past performance of the  
7 SIRF?

8 DR. WAYNE SIMPSON: Yes, since --  
9 since the financial -- well, the -- the recession of  
10 '08/'09, yeah.

11 MR. MATT GHIKAS: Right. And do you  
12 have any basis to dispute the data that's presented in  
13 the diagram?

14 DR. WAYNE SIMPSON: No.

15 MR. MATT GHIKAS: Now, as an  
16 econometrician, sir, what does this data and the  
17 figures say about the predictive power of the SIRF  
18 over this period?

19 DR. WAYNE SIMPSON: It's under-  
20 performed over a relatively short period of  
21 observation, yes.

22 MR. MATT GHIKAS: Right. And it's --  
23 it's performed poorly, hasn't it?

24 DR. WAYNE SIMPSON: It has -- it has  
25 consistently overestimated the interest rate rebound.

1 MR. MATT GHIKAS: You'd agree with me,  
2 sir, that this is demonstrating characteristics  
3 suggestive of statistical bias?

4 DR. WAYNE SIMPSON: Only over this  
5 short period, yes. I wouldn't -- I wouldn't fore --  
6 if I were assessing the forecast behaviour of the  
7 Standard Interest Rate Forecast, I wouldn't restrict  
8 myself to this relatively short and, as I've admitted,  
9 unusual period of -- of sustained low interest rates.

10 MR. MATT GHIKAS: Okay. And -- and  
11 you wouldn't restrict yourself -- and was anyone  
12 restricting you, sir, when you prepared your evidence  
13 from going back and providing a longer analysis?

14 DR. WAYNE SIMPSON: I wasn't asked to  
15 do that.

16 MR. MATT GHIKAS: Okay. And you  
17 didn't think that would be useful?

18 DR. WAYNE SIMPSON: I -- I wasn't  
19 asked to do that, and I have -- have no -- yes, it  
20 would be useful and I -- but I didn't do it.

21 MR. MATT GHIKAS: Okay. Now, here we  
22 have thirty-two (32) quarters of data here, and you'll  
23 accept subject to check that it's directionally wrong  
24 twenty-six (26) times of the thirty-two (32)?

25 DR. WAYNE SIMPSON: Sure.

1 MR. MATT GHIKAS: Okay. So let me --  
2 let me change this up a bit on you here. Let's --  
3 let's say if MPI came forward and had over-forecast  
4 its required rate increase by double for eight (8)  
5 years in a row and now comes to the Board asking for  
6 another significant increase, would you, sir, be here  
7 telling the Board not to worry about it because we're  
8 in a rising cost environment?

9 DR. WAYNE SIMPSON: All I'm saying is  
10 that if we're identifying risks such as this, that is  
11 to say the risk that interest rates remain low, we  
12 should deal with it in the kind of risk methodology  
13 that we've developed, which is the DCAT. And we  
14 should make sure that MPI has funds appropriate to  
15 provide for that risk, among others.

16

17 (BRIEF PAUSE)

18

19 MR. MATT GHIKAS: Sir, if you saw that  
20 performance would you look at adjusting your  
21 forecasting methodology?

22 DR. WAYNE SIMPSON: Looking at what's  
23 in front of me?

24 MR. MATT GHIKAS: Yeah.

25 DR. WAYNE SIMPSON: I think it's too

1 short a period to say that the methodology is wrong.  
2 And again going back to my statement, if you're  
3 saying, Do I think I can do better than the consensus  
4 of bank forecasts of people who spend their life in  
5 this industry and who have a substantial stake in this  
6 industry, neither of which I do or have, then I would  
7 say, no.

8 MR. MATT GHIKAS: Ms. Sherry, would  
9 you look at that diagram as a professional actuary and  
10 accept that without asking the question of whether  
11 there was statistical bias in that modelling?

12 MS. ANDREA SHERRY: Well, I would  
13 agree with Dr. Simpson that this is not my area of  
14 expertise, so I really can't comment on that.

15 MR. MATT GHIKAS: Okay. So, Dr.  
16 Simpson, back to you. You indicated in your response  
17 to the Information Request that:

18 "The SIRF is a consensus forecast of  
19 respected financial institutions  
20 with a large stake in accurate  
21 interest rate forecasting who have  
22 been conducting forecasts for a long  
23 time."

24 Dr. Simpson, you'd agree with me that  
25 these financial institutions have been conducting

1 forecasts in a long time. The fact that they've been  
2 conducting them for a long time hasn't stopped them  
3 from being consistently wrong, has it?

4 DR. WAYNE SIMPSON: I guess as I look  
5 at this diagram again, I wonder why it starts at  
6 February '08, and of course that is the -- the  
7 beginning of the -- of the recession. Some people  
8 characterize it as a financial crisis, and the low  
9 interest rate era.

10 When you say "consistently wrong," I  
11 would want to see more data going back to an earlier  
12 period when I suspect they'd been more often right  
13 than wrong.

14 MR. MATT GHIKAS: Well, sir, we are in  
15 a period of historic low interest rates, aren't we?

16 DR. WAYNE SIMPSON: Yes. But you're  
17 asking me about their forecasting record, and I'm  
18 saying that I wouldn't judge a forecasting record on  
19 the basis of such a short period of time which I think  
20 is what, eight (8) years. The banks have been doing  
21 these forecasts for a very, very long time.

22 MR. MATT GHIKAS: And the fact that  
23 they were -- these -- these financial institutions had  
24 lots of experience in forecasting back in 2010, for  
25 example, didn't they?

1 DR. WAYNE SIMPSON: Yes, but not in --  
2 not likely in that environment.

3 MR. MATT GHIKAS: Okay. And -- and  
4 we're still in that environment today, aren't we, sir?

5 DR. WAYNE SIMPSON: Yes, we are.

6 MR. MATT GHIKAS: Okay. And the fact  
7 that these institutions are well respected hasn't  
8 stopped them from being consistently wrong since 2008,  
9 has it?

10 DR. WAYNE SIMPSON: It -- that's  
11 right. Consistently wrong in terms of the data -- the  
12 data as we realize it. We're really talking about  
13 what happens going forward. So we're looking, again,  
14 prospectively, as Ms. Sherry said, not -- we're not  
15 looking back at this point. We're looking at --  
16 forward, and inherently, on the risks associated with  
17 looking forward.

18 MR. MATT GHIKAS: Okay. And the fact  
19 that these financial institutions have had a stake in  
20 accurate forecasting hasn't stopped them from being  
21 consistently wrong since 2008, has it?

22 DR. WAYNE SIMPSON: Yeah, the record  
23 speaks for itself.

24 MR. MATT GHIKAS: Yeah. And do you  
25 dispute Dr. Cleary's evidence that the -- just using

1 the Naive forecast out performs the SIRF over this  
2 period?

3 DR. WAYNE SIMPSON: Well, I -- I  
4 suppose the Naive forecast doesn't do that well  
5 either, because the -- it actually is declining, not -  
6 - not flat. But to say that a better predictor of  
7 next year's interest rate would have been this years  
8 interest rate is probably true from that. But, of  
9 course, we're forecasting a number of years into the  
10 future on the basis of a best guess.

11 And Naive forecasts typically don't do  
12 very well in those circumstances.

13 MR. MATT GHIKAS: Now, if we can go to  
14 your presentation this morning, sir. Diana, tab --  
15 slide 7, sorry.

16

17 (BRIEF PAUSE)

18

19 MR. MATT GHIKAS: It's the one (1)  
20 with the target on it, sorry. I don't know which  
21 slide it is. There we go.

22 Would you agree with me, Dr. Simpson,  
23 that forecasting interest rate movement is an exercise  
24 in forecasting uncertain or risky outcomes?

25 DR. WAYNE SIMPSON: Yes.

1 MR. MATT GHIKAS: There's uncertainty  
2 in the direction of interest rates going forward?

3 DR. WAYNE SIMPSON: Yes.

4 MR. MATT GHIKAS: And there's  
5 uncertainty --

6 DR. WAYNE SIMPSON: That's -- that's  
7 the basis for the interest rate decline scenario.

8 MR. MATT GHIKAS: Right. And there's  
9 -- and there is -- there is uncertainty regarding the  
10 pace of increase if it increases?

11 DR. WAYNE SIMPSON: That is the big  
12 question.

13 MR. MATT GHIKAS: All right. And do  
14 you accept, subject to check, that the interest rate  
15 movement contemplated by the SIRF represents a 1:29  
16 year event?

17 DR. WAYNE SIMPSON: I -- I have no  
18 idea how that would be calculated.

19 MR. MATT GHIKAS: Okay.

20 DR. WAYNE SIMPSON: I -- I would --  
21 that would be subject to somebody explaining to me how  
22 you would arrive at that number.

23 MR. MATT GHIKAS: Okay. And you would  
24 agree with me that the potential for MPI to lose \$33  
25 million per year for the next two (2) years from

1 interest rate forecaster would be a quote/unquote  
2 "risky outcome," sir?

3 DR. WAYNE SIMPSON: Yes.

4 MR. MATT GHIKAS: And should we only  
5 act like archers when aiming for the midpoint reduces  
6 rates, sir?

7 DR. WAYNE SIMPSON: Could you -- could  
8 you restate that question? I'm not sure --

9 MR. MATT GHIKAS: Certainly.

10 DR. WAYNE SIMPSON: -- what -- what  
11 you asked.

12 MR. MATT GHIKAS: Should we only act  
13 like archers and aim for the midpoint when doing so  
14 would reduce rates?

15 DR. WAYNE SIMPSON: I don't see the  
16 connection to reducing rates. We're talking about the  
17 range of the RSR which is retained earnings that MPI  
18 already has.

19 MR. MATT GHIKAS: Okay. I want to  
20 switch topics here and deal with your point about  
21 double counting, sir.

22 Your point about double counting is  
23 premised on the original DCAT analysis, correct?

24 DR. WAYNE SIMPSON: Yes.

25 MR. MATT GHIKAS: Right.

1 DR. WAYNE SIMPSON: The model, yes.

2 MR. MATT GHIKAS: The one (1) that was  
3 \$181 million?

4 DR. WAYNE SIMPSON: Yes.

5 MR. MATT GHIKAS: So if -- if Mr.  
6 Johnston has to rerun the DCAT analysis to reflect a  
7 50/50 forecast and the RSR has gone down to a hundred  
8 and fifty-nine (159) that would not be double  
9 counting, would it, sir?

10 DR. WAYNE SIMPSON: It's still double  
11 counting, because the risk associated with the IRFRF  
12 and the risk associated with the interest rate decline  
13 scenario are the same. It's the same scenario.  
14 They're just then based on the same interest rate  
15 assumptions.

16 MR. MATT GHIKAS: Okay. We --

17 DR. WAYNE SIMPSON: So they're dou --  
18 they're really more closely double counted then than  
19 they were before.

20 MR. MATT GHIKAS: Okay. Let's -- let  
21 me back up, here.

22 DR. WAYNE SIMPSON: I think -- I think  
23 that's correct. Isn't that -- isn't that correct?  
24 That if -- if they're now based on exactly the same  
25 interest rate forecast, then they truly -- it truly is

1 double counting, whereas before, they were slightly  
2 different. I simply said that they were very similar.  
3 One was based on -- on the Government of Canada ten  
4 (10) year bonds, and the other was based on a 50/50 of  
5 the Naive and the Standard Interest Rate Forecast.

6 Now if they're both based on that 50/50  
7 scenario, then they're even more closely aligned than  
8 they were before.

9 MR. MATT GHIKAS: Sir, the fact that  
10 they've been set based on a 50/50 forecast has reduced  
11 the risk of a loss, correct?

12 DR. WAYNE SIMPSON: Yeah. And that's  
13 a bit puzzling. I don't profess to fully understand  
14 or be privy to the results that come out of the --  
15 running it through the financial model.

16 But I -- I admit that that is a bit  
17 puzzling, because what we're really saying there is  
18 that, when we reduce the interest rate forecast, we  
19 actually are saying that there is less interest rate  
20 risk associated than there was before.

21 MR. MATT GHIKAS: There's less  
22 interest rate -- downside interest rate risk?

23 DR. WAYNE SIMPSON: That appears to be  
24 the implication, doesn't it?

25 MR. MATT GHIKAS: It does, yes.

1 DR. WAYNE SIMPSON: Yeah.

2 MR. MATT GHIKAS: Yeah. And so --

3 DR. WAYNE SIMPSON: But I think that's  
4 because it's combined with the -- the two (2) year  
5 combined scenario where there are other risks of the  
6 Corporation, which I think is more appropriate,  
7 because that isn't the only risk that MPI faces. They  
8 also face the risk of -- of an equity decline. And  
9 they also face the risk of a high claims loss, the --  
10 the claims. And -- and those three (3) are associated  
11 in the combined scenario.

12 So how that all works out in -- in the  
13 model as it's run through the DCAT is -- is a little  
14 more complicated than -- than I can fully understand.

15 MR. MATT GHIKAS: Right, because  
16 you're not an actuary, right?

17 DR. WAYNE SIMPSON: And I'm not privy  
18 to the model.

19 MR. MATT GHIKAS: Now, let's -- let's  
20 go to your -- your note on the IRFRF and RSR, which is  
21 CAC Exhibit 6.

22

23 (BRIEF PAUSE)

24

25 MR. MATT GHIKAS: And we'll go to the

1 last -- last page, last paragraph, last sentence,  
2 actually. So you say:

3 "Since prediction of the future is  
4 inherently risky since there is no  
5 precedent for an IRFRF rate  
6 adjustment elsewhere, and since we  
7 have a well-established procedure  
8 for -- for the assessment of the  
9 risks facing MPI and the  
10 determination of the RSR, including  
11 an RSR surcharge to rates if  
12 necessary, the proposal for an IRFRF  
13 should be abandoned."

14 Do you see that?

15 DR. WAYNE SIMPSON: Yeah.

16 MR. MATT GHIKAS: Okay. So, Ms.

17 Sherry, I'm going to ask you some questions. I want  
18 you to focus in on Dr. Simpson's comment, that the --  
19 the -- one (1) of the reasons the IRFRF should be  
20 abandoned is that:

21 "Prediction of the future is  
22 inherently risky."

23 Do you see that?

24 MS. ANDREA SHERRY: I do see that.

25 MR. MATT GHIKAS: And presumably, Ms.

1 Sherry, you'd agree with Dr. Simpson that the  
2 prediction of the future is inherently risky?

3 MS. ANDREA SHERRY: Always, yeah.

4 MR. MATT GHIKAS: And can you tell me,  
5 Ms. Sherry, does the fact that the future is difficult  
6 to predict mean that an actuary shouldn't bother  
7 trying to forecast accurately?

8 MS. ANDREA SHERRY: Of course not. We  
9 try our best to do as accurate a prediction as  
10 possible.

11 MR. MATT GHIKAS: Right. And, in  
12 fact, the actuarial standards require you to use best  
13 estimates, don't they?

14 MS. ANDREA SHERRY: Yes, although we  
15 do do ranges for some things.

16 MR. MATT GHIKAS: Okay. Now, the --  
17 the definition of best estimate is in the actuarial  
18 standard -- I'll just read this. This is probably no  
19 news to you, but it's without -- 'best estimate' means  
20 without bias, neither conservative nor unconservative.  
21 That sounds familiar?

22 MS. ANDREA SHERRY: Yeah.

23 MR. MATT GHIKAS: Okay. Now, I want  
24 to focus in again on that sentence and ask you, Ms.  
25 Sherry, about the rationale.

1 "Since we have a well-established  
2 procedure for the assessment of  
3 risks facing MPI in the  
4 determination of the RSR."

5 Do you see that?

6 MS. ANDREA SHERRY: Yeah.

7 MR. MATT GHIKAS: Okay. Now, Ms.  
8 Sherry, would you endorse that MPI and the Board  
9 simply accept a forecast that is not regarded as a  
10 best estimate because MPI's basic capital is above the  
11 minimum RSR?

12 MS. ANDREA SHERRY: If you're asking  
13 me if the DCAT-based scenario should be the best  
14 estimate of the Corporation's true belief of what the  
15 future financial position of the Company would be,  
16 then that would be yes.

17 MR. MATT GHIKAS: Okay. Well, let me  
18 ask you about -- let's talk about interest rates here,  
19 okay? Now, let's assume that -- let's assume that the  
20 interest rate forecast is not a best estimate. Let's  
21 assume that's the Board's conclusion, okay? All  
22 right. Let's assume that's your conclusion, okay?

23 MS. ANDREA SHERRY: Okay.

24 MR. MATT GHIKAS: All right. Would  
25 you, as an actuary, use that estimate anyway simply

1 because -- in conducting our actuarial rate analysis  
2 simply because there's sufficient capital to absorb a  
3 loss?

4 MS. ANDREA SHERRY: I would use the  
5 best estimate I could come up with, and believed to be  
6 the best estimate, in my base scenario for the DCAT.

7 MR. MATT GHIKAS: Right. And you'd  
8 agree with me if I said to you that solid forecasting  
9 is the key?

10 MS. ANDREA SHERRY: Yes.

11 MR. MATT GHIKAS: Okay. And you'd  
12 agree with me if I said to you that the RSR cannot be  
13 seen as a substitute for good forecasting, right?

14 MS. ANDREA SHERRY: I think we've all  
15 agreed to that.

16 MR. MATT GHIKAS: Okay. And you'd  
17 agree with me that, Ms. Sherry, if you weren't using  
18 best estimates, then the losses that are being  
19 reflected in the RSR balance aren't necessarily an  
20 unforeseen event, are they?

21 MS. ANDREA SHERRY: I have a difficult  
22 time answering that question because I think that the  
23 DCAT-based scenario should be the best estimate. So  
24 I'm not sure exactly what you're asking me.

25 MR. MATT GHIKAS: Okay. I'm --

1 MS. ANDREA SHERRY: If -- if you're  
2 saying like the DCAT-based scenario is a poor-based  
3 scenario, then that's not good practice.

4 MR. MATT GHIKAS: Okay. Ms. Sherry,  
5 I'm asking you whether, if you're using an estimate --  
6 you as actuary is using an estimate that you don't  
7 regard as a best estimate, then the -- the losses that  
8 are reflected in the RSR balance wouldn't necessarily  
9 be an unforeseen event, right? I'm hoping those words  
10 sound familiar to you.

11 MS. ANDREA SHERRY: If you're  
12 purposely using an estimate or a forecast that is not  
13 what you believe to be the best estimate -- that's  
14 what you're asking me?

15 MR. MATT GHIKAS: Well, the losses  
16 would then not be unforeseen, would they?

17 MS. ANDREA SHERRY: No. But I would  
18 suggest that that would be poor practice.

19 MR. MATT GHIKAS: Ms. Sherry, you'd  
20 agree with me that good forecasting tends to promote  
21 rate stability over time?

22 MS. ANDREA SHERRY: Yes.

23 MR. MATT GHIKAS: And conversely, poor  
24 forecasting tends to promote rate volatility over  
25 time, doesn't it?

1 MS. ANDREA SHERRY: Well, I suppose if  
2 you're consistently poor forecasting, then it wouldn't  
3 increa -- increase instability. It's when you change  
4 it that it creates instability.

5 MR. MATT GHIKAS: Okay. Now, changing  
6 topics here, Ms. Sherry, to your note on accepted  
7 actuarial practice, now if we -- if I can start off  
8 just more generally with you, Ms. Sherry, that the  
9 rate indication process that MPI is doing, it does  
10 accord with accepted actuarial practice in many  
11 respects, doesn't it?

12 MS. ANDREA SHERRY: In many respects --

13 MR. MATT GHIKAS: Yes.

14 MS. ANDREA SHERRY: -- if you could  
15 give me examples of that, perhaps?

16 MR. MATT GHIKAS: Well, if -- if  
17 you've seen the Application -- the section -- have you  
18 read the section on accepted actuarial practice in the  
19 Application?

20 MS. ANDREA SHERRY: Yes, I have.

21 MR. MATT GHIKAS: Okay. And that is  
22 where Mr. Johnston has identified the departures from  
23 accepted actuarial practice in his analysis.

24 MS. ANDREA SHERRY: True. I'm going  
25 by memory. I'm not sure if he hit on all of the areas

1 where we've discussed could be -- there could be  
2 improvement.

3 MR. MATT GHIKAS: Okay. But, Ms. --  
4 Ms. Sherry, you'd agree with me that the Standards of  
5 Practice actually require an actuary in producing an  
6 indication to indicate where it departs from accepted  
7 actuarial practice. Right?

8 MS. ANDREA SHERRY: Yes.

9 MR. MATT GHIKAS: Okay. And you --  
10 you -- are you suggesting that Mr. Johnston hasn't  
11 done that?

12 MS. ANDREA SHERRY: There are areas  
13 such as the treatment of re-insurance where I'm not  
14 sure if it is against -- in the Standards of Practice  
15 where it -- but it would definitely be not in  
16 accordance with normal actuarial rate making  
17 procedures.

18 MR. MATT GHIKAS: Okay.

19 MS. ANDREA SHERRY: That's one (1)  
20 example that comes to mind.

21 MR. MATT GHIKAS: Okay. So, Ms. --  
22 Ms. Sherry, you'd agree with me that there are --  
23 there is room for judgment in -- in accepted actuarial  
24 practice, ma'am?

25 MS. ANDREA SHERRY: Yes, there is.

1 MR. MATT GHIKAS: Okay.

2 MS. ANDREA SHERRY: But there's also  
3 some things that are simply more accurate than others.

4 MR. MATT GHIKAS: In -- in your view.

5 MS. ANDREA SHERRY: Yes, and in normal  
6 actuarial practice.

7 MR. MATT GHIKAS: Now, you'd agree  
8 with me also, Ms. Sherry, that the -- that the  
9 Standards of Practice in accepted actuarial practice,  
10 it applies to the derivation of the indicated rates,  
11 not to the recommendation or selection of the rates to  
12 actually be charged by the company.

13 MS. ANDREA SHERRY: Correct.

14 MR. MATT GHIKAS: And that same  
15 principal applies to quasi insurers, which would  
16 include a federal or Provincial Crown corporation?

17 MS. ANDREA SHERRY: Yes.

18 MR. MATT GHIKAS: Now, in simple terms  
19 the indicated rates are the rates that you produce  
20 when you're doing your modelling based on the data.  
21 Correct?

22 MS. ANDREA SHERRY: Correct.

23 MR. MATT GHIKAS: Okay. And so an  
24 insurance company isn't required to charge the  
25 indicated rates, right?

1 MS. ANDREA SHERRY: No.

2 MR. MATT GHIKAS: And, indeed, a  
3 private company for example might select rates that  
4 are different from indicated rates for business or  
5 competitive reasons. Correct?

6 MS. ANDREA SHERRY: Absolutely.

7 MR. MATT GHIKAS: And that happens  
8 frequently, doesn't it?

9 MS. ANDREA SHERRY: Yes.

10 MR. MATT GHIKAS: And would you agree  
11 with me that -- that even the obligation of an actuary  
12 to prepare the rate indication is subject to  
13 regulatory direction?

14 MS. ANDREA SHERRY: Sorry? Do you  
15 mean in the private world where --

16 MR. MATT GHIKAS: In any world. The -  
17 - the producing of a rate indication consistent with  
18 accepted actuarial practice has an exception in it for  
19 regulatory direction. Doesn't it?

20 MS. ANDREA SHERRY: Yes.

21 MR. MATT GHIKAS: Okay.

22 MS. ANDREA SHERRY: I'll accept that.

23 MR. MATT GHIKAS: Now, Ms. Sherry, the  
24 -- the RSR is essentially a capital reserve, right?

25 MS. ANDREA SHERRY: Yes.

1 MR. MATT GHIKAS: Okay. And every  
2 insurance company in Canada, public or private, has a  
3 capital reserve?

4 MS. ANDREA SHERRY: Yes.

5 MR. MATT GHIKAS: OSFI is the Office  
6 of the Superintendent of Financial Institutions. Right?

7 MS. ANDREA SHERRY: Correct.

8 MR. MATT GHIKAS: It's a federal  
9 regulator?

10 MS. ANDREA SHERRY: Yeah.

11 MR. MATT GHIKAS: And it regulates  
12 federally regulated insurers, the private ones  
13 generally.

14 MS. ANDREA SHERRY: Yes.

15 MR. MATT GHIKAS: Okay. And it has  
16 developed the minimum capital test to assess capital  
17 adequacy for those federally regulated insurers.  
18 Correct?

19 MS. ANDREA SHERRY: Correct.

20 MR. MATT GHIKAS: And simply stated,  
21 Ms. Sherry, MCT is the ratio of capital available to  
22 the -- to capital required?

23 MS. ANDREA SHERRY: Correct.

24 MR. MATT GHIKAS: And 100 percent MCT  
25 is where the capital available equals the capital

1 required, correct?

2 MS. ANDREA SHERRY: Yes.

3 MR. MATT GHIKAS: Okay. Now, OSFI's  
4 guidelines stipulate how those amounts are calculated,  
5 correct?

6 MS. ANDREA SHERRY: Correct.

7 MR. MATT GHIKAS: I circulated to your  
8 counsel last night a reference to the OSFI diagram --  
9 OSFI guidelines, pardon me.

10 MS. ANDREA SHERRY: Yeah.

11 MR. MATT GHIKAS: And it's -- a hard  
12 copy has been circulated this morning, Mr. Chairman.  
13 Perhaps we can take a quick look at that.

14 MR. BYRON WILLIAMS: And I can confirm  
15 that the document was rech -- received, shared with  
16 the witness, and -- and reviewed by the witness to  
17 expedite matters for My Learned Friend.

18 MR. MATT GHIKAS: Thank you very much.  
19

20 CONTINUED BY MR. MATT GHIKAS:

21 MR. MATT GHIKAS: So you had an  
22 opportunity to look at that, did you?

23 MS. ANDREA SHERRY: I'm very familiar  
24 with this, yeah.

25 MR. MATT GHIKAS: Sure. So this --



1 Financial Services Commission of Ontario, or FSCO,  
2 regulates Ontario-based financial institutions?

3 MS. ANDREA SHERRY: Yes.

4 MR. MATT GHIKAS: And they have  
5 adopted the minimum capital test as well, correct?

6 MS. ANDREA SHERRY: Yes.

7 MR. MATT GHIKAS: And the British  
8 Columbia Utilities Commission employs the minimum  
9 capital test in its regulation of ICBCs universal  
10 compulsory insurance?

11 MS. ANDREA SHERRY: I believe so.

12 MR. MATT GHIKAS: And the SGI Auto  
13 Fund also employs the minimum capital test, correct?

14 MS. ANDREA SHERRY: They use it, yes.

15 MR. MATT GHIKAS: And the -- I've seen  
16 in your past transcripts, Ms. Sherry, where you had  
17 indicated that you didn't believe MCT was appropriate  
18 for use for MPI.

19 Is that correct?

20 MS. ANDREA SHERRY: I wouldn't say  
21 that it's not appropriate to use for MPI. The MCT is  
22 really just an output of a set of financial  
23 statements. My opinion is that it shouldn't serve as  
24 the -- a hundred percent MCT shouldn't serve as the  
25 upper target for the RSR.

1 MR. MATT GHIKAS: Okay. Now, you'd  
2 agree with me that it's important for MPI to remain  
3 solvent, first of all?

4 MS. ANDREA SHERRY: Yes.

5 MR. MATT GHIKAS: And it wouldn't be  
6 sound business practice for a Crown corporation to run  
7 itself with a willingness to become insolvent,  
8 correct?

9 MS. ANDREA SHERRY: Correct.

10 MR. MATT GHIKAS: Even if that means -  
11 - even if it's backed by the provincial government,  
12 right?

13 MS. ANDREA SHERRY: I don't believe  
14 that insolvency is a risk for MPI.

15 MR. MATT GHIKAS: My question was  
16 whether -- whether it would be appropriate for MPI or  
17 a Crown corporation to run itself without concern for  
18 insolvency simply because it was a Crown corporation?

19 MS. ANDREA SHERRY: Certainly not.

20 MR. MATT GHIKAS: Now, the -- MPI's  
21 evidence is that the lower RSR ticket -- target after  
22 adjustment for a 50/50 interest rate is 26 percent  
23 MCT. Have you seen that number?

24 MS. ANDREA SHERRY: I don't recall a  
25 26 percent, but I will believe you.

1 MR. MATT GHIKAS: Okay. You can  
2 accept that subject to check. If you --

3 MS. ANDREA SHERRY: Yeah.

4 MR. MATT GHIKAS: -- need the backup,  
5 it's -- I can provide that to you. OSFIs supervisory  
6 target is 150 percent MCT?

7 MS. ANDREA SHERRY: Correct.

8 MR. MATT GHIKAS: And OSFI has an  
9 early intervention process if the capital levels fall  
10 below 150?

11 MS. ANDREA SHERRY: Yes.

12 MR. MATT GHIKAS: And OSFI intervenes  
13 below 150 to ensure there's no prospect of the capital  
14 level falling below a hundred, correct?

15 MS. ANDREA SHERRY: Correct.

16 MR. MATT GHIKAS: And OSFI would  
17 intervene in a company, is it fair, is it -- if -- at  
18 a hundred percent, wouldn't it?

19 MS. ANDREA SHERRY: Absolutely.

20 MR. MATT GHIKAS: And so in order to  
21 avoid falling below 150 percent supervisory target  
22 private insurers must retain sufficient capital  
23 cushion above that level to be able to absorb  
24 volatility and losses, right?

25 MS. ANDREA SHERRY: Yes.

1 MR. MATT GHIKAS: And all OSFI  
2 insurers manage to a target higher than 150?

3 MS. ANDREA SHERRY: Yes. Each  
4 individual company has a target MCT level which they  
5 manage to.

6 MR. MATT GHIKAS: And last year, when  
7 I looked at the transcripts, Wawanesa's was operating  
8 at 300 percent. Is that still the case?

9 MS. ANDREA SHERRY: Yes. And there's  
10 a reason for that. Wawanesa is a mutual company.  
11 They have no access to capital like a stock company  
12 would, so we operate higher than normal.

13 MR. MATT GHIKAS: Okay. So the other  
14 insurers would be operating somewhere between 150 and  
15 300?

16 MS. ANDREA SHERRY: Well, I can't say  
17 -- not every single -- every single insurance company  
18 will have their own target level. But generally stock  
19 companies have a lower MCT target because they  
20 dividend the money to their stockholders.

21 MR. MATT GHIKAS: Right. But they  
22 would keep a cushion above 150 percent to make sure  
23 they don't drop below that level, correct?

24 MS. ANDREA SHERRY: Correct.

25 MR. MATT GHIKAS: Okay. And the

1 regulator has set ICBC's upper limit to pay out to  
2 customers at 160?

3 MS. ANDREA SHERRY: Subject to check.

4 MR. MATT GHIKAS: Okay. And ICBC is a  
5 monopoly, it's not subject to competition, right?

6 MS. ANDREA SHERRY: Correct.

7 MR. MATT GHIKAS: No prospect of  
8 losing market share?

9 MS. ANDREA SHERRY: Correct.

10 MR. BYRON WILLIAMS: I just want to --  
11 and, Mr. Ghikas, in terms of the question two (2) ago,  
12 are you suggesting it was the regulator or the  
13 Lieutenant Governor in Council?

14 MR. MATT GHIKAS: It is in fact the  
15 regulator, yeah. The Lieutenant Governor in Council  
16 stipulates a minimum of a hundred.

17

18 CONTINUED BY MR. MATT GHIKAS:

19 MR. MATT GHIKAS: Are you aware that  
20 SGI's auto fund has a target of a hundred percent MCT?

21 MS. ANDREA SHERRY: I am.

22 MR. MATT GHIKAS: Okay. And if we  
23 could just briefly go there. I'm just about done this  
24 section, Mr. Chairman. If we could briefly go to CAC  
25 Exhibit...

1 (BRIEF PAUSE)

2

3 MR. MATT GHIKAS: ...18, please. And  
4 if you could go over to the second page of that,  
5 Diana, right under the heading, 'Capital Adequacy,'  
6 there. This was a copy of -- of a document that I  
7 referred your counsel to?

8 MS. ANDREA SHERRY: Yeah, I read it  
9 last night.

10 MR. MATT GHIKAS: Okay, thank you.  
11 And I really had just one (1) simple question about  
12 the first line under, 'Capital Adequacy,' at the top.

13 "Capital adequacy speaks to the auto  
14 fund's ability to honour its  
15 financial obligations."

16 You would agree with me that that is an  
17 appropriate thing for a public insurer to do?

18 MS. ANDREA SHERRY: Within limits.

19 MR. MATT GHIKAS: Okay.

20 MS. ANDREA SHERRY: I have to caveat  
21 with that.

22 MR. MATT GHIKAS: And SGI is a  
23 monopoly insurer, as well, correct?

24 MS. ANDREA SHERRY: It is, yeah.

25 MR. MATT GHIKAS: And there's no

1 prospect of losing market share to competition?

2 MS. ANDREA SHERRY: No.

3 MR. MATT GHIKAS: Okay. Thank you.

4 Mr. Chairman, that would be a good time to break, if  
5 you -- if you like. I've got enough that it would be  
6 worth --

7 THE CHAIRPERSON: Okay. Thank you.

8 We'll break for an hour. Thank you.

9

10 --- Upon recessing at 12:03 p.m.

11 --- Upon resuming at 1:04 p.m.

12

13 THE CHAIRPERSON: Okay, if we -- if --  
14 if we could resume. Mr. Ghikas...?

15 MR. MATT GHIKAS: Thank you, Mr.  
16 Chairman.

17

18 CONTINUED BY MR. MATT GHIKAS:

19 MR. MATT GHIKAS: Dr. Simpson, early  
20 on in -- in your PowerPoint presentation, Mr. Williams  
21 stopped you and asked you a question about management  
22 action, and I believe his question was around whether  
23 RSR levels should be assessed assuming management  
24 action. Do you recall that?

25 DR. WAYNE SIMPSON: Yeah.

1 MR. MATT GHIKAS: Okay. And it -- did  
2 I understand your answer correctly that you believe  
3 that management action should be accounted for in  
4 establishing the RSR levels?

5 DR. WAYNE SIMPSON: Yes. And that's  
6 what the DCAT report does.

7 MR. MATT GHIKAS: Okay. And does that  
8 same answer apply to an upper level, assuming that --  
9 that one is approved by the Board?

10 DR. WAYNE SIMPSON: An upper level for  
11 the RSR?

12 MR. MATT GHIKAS: Yes.

13 DR. WAYNE SIMPSON: Based on what?  
14 Based on -- on the one (1) in two hundred (200) risk  
15 tolerance, or just in general?

16 MR. MATT GHIKAS: Well, just -- just  
17 in general. I mean, in your -- in your analysis, do  
18 both boundaries get -- get assessed using management  
19 action?

20 DR. WAYNE SIMPSON: That would seem to  
21 appeal to my sense of consistency, yes.

22 MR. MATT GHIKAS: Okay. And just in  
23 terms of the term 'management action', it's a bit  
24 euphemistic, but essentially management action is a  
25 rate increase, basically.

1 DR. WAYNE SIMPSON: Yeah. Among other  
2 things, yeah.

3 MR. MATT GHIKAS: Yeah. And so if the  
4 upper band of the RSR is -- I mean, the width -- let  
5 me put it this way. The RSR band is -- is a band in  
6 which -- which is used to manage volatility. Correct?

7 DR. WAYNE SIMPSON: Yes.

8 MR. MATT GHIKAS: Okay.

9 DR. WAYNE SIMPSON: Risk.

10 MR. MATT GHIKAS: Right. And if -- if  
11 -- would you agree with me that if one is assuming  
12 rate increases when you're determining the upper level  
13 of that band, it's a bit circular?

14 DR. WAYNE SIMPSON: I'm not sure what  
15 you're getting at there.

16 MR. MATT GHIKAS: Okay. So your --  
17 your -- the upper level of the band is being  
18 established to provide a necessary band in which rate  
19 volatility will be maintained. Correct?

20 DR. WAYNE SIMPSON: M-hm.

21 MR. MATT GHIKAS: So if you're  
22 determining that band, assuming a rate increase, isn't  
23 that a bit circular?

24 DR. WAYNE SIMPSON: I don't think so,  
25 because my sense of the upper bound is that beyond

1 that, there would be a consideration of a -- a rebate,  
2 and that could reduce -- essentially be thought of as  
3 a -- as a -- offsetting the rate increase. That's the  
4 way I would think of it, just to be consistent.

5 MR. MATT GHIKAS: And you would -- you  
6 would regard, I assume, a situation where you're  
7 rebating immediately followed by an RSR rebuilding fee  
8 to be something you'd want to avoid if possible.

9 DR. WAYNE SIMPSON: I think you'd want  
10 to combine those two (2) in a more moderate rate  
11 increase, right.

12 MR. MATT GHIKAS: Now, just changing  
13 gears for the moment, Ms. Sherry, just on the issue of  
14 accepted actuarial practice, you'd agree with me that,  
15 even under a rate-setting approach that's based  
16 entirely on accepted actuarial practice, there's still  
17 a potential for losses associated with, say, prior  
18 year policies written that could deplete the RSR,  
19 correct?

20 MS. ANDREA SHERRY: Yes.

21 MR. MATT GHIKAS: Okay. And if -- if  
22 those losses become significant enough, it doesn't --  
23 accepted actuarial practice doesn't do away with the  
24 need for an RSR rebuilding fee.

25 That can -- that is still a

1 possibility, right?

2 MS. ANDREA SHERRY: Yes.

3 MR. MATT GHIKAS: Okay. Now, can I  
4 get you to turn -- you both to turn -- and, Diana,  
5 would you mind turning back to the IR responses, CAC's  
6 IR responses, please. And I'm -- I'm looking at IR-1-  
7 3.

8 And this is a question that's aimed at  
9 the range around the lower bound of the total equity  
10 target range or of the RSR. And -- and there are two  
11 (2) responses under here. One (1) of them in AS, and  
12 I assume that's you, Ms. Sherry.

13 MS. ANDREA SHERRY: Yes, it is.

14 MR. MATT GHIKAS: And -- and WS,  
15 that's -- that's your response, Dr. Simpson?

16 DR. WAYNE SIMPSON: Yes.

17 MR. MATT GHIKAS: Okay. Now, you have  
18 clarified in response to the question that you are  
19 seeking to have the target or recommending the target  
20 be the one (1) in forty (40), and that there be a band  
21 around that target, as it were, correct?

22 MS. ANDREA SHERRY: Yes.

23 MR. MATT GHIKAS: And in -- Dr.  
24 Simpson, in yours, you reference -- and I think you  
25 did this in your presentation as well, towards the

1 bottom of that page there's some specific tolerances.  
2 Down there at the bottom, second to last line on  
3 Diana's page there, a one (1) in ten (10) risk  
4 tolerance is referenced.

5 Do you see that?

6 DR. WAYNE SIMPSON: For the -- for the  
7 minimum, yes.

8 MR. MATT GHIKAS: For the minimum,  
9 right. And do you see that, Ms. Sherry?

10 MS. ANDREA SHERRY: Yes.

11 MR. MATT GHIKAS: Okay. Now, as a  
12 professional actuary, do you routinely endorse a DCAT  
13 based on a one (1) in ten (10) risk tolerance?

14 MS. ANDREA SHERRY: In the private  
15 world, no.

16 MR. MATT GHIKAS: Okay. Not in any  
17 world I assume?

18 MS. ANDREA SHERRY: I've only done  
19 DCATs in the private industry. I've never done a DCAT  
20 for a public company.

21 MR. MATT GHIKAS: Okay. And I assume  
22 that's not -- that your own DCAT at Wawanesa, we won't  
23 get into the specifics of it because it's probably  
24 commercially sensitive.

25 But your own DCAT analysis would be

1 looking at more remote probabilities than that one (1)  
2 in ten (10) by a significant margin, wouldn't it?

3 MS. ANDREA SHERRY: Yes.

4 MR. MATT GHIKAS: Okay. And you'd  
5 agree with me that OSFI would never allow an insurer  
6 to hold only as much capital as to be able to  
7 withstand a one (1) in ten (10) year event?

8 MS. ANDREA SHERRY: Because OSFI is  
9 concerned with solvency.

10 MR. MATT GHIKAS: Right. And MPI is  
11 not concerned with solvency?

12 MS. ANDREA SHERRY: I don't think  
13 solvency is a risk like it is for a private insurance  
14 company.

15 MR. MATT GHIKAS: Okay. But it's a  
16 desirable outcome, isn't it?

17 MS. ANDREA SHERRY: Yes.

18 DR. WAYNE SIMPSON: And -- and the RSR  
19 is concerned with rate shock.

20 MR. MATT GHIKAS: And rate shock is  
21 undesirable?

22 DR. WAYNE SIMPSON: Which is different  
23 from solvency.

24 MR. MATT GHIKAS: Okay. And it would  
25 actually be inconsistent with accepted actuarial

1 practice for an actuary to sign off on a DCAT based on  
2 a one (1) in ten (10) scenario, wouldn't it?

3 MS. ANDREA SHERRY: For a private  
4 insurance company or a federally regulated insurance  
5 company, yes.

6 MR. MATT GHIKAS: Well, based on the  
7 Canadian Institute of Actuaries' practices, right?

8 MS. ANDREA SHERRY: Only federally  
9 regulated companies are required to do a DCAT by OSFI.  
10 So the standards of practice speak to those DCATs that  
11 have to be done.

12 MR. MATT GHIKAS: And are you -- are  
13 you familiar with -- so the Canadian Institute of  
14 Actuaries, that's who publishes the principles that  
15 get referred to as accepted actuarial practice,  
16 correct?

17 MS. ANDREA SHERRY: Standards of  
18 practice.

19 MR. MATT GHIKAS: Right. And in  
20 addition to the standards of practice, they publish  
21 educational notes, right?

22 MS. ANDREA SHERRY: Yes, they do.

23 MR. MATT GHIKAS: Right. And are you  
24 familiar with the educational note that sets out an  
25 expectation about plausible adverse events for DCAT

1 stress testing?

2 MS. ANDREA SHERRY: Yes.

3 MR. MATT GHIKAS: Right. And one (1)  
4 of those -- one (1) of those principles is that a 95th  
5 percentile or greater result would be required for a  
6 scenario to be deemed adverse?

7 MS. ANDREA SHERRY: For a federally  
8 regulated company or a private company, yes.

9 MR. MATT GHIKAS: Well, do the  
10 standards of practice only apply to federally  
11 regulated?

12 MS. ANDREA SHERRY: As I said, only  
13 federally regulated companies are required to do a  
14 DCAT by OSFI.

15 MR. MATT GHIKAS: Yes, but this isn't  
16 OSFI, is it?

17 MS. ANDREA SHERRY: No, but the  
18 standards of practice would be guiding those actuaries  
19 that had to do a DCAT.

20 MR. MATT GHIKAS: And a 95th  
21 percentile or greater result, that would be a 1:20?

22 MS. ANDREA SHERRY: Yeah. Yeah.

23

24 (BRIEF PAUSE)

25

1 MR. MATT GHIKAS: Ms. Sherry, can you  
2 -- can you identify specifically for me where -- where  
3 the -- what you're referring to when you say that the  
4 educational notes only apply to OSFI regulated  
5 insurers in that regard?

6 MS. ANDREA SHERRY: Well, I wasn't  
7 saying that specifically. I was saying that federally  
8 regulated private companies are required by OSFI to do  
9 a DCAT. There are some provincial regulators that  
10 require that as well. And the sta -- the standards of  
11 practice would be referring those actuaries required  
12 to do DCATs, giving them guidance on that.

13 Okay. So if -- if for --

14 MS. ANDREA SHERRY: MPI is not  
15 actually required to do a DCAT by any sort of  
16 regulation.

17 MR. MATT GHIKAS: MPI is not required  
18 to do a DCAT?

19 MS. ANDREA SHERRY: Not by regulation.

20 MR. MATT GHIKAS: Okay.

21 MS. ANDREA SHERRY: Not by OSFI or --  
22 or the Public Utility Board.

23 MR. MATT GHIKAS: Okay. Now, let's  
24 assume for a moment that the Board actually does want  
25 MPI to do a DCAT. It would then be subject to the

1 same requirements, right?

2 MS. ANDREA SHERRY: I don't know, to  
3 be honest with you.

4 MR. MATT GHIKAS: Okay. Thank you.  
5 Dr. Simpson, would you agree with me that the wider  
6 the RSR range the less volatility there would be in  
7 rates?

8 DR. WAYNE SIMPSON: Yes, because the  
9 retained earnings within that could be used to reduce  
10 rate volatility.

11 MR. MATT GHIKAS: And if you were to  
12 achieve that with -- by moving the lower limit of the  
13 RSR too low, you run the risk of a series of adverse  
14 events reducing the capital to an unsustainable point,  
15 right?

16 DR. WAYNE SIMPSON: Well, I don't  
17 think that follows, because simply reducing the lower  
18 bound makes the ranger wider.

19 MR. MATT GHIKAS: Okay. Well, let me  
20 -- let me say the words again, because they should  
21 sound familiar to you, Dr. Simpson, I would suggest,  
22 the wider the range the less action is prescribed.  
23 There is some risk in widening the range, because that  
24 -- if that minimum is too small, you run the risk of a  
25 series of adverse events being, you know, reducing the

1 retained earnings to a -- an unsustainable point.

2 And you're disagreeing with that  
3 evidence, sir?

4 DR. WAYNE SIMPSON: No, I was just  
5 disagreeing with it following from the previous  
6 comment about the -- the range. I didn't know that  
7 you were getting at a -- at a separate point.

8 MR. MATT GHIKAS: Okay.

9

10 (BRIEF PAUSE)

11

12 MR. MATT GHIKAS: Dr. Simpson, these  
13 words should sound vaguely familiar to you again.

14 In your view, there's a lot of evidence  
15 that consumers are risk averse and that they don't  
16 want sudden jumps in rate, right?

17 DR. WAYNE SIMPSON: I -- that is --  
18 that is the assumption behind the RSR and the DCAT,  
19 yeah.

20 MR. MATT GHIKAS: And that's something  
21 you believe, right?

22 DR. WAYNE SIMPSON: Well, I'm -- I'm  
23 taking -- I'm taking other's believe in it.

24 MR. MATT GHIKAS: Okay. And rate  
25 stabilization is something that they would value,

1 right?

2 DR. WAYNE SIMPSON: I think that is  
3 assumption behind the DCAT and RSR, yes.

4 MR. MATT GHIKAS: Thank you, Dr.  
5 Simpson. Thank you, Ms. Sherry. And thank you, Mr.  
6 Chairman. That's my questions.

7 THE CHAIRPERSON: Thank you, Mr.  
8 Ghikas. Ms. McCandless...?

9 MS. KATHLEEN MCCANDLESS: Thank you.

10

11 CROSS-EXAMINATION BY MS. KATHLEEN MCCANDLESS:

12 MS. KATHLEEN MCCANDLESS: Good  
13 afternoon. I'm counsel on behalf of the Public  
14 Utilities Board in Manitoba and I do have some  
15 questions for both of you with respect to your reports  
16 and your presentations today.

17 First, Dr. Simpson. In this  
18 proceeding, a lot of focus has been applied to the  
19 term best estimate. And, of course, you had some  
20 questions from Mr. Ghikas this morning on that term.

21 When it comes to interest rate  
22 forecasting, perhaps just for clarification, how would  
23 you define a best estimate?

24 DR. WAYNE SIMPSON: Well, I -- I think  
25 I would define the estimate the same way good interest

1 rate forecasters do, such as the banks. Which is to  
2 say that I would consider a good estimate -- a good  
3 for -- a good forecast to be one that hits the mark  
4 reasonably well and is wrong one way as often as it is  
5 the other way looking over a substantial period of  
6 time because my forecasts have to deal with a whole  
7 variety of situations.

8                   So it'll be a rough and ready -- I  
9 mean, I could be more technical if you want, but...

10                   MS. KATHLEEN MCCANDLESS: Please go  
11 ahead, yeah.

12                   DR. WAYNE SIMPSON: Well, when they  
13 forecast, I think typically they would forecast based  
14 on a method -- some sort of regression method. And  
15 that would produce -- although it probably comes out  
16 of a fairly sophisticated set of equations, not just a  
17 very simple kind of time series analysis. And it  
18 would produce an estimate, sort of a best estimate,  
19 which would be the expected value, and then would  
20 produce a range of values. And so you'd have the  
21 probability that would lie in -- in different  
22 distances from the best estimate.

23                   And so if you were comparing that to an  
24 actual forecast you'd be comparing it to, well, how  
25 did we do, did we miss the mark by -- did we fall

1 outside the 95 percent confidence interval, did we  
2 not, and -- and so on. So there's all sorts of ways  
3 of kind of assessing those forecasts to go forward,  
4 and then moderating your forecasting techniques on  
5 that basis.

6                   And, you know, given the very unique  
7 circumstances that -- that we're going through, I -- I  
8 suspect there's a fair amount of scrambling by  
9 forecasters to get a good sense of what is like -- is  
10 going on and what the best forecasting methods now  
11 are.

12                   But I'm not -- I'm not an insider.

13                   MS. KATHLEEN MCCANDLESS: Thank you.  
14 And we did hear a little bit from you this morning  
15 with respect to the issue of bias.

16                   Perhaps you could just clarify how  
17 considerations of accuracy and bias enter into the  
18 determination of what is the best estimate?

19                   DR. WAYNE SIMPSON: Well, I think the  
20 issue of bias has come up here just because the  
21 forecasts have been consistently off in one (1)  
22 direction for a period since 2010. I suspect they go  
23 back further. That's not the case. I'm almost  
24 certain that's not the case. But that -- that is sort  
25 of the issue of -- of bias.

1 I think you would ideally want  
2 forecasts not to be consistently biased in one  
3 direction for any length of time. That is what I  
4 would call serially correlated bias, you know, that --  
5 that if you're wrong one (1) year, you're continually  
6 be wrong below, say, where if you're above you'd be  
7 continually above.

8 But I really don't know how the bank  
9 forecasts have faired before 2010, and I don't see any  
10 data that tells me that.

11 MS. KATHLEEN MCCANDLESS: Thank you.  
12 You would agree that MPI is ex -- is expected to  
13 prepare its GRA using best estimate forecasts?

14 DR. WAYNE SIMPSON: Yes, that -- yeah.

15 MS. KATHLEEN MCCANDLESS: And this  
16 morning Mr. Ghikas reviewed with you your response to  
17 PUB CAC-1-2 -- sorry 1-1. And I don't think it's  
18 necessary to put the -- the document up on the screen.  
19 I just have one (1) question for you about that.

20 You had been asked if you considered  
21 the Standard Interest Rate Forecast in the -- in the  
22 Information Requested used in the GRA as originally  
23 filed to be a best estimate. And your response was  
24 that you indicated you would not consider yourself  
25 qualified to do better.

1 Do you recall that?

2 DR. WAYNE SIMPSON: Yeah. I mean, I  
3 could add to that that the banks presumably devote  
4 considerable amounts of resources to this. And -- and  
5 any individual would be fairly presumptuous to think  
6 that they could do better, but, of course, investors  
7 try.

8 MS. KATHLEEN MCCANDLESS: So would  
9 that mean then that you consider the Standard Interest  
10 Rate Forecast to be a best estimate?

11 DR. WAYNE SIMPSON: Yep.

12 MS. KATHLEEN MCCANDLESS: Okay. Have  
13 you had an opportunity to review the evidence led by  
14 Dr. Cleary for MPI that explored interest rate  
15 forecasting accuracy and bias?

16 DR. WAYNE SIMPSON: I've read through  
17 it, yes.

18 MS. KATHLEEN MCCANDLESS: And so are  
19 you able to respond to Dr. Cleary's observations that,  
20 on the recent historical performance of the Standard  
21 Interest Rate Forecast and his conclusion, that it's  
22 not a best estimate forecast?

23 DR. WAYNE SIMPSON: Well, there --  
24 there isn't -- isn't much, if any, statistical detail  
25 comparing the outcomes. But, of course, you can

1 simply look at the graph that was put on the board  
2 this morning and see that the -- the banks have  
3 consistently overstated the rise in interest rates  
4 over the period since 2010. And the question going  
5 forward is again, the question of what is the risk of  
6 them continuing to do so, which is the interest rate  
7 decline scenario.

8 MS. KATHLEEN MCCANDLESS: Do you  
9 recall that the Standard Interest Rate Forecast is  
10 derived from short-term forecasts from the five (5)  
11 major Canadian banks plus a short and long-term  
12 forecast from Global Insight?

13 DR. WAYNE SIMPSON: Yes.

14 MS. KATHLEEN MCCANDLESS: Can you  
15 think of a reason that the banks and Global Insight  
16 would publish interest rate forecasts that are not  
17 best estimates?

18 DR. WAYNE SIMPSON: No.

19 MS. KATHLEEN MCCANDLESS: In the  
20 Standard Interest Rate Forecast, there's only one (1)  
21 source used for interest rate forecasts over the  
22 longer term. That's Global Insight.

23 If the objective of the Standard  
24 Interest Rate Forecast is to develop a consensus  
25 forecast, would the Standard Interest Rate Forecast be

1 improved by the addition of other long-term forecasts  
2 to augment that of Global Insight?

3 DR. WAYNE SIMPSON: I would presume  
4 so, yes. Yeah. I -- I would agree with that.

5 MS. KATHLEEN MCCANDLESS: When -- for  
6 financial modelling, for your purposes, what do you  
7 use for changes in interest rates?

8 DR. WAYNE SIMPSON: Well, I don't  
9 forecast interest rates on a regular basis in teaching  
10 students about labour economics, or in doing research  
11 on income maintenance programs.

12 But if I were forecasting interest  
13 rates right now -- is that what you're asking me?  
14 What would I do?

15 MS. KATHLEEN MCCANDLESS: Yes.

16 DR. WAYNE SIMPSON: I would -- I would  
17 look back at the forecasting record. I would  
18 certainly give some significant weight to what has  
19 gone on in the last five (5) or six (6) years, but I  
20 would probably look back further than that at -- at  
21 interest rates.

22 I mean, I think the presumptions that  
23 interest rates at some point will rise are based on  
24 some historical understanding of -- of the -- the  
25 performance of the economy -- the economies of the

1 world, and -- and the nature of monetary policy, which  
2 is that once economies begin to grow in a more robust  
3 fashion, there will be pressures on interest rates to  
4 rise to ward off inflation.

5 MS. KATHLEEN MCCANDLESS: Subject to  
6 there being suf -- a sufficient number of independent  
7 interest rate forecasts, would you agree that a  
8 possible upward bias in the current SIRF could be  
9 mitigated by eliminating the high forecast value in  
10 each forecast period being averaged?

11 DR. WAYNE SIMPSON: Yeah. I think  
12 there are a number of ways of mitigating forecasts.  
13 It sort of negates the notion it's a best forecast,  
14 but yeah, I accept that that would moderate the  
15 forecast. Yes.

16 MS. KATHLEEN MCCANDLESS: Thank you.  
17 Diana, could we please pull up CAC Exhibit 6? Dr.  
18 Simpson, that's your note on the IRFRF and the RSR  
19 target. And page 4.

20

21 (BRIEF PAUSE)

22

23 MS. KATHLEEN MCCANDLESS: At paragraph  
24 numbered 3, you describe the interest rate floor used  
25 in the DCAT as arbitrary. And you indicate that:

1 "We simply do not have modern  
2 evidence from a past low interest  
3 rate experience to provide guidance  
4 on what an appropriate interest  
5 floor might be."

6 You go onto conclude that:

7 "We cannot assign a proper risk  
8 tolerance to the interest rate  
9 decline scenario."

10 DR. WAYNE SIMPSON: M-hm. That's  
11 right, yeah.

12 MS. KATHLEEN MCCANDLESS: Does this  
13 mean that you reject any results from the DCAT based  
14 on the interest rate decline scenario?

15 DR. WAYNE SIMPSON: No. I think I  
16 suggested in an earlier hearing that we might discount  
17 the importance of this scenario in reaching a  
18 conclusion about the -- the risks facing MPI, but I'm  
19 not sure I would say that now given what has been a  
20 continuing emphasis on the interest rate decline.

21 But I mean the -- the issue still is a  
22 question of -- of how much weight you give to  
23 something that is -- that involves some fairly  
24 arbitrary assumptions, including the assumption that,  
25 you know, the Naive assumption is interest rates are

1 going to stay at the current level for the next four  
2 (4) years. Well, I think that's probably a bad  
3 forecast.

4 MS. KATHLEEN MCCANDLESS: Would you  
5 make those same comments with respect to the results  
6 from the DCAT that would be based on the combined  
7 scenario which also incorporates the interest rate  
8 floor?

9 DR. WAYNE SIMPSON: The -- yes. Yes.

10 MS. KATHLEEN MCCANDLESS: Thank you.

11 Ms. Sherry, now with some questions for  
12 you with respect to your note on ratemaking in  
13 accordance with accepted actuarial practice. And  
14 first I'm going to take you to an IR response which is  
15 PUB-CAC-1-2.

16 And this IR addressed what, in your  
17 experience, was -- is most commonly the basis for  
18 selection of the investment rate return used for  
19 discounting the actuarial liabilities. That was  
20 question 1 that you see before you on the screen.

21 MS. ANDREA SHERRY: M-hm.

22 MS. KATHLEEN MCCANDLESS: And your  
23 response is on the second page which is before you  
24 here. I won't re-read it for you, but is it fair to  
25 say that the common theme in your response was that

1 the discount rate for valuation purposes is typically  
2 dependent on consideration of the investment portfolio  
3 actually held as at the valuation date?

4 MS. ANDREA SHERRY: Normally I work  
5 with my -- I would have in the past worked with my --  
6 the investment team at the company that I'm with to  
7 decide what would be the most reasonable investment  
8 rate to use or discount rate to use.

9 But I have also used the dis -- the  
10 cashflow analysis, which would be looking at what  
11 investments you hold and how they match to the  
12 cashflows that you expect to occur out of the claims  
13 liabilities. And you would assume turnover of that.  
14 So if a bond is up, you assume you purchase something  
15 else. So there would be a bit of a combination there.

16

17 (BRIEF PAUSE)

18

19 MS. KATHLEEN MCCANDLESS: Would you  
20 agree that MPI's approach to selection of a discount  
21 rate for valuation purposes is consistent with your  
22 expectation in this regard?

23 MS. ANDREA SHERRY: To be honest, I  
24 can't recall the discount rate for the valuation.

25 MS. KATHLEEN MCCANDLESS: And just

1 going back to your previous response, the starting  
2 point for valuation purposes is still the current  
3 investment portfolio?

4 MS. ANDREA SHERRY: Yes. Well, I was  
5 thinking more of the ratemaking, the discount rate  
6 used in ratemaking, what that should be. That's what  
7 I was focussed on those responses. So obviously it  
8 would be good if there was some consistency in that,  
9 but that's where that comment came from.

10 MS. KATHLEEN MCCANDLESS: Thank you.  
11 To your third response in IR at PUB-CAC-1-2, this IR  
12 addressed the requirements of the -- the CIA standards  
13 of practice with respect to the basis of the selection  
14 of the investment return rate used for discounting  
15 cashflows in a pricing context.

16 Do you recall that?

17 MS. ANDREA SHERRY: Yes.

18 MS. KATHLEEN MCCANDLESS: And is it  
19 fair to say that your response indicated that the  
20 discount rate for pricing purposes is typically based  
21 on an expected new money rate to be earned on  
22 investments to be acquired with new net cashflows  
23 arising from the ren -- revenue generated by the  
24 indicated rate?

25 MS. ANDREA SHERRY: Yes.

1 MS. KATHLEEN MCCANDLESS: Now, to  
2 slide 5 of your presentation from this morning, which  
3 was CAC Exhibit number 25, with respect to the  
4 discount rate. Now, would you agree that MPI's  
5 approach to selection of a discount rate for pricing  
6 purposes is not consistent with your expectation in  
7 this regard?

8 MS. ANDREA SHERRY: Yes.

9 MS. KATHLEEN MCCANDLESS: If we go  
10 back to slide 4 of your presentation, on this slide  
11 you concur with the evidence which is already on the  
12 record that the underwriting profit margin for a  
13 break-even objective determined in accordance with  
14 accepted actuarial practice in Canada.

15 In your experience, and recognizing the  
16 prospective nature of ratemaking, do you have any  
17 recommended approaches that MPI might consider with  
18 respect to setting the assumptions for both of the  
19 numerator IR and the denominator PSR?

20 MS. ANDREA SHERRY: I think that the  
21 calculation that they did was accurate. It was in  
22 response to, I believe it was PUB 13, except for I  
23 would take another look at the investment return rate  
24 that they used and ensure that it was the new money  
25 rate that we would expect it to be.

1 (BRIEF PAUSE)

2

3 MS. KATHLEEN MCCANDLESS: In your  
4 experience, does the DCAT specifically address the  
5 derivation of target capital levels?

6 MS. ANDREA SHERRY: Yes.

7 MS. KATHLEEN MCCANDLESS: And would  
8 you agree that the exercise undertaken by MPI or  
9 through the collaborative process to derive target  
10 capital levels is an adaptation of the DCAT?

11 MS. ANDREA SHERRY: Yes. Yeah.

12 MS. KATHLEEN MCCANDLESS: Thank you.

13

14 (BRIEF PAUSE)

15

16 MS. KATHLEEN MCCANDLESS: Thank you.  
17 Do you have any other recommendations for MPI's  
18 consideration with respect to rate making in  
19 accordance with accepted actuary -- actuarial practice  
20 in Canada?

21 MS. ANDREA SHERRY: Well, I think this  
22 was covered very well in some of the Information  
23 Requests and some earlier email exchanges that went  
24 on. So I wouldn't have anything to add specifically  
25 to that. I really feel that the training procedures

1 used by MPI should be reviewed.

2 I think they've got some great data  
3 that could be used to do a much more robust analysis  
4 of what the trends look like. I also think that the  
5 way that the insurance is treated in the current rate  
6 making analysis is not accurate and I think that that  
7 could be improved upon.

8 Other than that -- I'll just a note --  
9 a quick look here. I think other than that we've  
10 covered off the major pieces that I would suggest  
11 should be reviewed in -- in this PowerPoint, so.

12 MS. KATHLEEN MCCANDLESS: Do you  
13 foresee any practical barriers to the adoption of rate  
14 indications based on accepted actuarial practice in  
15 Canada for Basic rate setting purposes?

16 MS. ANDREA SHERRY: No. As I said  
17 earlier, I do think that there could be -- there will  
18 be an adjustment year, because it's a different way to  
19 do the analysis.

20 But how that adjustment or what that  
21 adjustment would actually look like is -- is yet to be  
22 determined, because I think the full analysis has to  
23 be done, taking all areas of the analysis into  
24 consideration, which MPI has done in some of the  
25 Information Requests, but it cert -- it has to be done

1 in totality together to see really what that impact  
2 would be.

3 But practically speaking, no I don't  
4 think there are barriers.

5 MS. KATHLEEN MCCANDLESS: Thank you.

6

7 (BRIEF PAUSE)

8

9 MS. KATHLEEN MCCANDLESS: Now, with  
10 respect to your joint report on the use of the DCAT to  
11 set the RSR target range.

12 And just to summarize and clarify what  
13 we've heard so far today, is it -- it's fair to say  
14 then that you are both recommending a Basic total  
15 equity target capital range that brackets a midpoint  
16 target level based on a 1:40 year combined scenario  
17 over a two (2) year time horizon?

18 MS. ANDREA SHERRY: Correct.

19 DR. WAYNE SIMPSON: We've taken the  
20 two (2) year combined scenario because that is the one  
21 (1) that was the basis for the RSR target minimum in  
22 the -- in the MPI report. We don't have information  
23 to contradict that. So -- so that is -- that is the  
24 basis for what we've done, yeah.

25 MS. KATHLEEN MCCANDLESS: Now, Board

1 Order 128/'15 from last year's GRA in section 10.17 of  
2 that order, and Diana, perhaps we could just pull it  
3 up for the witnesses reference. 10.17 directed that  
4 for fiscal 2016 the two (2) year 1:40 combined  
5 scenario, including management and regulatory action  
6 will be utilized for the purposes of setting the lower  
7 total equity capital target for Basic, calculated at  
8 \$231 million by MPI.

9                   Is it fair to say that you are both  
10 recommending against continuing with what is set out  
11 in 10.17 of the order?

12                   MS. ANDREA SHERRY: From my  
13 perspective, yes.

14                   DR. WAYNE SIMPSON: I don't know if we  
15 disagree. I guess it's a nuance disagreement. I -- I  
16 would say I agree with this, so, no, with the  
17 understanding that this constitutes the -- the target  
18 midpoint. The -- the two (2) year one (1) in forty  
19 (40) combined scenario with meg -- reg -- management  
20 regulatory action is the basis for -- for the  
21 construction of an RSR range around a -- a midpoint of  
22 one (1) in forty (40) risk tolerance.

23                   So I -- I don't have any trouble with  
24 that. And I think the second DCAT report forms the  
25 basis for that in terms of setting a midpoint of the

1 range.

2 MS. KATHLEEN MCCANDLESS: Thank you.  
3 Why do you both believe a more likely outcome level  
4 than a one (1) in forty (40) year event level is  
5 appropriate for purposes of setting the lower Basic  
6 total equity capital target?

7 DR. WAYNE SIMPSON: The -- the minimum  
8 of the range?

9 MS. KATHLEEN MCCANDLESS: Yes.

10 DR. WAYNE SIMPSON: Well, I don't  
11 think -- I don't think we really know what the risk  
12 tolerance of ratepayers is. But I think at some  
13 point, they are going -- if they are concerned about  
14 rate shock, they're going to say, There's too big a  
15 risk of rate shock.

16 Now that that is, I don't know, but it  
17 seems to me that one (1) in ten (10) is not  
18 unreasonable from that perspective, that is to say, of  
19 what ratepayers might -- might think about risks. But  
20 we don't have much information on that.

21 MS. KATHLEEN MCCANDLESS: And Ms.  
22 Sherry, do you have anything to add to Dr. Simpson's  
23 response?

24 MS. ANDREA SHERRY: Well, he gave a  
25 very good answer. And I -- I just believe that the

1 one (1) in forty (40), if it is a target, it has to  
2 have a range around it, because you're never going to  
3 be exactly that number. So to add some range around  
4 what your actual target is makes sense to me.

5 MS. KATHLEEN MCCANDLESS: Is it your  
6 shared position that the upper Basic total equity  
7 target should be also based on a probabilistic  
8 approach?

9 MS. ANDREA SHERRY: Yes.

10 DR. WAYNE SIMPSON: Yes.

11 MS. KATHLEEN MCCANDLESS: And can you  
12 explain why that's the case?

13 DR. WAYNE SIMPSON: Consistency and  
14 the use of specified risk scenarios with specified  
15 risk tolerances is -- is -- seems the way to go in  
16 terms of dealing with risky situations, including  
17 interest rate risk.

18 MS. ANDREA SHERRY: Yeah, really the  
19 DCAT -- we've spent an awful lot of time working on  
20 developing a DCAT. And it would seem to me that  
21 there's no reason not to use the DCAT to set the lower  
22 and the upper range.

23 So instead of bringing in something  
24 different for the upper range that has such a -- such  
25 a low probability of ever happening, that it seems to

1 hold -- for a -- a monopoly Crown corporation to hold  
2 that much money in a reserve does not seem socially  
3 equitable, I guess you could say, from my perspective.

4 MS. KATHLEEN MCCANDLESS: Thank you.  
5 Have either of you had occasion to consider the Aon  
6 asset liability matching report from 2014?

7 MS. ANDREA SHERRY: At a high level, I  
8 have.

9 MS. KATHLEEN MCCANDLESS: And so,  
10 Diana, could we put up from PUB MPI-I-20A, Attachment  
11 B, page 14? And there's just one (1) recommendation  
12 made here by Aon, for which I'd appreciate your  
13 comments, and that's at the second bullet. It's  
14 under, "Revise the RSR targets."

15 And the third bullet in, there's a  
16 comment that:

17 "The distance between targets should  
18 reflect the volatility of the RSR."

19 Do you see that before you?

20 MS. ANDREA SHERRY: I do.

21 MS. KATHLEEN MCCANDLESS: In practical  
22 terms, are you able to comment on how wide is wide  
23 enough, in your opinion?

24 DR. WAYNE SIMPSON: Well, no, I think  
25 that's the advantage of -- of the approach I

1 suggested, which is looking at what are reasonable  
2 levels of risk tolerance. I think one (1) in ten (10)  
3 is certainly some sort of notion of a lower bound.  
4 Maybe it's too low.

5 One (1) in two hundred (200) is -- is  
6 pretty big. And I don't think many ratepayers would --  
7 would dispute that as an upper bound.

8 MS. KATHLEEN MCCANDLESS: And Ms.  
9 Sherry?

10 MS. ANDREA SHERRY: I don't think I  
11 have anything to add to that really.

12 DR. WAYNE SIMPSON: This is -- this is  
13 kind of -- you know, if you take this apart it almost  
14 says that -- you know, the distance between targets,  
15 this is -- question was asked earlier.

16 One (1) way to get the distance between  
17 targets is simply to have ridiculous low lower target,  
18 and a ridiculous high upper target, and -- and I don't  
19 think either would be a -- would be a particularly  
20 good idea.

21

22 (BRIEF PAUSE)

23

24 MS. KATHLEEN MCCANDLESS: Diana, can  
25 you, please, pull up MPI Exhibit number 62? I don't

1 know if either of you have had occasion to consider  
2 MPI's reply to Undertaking number 3 but MPI was asked  
3 to advise at what percentile level Basic total equity  
4 was exhausted in the simulations. So it -- it  
5 addressed the estimated probability levels of adverse  
6 scenarios necessary to exhaust various Basic total  
7 equity levels.

8 The last paragraph at page 1:

9 "MPI opines that the relevant  
10 capital depletion scenario to  
11 consider in this exercises is the  
12 depletion of capital down to the  
13 lower RSR threshold, not zero."

14 Would either of you care to respond to  
15 MPI's position on this question?

16

17 (BRIEF PAUSE)

18

19 DR. WAYNE SIMPSON: Yeah, I -- I think  
20 I would agree with this. Once -- once you reach the -  
21 - the lower threshold, whatever that is, they talk  
22 about a target minimum, I talk about a target midpoint  
23 and then define what minimum and maximum might  
24 reasonably be but, yeah, below the target minimum you  
25 have to start thinking about a rebuilding fee or an

1 offsetting of premiums -- an addition to premiums, and  
2 then when you reach the maximum you have to think  
3 about a rebate which would offset the -- the premiums.

4 MS. ANDREA SHERRY: Yeah, I would  
5 agree --

6 DR. WAYNE SIMPSON: That -- that's the  
7 way I've conceived the RSR.

8 MS. ANDREA SHERRY: Yeah.

9 MS. KATHLEEN MCCANDLESS: And, Ms.  
10 Sherry, I hear you saying you agree with Dr. Simpson?

11 MS. ANDREA SHERRY: I do. I agree  
12 with those comments, yeah.

13

14 (BRIEF PAUSE)

15

16 MS. KATHLEEN MCCANDLESS: All right.  
17 Thank you. Those are my questions for you, Dr.  
18 Simpson and Ms. Sherry. Thank you.

19 THE CHAIRPERSON: I'll -- I'll ask the  
20 panel if they have any questions.

21

22 (BRIEF PAUSE)

23

24 THE CHAIRPERSON: Okay. I -- I have a  
25 question for you, Dr. Simpson, and I will first do a

1 caveat. If -- if my lack of knowledge of economics is  
2 apparent, I blame it on Sygonic (phonetic), who taught  
3 me first year economics. Can you bring up MPI-23,  
4 slide 11, which is the SIRF chart? Okay.

5 DR. WAYNE SIMPSON: I -- I don't  
6 believe I've seen this. I -- I'm kidding.

7 THE CHAIRPERSON: Yeah. Dr. Simpson,  
8 you said the forecast shouldn't be biased only one  
9 (1) way.

10 DR. WAYNE SIMPSON: Over the long run,  
11 yes.

12 THE CHAIRPERSON: Okay, but that's my  
13 problem. What -- what's the long run? At one point  
14 you said later you -- you have to look back at  
15 forecasting records more than five (5) to six (6)  
16 years. How many years do you have to look back?

17 DR. WAYNE SIMPSON: Well, I think the  
18 forecasts are based on historical evidence. That's  
19 the way I'm almost sure that they do it. That is to  
20 say they have built models, and they have forecasting  
21 procedures that are built upon a body of evidence.

22 How much weight they give to old  
23 observations versus new observations I don't know, but  
24 I -- I would guess it's probably one (1) and then they  
25 just pick a cut off point, a starting point and an end

1 point for their -- for their model building.

2                   And essentially when you're looking at  
3 forecasting you can look how well it does over the  
4 entire within forecast period. Sometimes what they'll  
5 do is they'll forecast up to a certain point, and then  
6 the last few years that they have of new information  
7 they'll see how well it's done there. And it's  
8 certainly the case that if you cut off their forecast  
9 in 2008 or '09, they're not going to look very good.  
10 No one disputes that this is a unique period.

11                   And difficult to forecast in part  
12 because, you know, interest rates are partly  
13 controlled by the -- by monetary policy, by the  
14 decisions of the Bank of Canada. And, you know, every  
15 time the Bank meets to decide on interest rates,  
16 there's a flurry of stock market activity guessing at  
17 what might happen.

18                   Same with the US, you know. If they  
19 think the US is going to raise rates, then it'll  
20 affect the markets one way. And if they don't, then  
21 it'll -- they'll go back.

22                   So there's an element here that is --  
23 is outside the Bank's control in really trying to  
24 understand the economy because you've got to  
25 understand how the banks are interpreting this -- the

1 Bank of Canada is interpreting this information and  
2 what it's going to do.

3 So I don't know if that answers your  
4 question, but --

5 THE CHAIRPERSON: But I guess --

6 DR. WAYNE SIMPSON: -- that's --  
7 that's my musings on this.

8 THE CHAIRPERSON: -- well, do we go  
9 back to the time frame when inflation -- and  
10 inflation, I'm trying to date myself -- inflation in  
11 the '80s?

12 DR. WAYNE SIMPSON: The '70s, the  
13 stagflation.

14 THE CHAIRPERSON: Well, no, I'm  
15 thinking inflation in the '80s when inflation -- I  
16 remember doing mortgages at 18, 19 percent.

17 DR. WAYNE SIMPSON: Yeah.

18 THE CHAIRPERSON: Do we go back that  
19 far when you're looking at this? That -- that's my  
20 problem. I'm trying to figure out when the statements  
21 are made, you've got to go back beyond that. I just  
22 don't -- I'm trying to figure out how far back do you  
23 go?

24 DR. WAYNE SIMPSON: Well, you can't --  
25 you can't build statistical reliability on -- on six

1 (6) or seven (7) years of data, I don't -- that's --  
2 that's clear. So they -- they go back -- I don't know  
3 how far they go back. I -- the banks don't tell us, I  
4 don't think, how far they go back. They issues  
5 forecasts, so I really don't know how far they go  
6 back.

7 I know from a standpoint of statistical  
8 reliability there is a sense that -- that every piece  
9 of data is valuable in some sense up to a point. You  
10 probably -- before -- before the Second World War, you  
11 start -- start talking about war periods, then you  
12 don't really have a sense that that information is  
13 useful to peace time.

14 But starting after the Second World  
15 War, you start thinking about, Well, what information  
16 is valuable and what information isn't? And I would  
17 think inflationary periods are valuable in the sense  
18 that we're likely to experience one again, even if  
19 we've had a long period of low inflation.

20 In other words, once interest rates  
21 start to creep up, it's really going to be trying to  
22 counteract that. And it'll probably do a better job  
23 than it's done in the past, which is -- is part of the  
24 whole question about older information and what use it  
25 is, which is that inflation policy is -- has changed

1 over time. Monetary policy is different from what it  
2 was even fifty (50) years ago.

3 THE CHAIRPERSON: Would you consider  
4 the event of 2008 significant enough that it created  
5 its own period? Or do you think that that's just part  
6 of the last post-war period?

7 DR. WAYNE SIMPSON: I think it created  
8 its own period in part because of how it was reacted  
9 to. I think it had the possibility of being a second  
10 Great Depression, but the governments did not make the  
11 mistakes they made in the -- in the 1930s.

12 And we're probably a little bit luckier  
13 with some other things as well, but they didn't make  
14 the mistakes of allowing banks to fail in the US in  
15 particular, sustaining the banking system.

16 They didn't make the mistake of trying  
17 to run budgetary balance. In fact, the US not only  
18 ran deficits, but it also poured a lot of money into  
19 the market in terms of quantitative easing, which is  
20 open market operations.

21 In Canada, we -- we ran some deficits,  
22 too. The banking system's more stable, but I think we  
23 didn't repeat the mistakes in -- obviously the  
24 mistakes that were made in the US and elsewhere would  
25 have spread to Canada had -- which -- over which we'd

1 have had no control.

2                   So I think it was different more  
3 because of policy response than because of what  
4 actually happened. But that policy response probably  
5 gives us more protection against those kinds of things  
6 happening, which is why I argued in an earlier hearing  
7 about equity declines, that the '30s were not relevant  
8 to the current period, because I don't think those  
9 kinds of conditions of the Great Depression are likely  
10 to be repeated. And 2008/'09/'10 is evidence of that  
11 really.

12                   THE CHAIRPERSON: Okay. Thank you.  
13 Thank you, Dr. Simpson. Those are my questions.

14                   Re-examination, Mr. Williams?

15                   MR. BYRON WILLIAMS: Yes.

16

17 RE-DIRECT EXAMINATION BY MR. BYRON WILLIAMS:

18                   MR. BYRON WILLIAMS: Just in -- in  
19 response to the Chairperson's question, he was seeking  
20 guidance about where -- where, if at all, when, if at  
21 all, to go back beyond the -- the great crisis of  
22 2008.

23                   And, Dr. Simpson, I think I heard you  
24 discuss a point in time when inflation policy was  
25 changed. And I take it you were referring to the Bank

1 of Canada's targeting of -- of a -- a 1 to 3 percent  
2 inflation rate bound.

3 Is that what you were referring to?

4 DR. WAYNE SIMPSON: Yeah.

5 MR. BYRON WILLIAMS: And could you  
6 indicate for the benefit of the panel about when that  
7 took place, sir?

8 DR. WAYNE SIMPSON: I think formally  
9 it's the mid-'90s. But I think in -- in practice  
10 about 1991. So through the '90s. So we've had about  
11 twenty-five (25) years of -- of inflation targeting.

12 MR. BYRON WILLIAMS: Okay. Thank you.  
13 I have no further questions.

14 THE CHAIRPERSON: Thank you. Thank  
15 you, Ms. Sherry and Dr. Simpson. Sorry, Mr. Ghikas?

16 MR. MATT GHIKAS: I -- I was just --  
17 sorry. I didn't want to interrupt. I was just going  
18 to report on the undertaking status.

19 THE CHAIRPERSON: Ah, okay.

20 MR. MATT GHIKAS: Okay. So there are  
21 three (3) remaining ones and they're just having the  
22 'T's crossed and 'I's dotted. And so we were going to  
23 file those electronically. And I -- I believe we're  
24 going to do it today.

25 THE CHAIRPERSON: Thank you.

1 MR. MATT GHIKAS: Yeah.

2 THE CHAIRPERSON: Okay. So we're -- I  
3 believe we're done with the experts and we're moving  
4 towards closing.

5 MS. KATHLEEN MCCANDLESS: And tomorrow  
6 we have scheduled for closing comments.

7 THE CHAIRPERSON: Okay. And we're  
8 proceeding with counsel for the panel first.

9 Is that correct?

10 MS. KATHLEEN MCCANDLESS: Yes, Board  
11 counsel followed by Intervenors, and then the -- we  
12 won't be sitting on Thursday and then MPI will return  
13 for its closing on Friday.

14 THE CHAIRPERSON: Is that correct to  
15 your understanding Mr. Ghikas?

16 MR. MATT GHIKAS: That -- that's fine  
17 by me. So we -- we won't be starting no matter what  
18 on Wednesday, if I understand correctly.

19 THE CHAIRPERSON: On Thursday.

20 MR. MATT GHIKAS: Sorry on -- if -- if  
21 the Intervenors finish early on Wednesday --

22 THE CHAIRPERSON: Wednesday, yes,  
23 you'll -- you'll start on Friday.

24 MR. MATT GHIKAS: I'll start on Friday  
25 no matter what. Okay. Good.

1 THE CHAIRPERSON: Right.

2 MR. MATT GHIKAS: Thank you.

3 THE CHAIRPERSON: Okay. Mr.

4 Williams...?

5 MR. BYRON WILLIAMS: Yes, if I might,  
6 we've listened with great interest to the transcript  
7 today. It's unlikely to be available to my client  
8 until late this evening or tomorrow morning. Our  
9 client will always be ready to go when the -- the  
10 Board calls upon us, but if I might ask the deference  
11 or the -- the accommodation of the Board, it would be  
12 helpful to us to start on Wednesday afternoon, so if  
13 we need to incorporate any elements of the transcript  
14 -- I -- I've spoken to My Friend, Mr. Oakes, who is  
15 certainly prepared to go before us and would prefer to  
16 go before me.

17 He accuses me of being long-winded. I  
18 have not spoken to -- I've -- I've reached out to Mr.  
19 Monnin, but I have not got feedback from him yet. So  
20 just out of fairness to my client, we may wish to  
21 incorporate some of this transcript and I -- we could  
22 do that if we appear -- started at 1:00 on Wednesday.

23 THE CHAIRPERSON: Do you have any idea  
24 how long the combined efforts of you, Mr. Oakes, and  
25 Mr. Monnin will be?

1 MS. KATHLEEN MCCANDLESS: I don't  
2 anticipate it being more than the morning.

3 THE CHAIRPERSON: Okay.

4 MS. KATHLEEN MCCANDLESS: So that --  
5 that should, scheduling-wise be fine, provided Mr.  
6 Monnin is on board with the -- the plan to proceed  
7 ahead of Mr. Williams.

8 MR. BYRON WILLIAMS: And in fairness,  
9 I don't -- I don't -- I wouldn't expect them to take  
10 the whole morning, so if you're --

11 THE CHAIRPERSON: Good.

12 MR. BYRON WILLIAMS: -- worried about  
13 dead time, there is a risk that there will be dead  
14 time.

15 THE CHAIRPERSON: Yeah, well, we'll --  
16 we'll go on that basis and understanding that there  
17 may be some dead time in the late morning. Okay. So  
18 we're adjourned until 9 a.m. tomorrow morning. Thank  
19 you.

20

21 (PANEL RETIRES)

22

23 --- Upon adjourning at 1:56 p.m.

24

25

1

2

3

4

5

6

7 Certified correct,

8

9

10 \_\_\_\_\_

11 Sean Coleman, Mr.

12

13

14

15

16

17

18

19

20

21

22

23

24

25