

# REBUTTAL EVIDENCE

2019 GENERAL RATE APPLICATION  
October 12, 2018

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## 1. Introduction

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1 MPI welcomes the participation and input of Dr. Simpson, Ms. Sherry and Mr. Viola to  
2 the testing of the 2019 General Rate application. Their respective evidence is  
3 canvassed below, and MPI has taken the opportunity to clarify the application where it  
4 appears to be misunderstood, to re-emphasize the existing evidentiary record and  
5 where appropriate expand the record to shed light on the core issues of contention.

## 2. Rebuttal to The Role of the DCAT and Interest Rate Forecasting in the 2019 MPI GRA

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6 The first several pages of the evidence provides a chronology of proposals for how the  
7 RSR should be determined. This chronology highlights three key facts. The first is that  
8 standards and practices evolve over time, and rightly so. The second is that MPI has  
9 sought to apply the MCT approach to determine the RSR target since 2005. The third  
10 fact highlighted is that Dr. Simpson and Ms. Sherry continue to claim that the MCT  
11 “does not address the specific risks facing MPI”<sup>1</sup>. The evidence that MCT is applicable  
12 and appropriate for MPI has been established on past GRA records, and MPI re-  
13 examines this evidence in section 2.3 below.

### 2.1 MPI’s RSR Range is Determined Using the Best Estimate DCAT Approach

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14 In the 2019 GRA, MPI has applied for capital targets based on MPI’s best estimate  
15 DCAT analysis, as it did last year. The lower RSR target for FY 2019/20, which  
16 establishes the minimum level of capital required for satisfactory financial condition,  
17 has been set after testing adverse scenarios at the 1-in-40 probability level. The  
18 minimum Total Equity balance, such that all of the Combined Scenarios after assumed

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<sup>1</sup> 2019 GRA Part VI DCAT p.3

1 management action remain above zero, is \$143 million. A summary of the analysis is  
2 provided at page 10 of Part VI DCAT, in the 2019 GRA.

3 The upper RSR target for FY 2019/20, is \$305 million. This target establishes the RSR  
4 range above the minimum, and has been selected based on a 2 year 1-in-40 DCAT  
5 scenario, before management action. A summary of the analysis is provided at page  
6 11 of Part VI DCAT, in the 2019 GRA.

7 As explained in the application<sup>2</sup>, and throughout the information requests<sup>3</sup>, MPI has  
8 applied best estimate assumptions as opposed to the iterative DCAT methodology  
9 used in PUB Order 130/17. This particular iterative methodology results in a lower RSR  
10 target reflecting the actual minimum level of capital required for satisfactory financial  
11 condition.

## 2.2 MPI's RSR Range has been converted to an MCT value to allow for forecasting the RSR targets beyond the current period

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12 In the 2019 GRA MPI has chosen to **express** the upper and lower RSR targets as a  
13 percentage of MCT. This has been reflected in both the Legal Application<sup>4</sup>, the Public  
14 Notice of Hearing<sup>5</sup>, and is explained in the RSR Chapter<sup>6</sup>, and demonstrated in the  
15 DCAT chapter<sup>7</sup>. Figure DCAT-10 has been reproduced below for convenience.

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<sup>2</sup> 2019 GRA Part VI DCAT page 15

<sup>3</sup> See PUB (MPI) 1-16, PUB (MPI) 1-17, PUB (MPI) 1-28 for example

<sup>4</sup> 2019 GRA Part I Legal Application page 2

<sup>5</sup> 2019 GRA Part VIII Media Package Notice of hearing

<sup>6</sup> 2019 GRA Part VI RSR page 9

<sup>7</sup> 2019 GRA Part VI DCAT page 14

**Figure DCAT- 10: Lower/Upper Target Comparison**

Line No.	Target	2018 GRA		2019 GRA	
		Total Equity	MCT Ratio	Total Equity	MCT Ratio
1	<i>(C\$millions, unless otherwise noted)</i>				
2	Lower RSR Target (MPI)	\$201	37%	\$143	34%
3	Upper RSR Target (MPI)	\$438	100%	\$305*	85%*
4	Lower RSR Target (PUB)	\$180	31%	\$120	27%
5	Upper RSR Target (PUB)	\$325	72%	\$251	69%
6	100% MCT	\$438	100%	\$358	100%

7 \* Would have been \$354M and 99% MCT without methodology change

MPI has chosen to express the RSR targets as an MCT ratio for two reasons:

1. First is that the MCT ratio is used as a means to forecast future DCAT-based RSR target calculations. The Corporation does not take the position that the MCT ratio can replace the DCAT exercise in 2020 and beyond. The 34% MCT ratio is derived from the 1-in-40 DCAT scenario<sup>8</sup>.

Page 23 of the DCAT states:

*MPI applied for DCAT-based minimum \$143 million capital target represents an MCT score of 34%, while the proposed maximum capital target of \$305 million represents an MCT score of 85%. **Assuming the DCAT analysis would produce a similar MCT score in future years**, the table below shows the projected minimum and maximum RSR targets at 34% MCT and 85% MCT ratios over the forecast period. The 100% MCT target is also provided. The calculations assume that the Corporation's proposed RSR targets in 2019/20 will be approved by the PUB. [emphasis added]*

<sup>8</sup> CAC (MPI) 1-15

Figure DCAT- 11: Projected Regulatory Capital Targets

Line No.	Fiscal Year Beginning	Minimum RSR	Maximum RSR	100% MCT
1	<i>(in millions)</i>			
2	2019/20	\$143	\$305	\$358
3	2020/21	\$155	\$337	\$396
4	2021/22	\$173	\$363	\$426
5	2022/23	\$180	\$380	\$445

Note: The Corporation's Total Equity (RSR) balance is not equivalent to Capital Available in the MCT calculation. As a result of certain deductions that are included in the MCT calculation, the required Total Equity balance to achieve a 100% ratio will be higher than MCT Capital Available. The calculations above reflect the amount of Total Equity required for Basic to achieve a 100% MCT ratio in the given fiscal year. The MCT calculations for the base scenario and the selected adverse scenarios are provided in the appendices of this DCAT report.

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This future projection of RSR Targets (in dollars, derived from MCT ratios) is necessary to demonstrate the future satisfactory financial condition of Basic, throughout the forecast period. This is reflected in DCAT.1 which states:

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*In my opinion, the future financial condition of Basic is satisfactory because (i) Basic exceeds the Manitoba Public Utilities Board (PUB) assumed minimum capital target under the base scenario during the forecast period, and (ii) Basic Total Equity remains positive in all adverse scenarios at the 1-in-40 probability levels as set by the Public Utilities Board<sup>9</sup>*

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- The second is that expressing the RSR Targets as an MCT ratio provides a convenient way to compare MPI's capital targets and actual capital level against industry standard targets, and MPI's crown insurer peers.

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The DCAT report, at page 18 explains this point, as follows:

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*The Corporation should convert their proposed dollar-based RSR targets into MCT-based RSR targets. MCT-based targets create a*

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<sup>9</sup> 2019 GRA Part VI DCAT page 4

1                                    *dynamic RSR target that responds to changes in risk level and*  
2                                    *can be more directly compared with other insurers.<sup>10</sup>*

3                                    This passage also alludes to a third benefit which is outlined in section 2.2.1  
4                                    below.

### 2.2.1                                    **The DCAT estimate provides a static point in time estimate while an MCT ratio is dynamic**

5                                    As explained in response to CAC (MPI) 1-14, MPI believes that absent any significant  
6                                    changes in the risk profile, using the MCT ratio as a means to **express** the dollar  
7                                    estimates of the minimum RSR target, results in a best estimate. The MCT ratio will  
8                                    adjust the capital targets in future years based on growth in the balance sheet,  
9                                    producing a more appropriate forecast. Despite this, the Corporation intends to  
10                                    continue performing the DCAT analyses in each GRA to confirm the most appropriate  
11                                    target for the rating year.

### 2.3                                    **The Minimum Capital Test Assess the Risks Facing Basic**

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12                                    At section RSR.4.5.2 of the 2019 GRA, MPI again lays out the relevant facts about the  
13                                    MCT test, and in RSR.4.5.2.2 details the risks assessed by the MCT. In RSR.Appendix  
14                                    1, the MPI has included the MCT worksheets detailing the calculation of the MCT  
15                                    Capital Available and Capital Required.

16                                    Further, in past GRA's MPI has established that the MCT test accurately reflects the  
17                                    risks that face Basic, in a manner that is consistent with industry standard. The MCT is  
18                                    required by OSFI regulated P&C insurance companies, and has been adopted by  
19                                    comparable crown auto insurers, in particular, SGI and ICBC.

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<sup>10</sup> 2019 GRA Part VI DCAT Page 18

1 In the 2018 GRA hearing, Ms. Sherry had an extensive cross examination with counsel  
2 for MPI on the issue of whether the MCT reflects the risks facing Basic, and this  
3 testimony is reproduced below<sup>11</sup>:

4 *MR. MATTHEW GHIKAS: Okay. Now, if we go over to the following page*  
5 *-- first of all, you'll agree with me that what the MCT test does is it looks*  
6 *at the particular balance sheet of an insurer; right?*

7 *MS. ANDREA SHERRY: M-hm.*

8 *MR. MATTHEW GHIKAS: Sorry, you'll have answer "yes" or "no".*

9 *MS. ANDREA SHERRY: Yes.*

10 *MR. MATTHEW GHIKAS: And each individual insurer's own balance sheet*  
11 *is going to be different, right?*

12 *MS. ANDREA SHERRY: Correct.*

13 *MR. MATTHEW GHIKAS: And so what this test does is it looks at that*  
14 *individual insurer's characteristics, and comes up and assesses the*  
15 *itemized risks in the context of an individual insurer; correct?*

16 *MS. ANDREA SHERRY: Correct.*

17 *MR. MATTHEW GHIKAS: Okay. And so an indiv -- an individual insurer's*  
18 *risk profile and the risk to its balance sheet are assessed under this*  
19 *test, correct?*

20 *MS. ANDREA SHERRY: Correct.*

21 *MR. MATTHEW GHIKAS: Now, keeping it really simple, at a high level,*  
22 *that means that if there are two (2) different insurers, and they're both*  
23 *operating at 100 percent MCT, the amount of capital that they're*  
24 *actually retaining in dollars could be quite different, depending on the*  
25 *risks to their balance sheet and the size of the business?*

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<sup>11</sup> 2018 GRA Transcript, pages 1690 to 1698



1           MS. ANDREA SHERRY: The type of business they write, et cetera, yes.

2           MR. MATTHEW GHIKAS: Right. Okay. So, if we can look on page 5,  
3           you'll see there is an overview of the minimum capital requirements,  
4           and how they're calculated. And I just wanted to run through some of  
5           them with you, Ms. Sherry. You'll see it says "minimum capital  
6           requirements are calculated as follows: Some of..." and then there's a  
7           list. Do you see that?

8           MS. ANDREA SHERRY: I do, yeah.

9           MR. MATTHEW GHIKAS: Okay. So let's go through some of the items.  
10          First of all, 1(a) capital required for unpaid claims and premium  
11          liabilities. Do you see that?

12          MS. ANDREA SHERRY: M-hm. Yes, I do.

13          MR. MATTHEW GHIKAS: Okay. You'd agree with me that Basic Autopac  
14          has unpaid claims and premium liabilities?

15          MS. ANDREA SHERRY: I would agree.

16          MR. MATTHEW GHIKAS: And you'd agree with me that Basic Autopac  
17          has risks associated with the potential for catastrophes?

18          MS. ANDREA SHERRY: I would have to look into that one, to be honest  
19          with you because I'm not sure if that's thr -- anything related to  
20          earthquake.

21          MR. MATTHEW GHIKAS: Okay. But depending on the catastrophe and  
22          depending on what they're writing, they can conceivably have that;  
23          correct?

24          MS. ANDREA SHERRY: Correct.

25          MR. MATTHEW GHIKAS: Right. And to the extent that they have less  
26          than another insurer, that's going to be picked up in the -- in the  
27          balance sheet, correct?

28          MS. ANDREA SHERRY: Yep.

1           MR. MATTHEW GHIKAS: Okay. And the next one "margin required for  
2           reinsurance seated to unregistered reinsurers." MPI doesn't include  
3           anything for that.

4           MS. ANDREA SHERRY: M-hm.

5           MR. MATTHEW GHIKAS: But -- so we'll - we'll leave that one. But you'll  
6           agree with me that MPI has exposure to interest rate risk?

7           MS. ANDREA SHERRY: Yes.

8           MR. MATTHEW GHIKAS: And that, for example, would be reflected in  
9           the fact that there is -- there is -- had to be \$163 million transferred  
10          from optional to the Basic side of the business to deal with interest rate  
11          variances?

12          MS. ANDREA SHERRY: I would agree that MPI has interest rate risk,  
13          yes.

14          MR. MATTHEW GHIKAS: Right. And you'd agree with me that MPI has  
15          foreign-exchange risk on investments that are US denominated or US  
16          infrastructure investments?

17          MS. ANDREA SHERRY: Yep.

18          MR. MATTHEW GHIKAS: And you'd agree with me that MPI, to the  
19          extent that it is holding equity in its portfolio, has equity risk?

20          MS. ANDREA SHERRY: Yes.

21          MR. MATTHEW GHIKAS: And you would agree with me that if there is  
22          real estate in MPI's portfolio - which I understand there is - MPI would  
23          also face real estate risk?

24          MS. ANDREA SHERRY: Yes.

25          MR. MATTHEW GHIKAS: And you'd agree with me -- let's skip over the  
26          next one. You'd agree with me that there is the potential for counter-  
27          party default risk for MPI?

1 MS. ANDREA SHERRY: Yes.

2 MR. MATTHEW GHIKAS: Okay. And the next two they are no values for  
3 MPI, so I'll skip over those. And there is the potential for operational  
4 risk, just like any other insurer; correct?

5 MS. ANDREA SHERRY: Correct.

6 MR. MATTHEW GHIKAS: Okay. Now, I take it that the fact that MPI is  
7 not subject to competition, the only place for that to fit is under 2(e)  
8 capital required for other market risk exposures?

9 MS. ANDREA SHERRY: Yes, I believe you're correct in the MCT.

10 MR. MATTHEW GHIKAS: Okay. And so for Basic then what MPI would  
11 simply do is put a zero value in for that, on their P&C-1 form. Right?

12 MS. ANDREA SHERRY: Is that a question?

13 MR. MATTHEW GHIKAS: It is.

14 MS. ANDREA SHERRY: I don't know what MPI would do.

15 MR. MATTHEW GHIKAS: Okay. So if -- if there is no market risk  
16 exposure from competition, you would expect that simply -- the insurer  
17 would simply fill -- fill out that line item reflecting the fact that they  
18 have no competitive risk; correct?

19 MS. ANDREA SHERRY: Okay.

20 MR. MATTHEW GHIKAS: Now, I just want to clarify your position, Ms.  
21 Sherry, on whether you oppose the use of the MCT as a test for MPI, or  
22 whether you simply believe that 100 percent MCT is too high?

23 MS. ANDREA SHERRY: My belief is that the MC -- a choice of a target, a  
24 higher level of the RSR using 100 percent MCT is arbitrary. The MCT  
25 wasn't created for an RSR target per se, it was created so that OSFI  
26 would know when a company was into the potential of going insolvent.  
27 So the tests around it including tests of a BC earthquake, et cetera,  
28 things that MPI does not face. As well, MPI does not face the risk of

1            *insolvency and the risk to the whole economy of Canada if we -- they go*  
2            *down on. That's what OSFI is trying to protect the consumers against. It*  
3            *wasn't built for a monopoly public insurer.*

4            *MR. MATTHEW GHIKAS: Okay. So let me -- let me ask you this again.*  
5            *I'm not sure if I understood whether you are objecting to the use of the*  
6            *test itself, or whether you're objecting to the use of 100 percent.*

7            *MS. ANDREA SHERRY: I'm objecting to the use of the MCT as -- in*  
8            *setting the RSR range.*

9            *MR. MATTHEW GHIKAS: Okay.*

10           *MS. ANDREA SHERRY: You can calculate the MCT and see where you're*  
11           *at, but it's -- I -- I don't think it should be used to set the RSR range.*

12           *MR. MATTHEW GHIKAS: Okay. Can we go, Diana, if you can pull up last*  
13           *year's transcript, please. And to page 2,059. And you can -- if you go*  
14           *down to line 15, please. Okay. Now, last year, Ms. Sherry, you -- I*  
15           *cross-examined you last year, right?*

16           *MS. ANDREA SHERRY: I recall.*

17           *MR. MATTHEW GHIKAS: And if -- starting at line 15 of this transcript, I*  
18           *asked you:*

19           *"And I've seen your transcripts, Ms. Sherry, where you had indicated*  
20           *that you didn't believe MCT was the appropriate -- was appropriate for*  
21           *use for MPI. Is that correct?"*

22           *Answer:*

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

27           *Now, do you recall being asked those questions?*

28           *MS. ANDREA SHERRY: Vaguely.*

1           MR. MATTHEW GHIKAS: Okay. And do you recall giving those answers?

2           MS. ANDREA SHERRY: Yes.

3           MR. MATTHEW GHIKAS: And were they true?

4           MS. ANDREA SHERRY: Yes.

5           MR. MATTHEW GHIKAS: Thank you.

6           Based on this testimony, and all prior materials placed on the public record, the  
7           evidence is clear that the MCT does in fact assess the risks facing Basic. The claim that  
8           is does not, is unfounded.

9           MPI (CAC) 1-1 asked for further support to the claim that MCT 'is not linked to the  
10          specific risks facing MPI as a monopoly crown insurer'. The answer given was that the  
11          statement was 'taken out of context'<sup>12</sup>, but the additional context given was that MCT  
12          is a solvency test, and therefore not applicable to a monopoly crown insurer. The  
13          answer did not elaborate on how the MCT is or is not 'linked to the specific risks facing  
14          MPI as a monopoly crown insurer'.

15          The response to MPI (CAC) 1-2 elaborates on this claim that MCT is a solvency test,  
16          and further claims that it is only possible for MPI to become insolvent if government of  
17          Manitoba were to become insolvent, which is unlikely.

18          Based on all of the above, the issue Dr. Simpson and Ms. Sherry appear to have with  
19          MCT is not that it "is not linked to risks facing MPI as a monopoly insurer", but rather  
20          that MPI should not rely on the MCT due to presumed inoculation from insolvency.  
21          There is a subtle, but important distinction between these two reasons for rejecting  
22          the MCT test. Essentially, they appear to be saying that MPI should not use standard  
23          industry practice as a means to assess actual risks facing MPI, because the  
24          government/taxpayers should be expected to bail MPI out of a crisis.

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<sup>12</sup> Since this 'context' was not included in the original report, the quote in question is more properly described as 'provided out of context'

## 2.4 The 50/50 interest rate forecast recommendation Is a result of Recency bias from a misleading indicator

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1 The recommendation of Dr. Simpson and Ms. Sherry to adopt the 50/50 interest rate  
2 forecast on the basis that the naïve is inferior to the 50/50 in recent years, amounts  
3 to engraining recency bias into the forecast, while rejecting the breadth of historical  
4 evidence.

5 The implicit claim that expected changes in the Bank of Canada overnight interest rate  
6 is a reliable proxy for changes in the 10 yr GoC bond rate, over the relevant time  
7 horizon is also incorrect.

### 2.4.1 The Bank of Canada overnight rate is not a reliable proxy for 10 year GoC bond rate

8 MPI fully acknowledges that over the long run there is a link between the Bank of  
9 Canada overnight rate and the yield on the 10 year Government of Canada bond.

10 However, the short run (1.0 – 1.5 years) is the relevant outlook period, as this is the  
11 outlook period for MPI's financial forecasts. Over this time horizon, the overnight rate  
12 is not a reliable proxy for the yield on the 10 year Government of Canada bond, as  
13 there can be significant and unpredictable lags between the two rates.

14 This fact has been clearly demonstrated in the response to CAC (MPI) 2-1, which  
15 showed that there are many periods when the overnight rate and the 10 year GoC  
16 bond yield have moved in opposite directions.

17 The evidence on the record simply does not support the assertion that, over the  
18 relevant time horizon, the overnight rate should be used a proxy or a leading indicator  
19 of the 10yr GoC bond rate. This leads to three obvious conclusions:

- 20 1. Actual Bank of Canada overnight rate policy adjustments should not inform the  
21 selection the interest rate forecast for rate setting

1           2. Speculation on future Bank of Canada overnight rate policy adjustments,  
2           should not inform the selection the interest rate forecast for rate setting

3           3. Historical data on the 10 Yr GoC interest rate itself should be used to assess  
4           the validity of the forecast

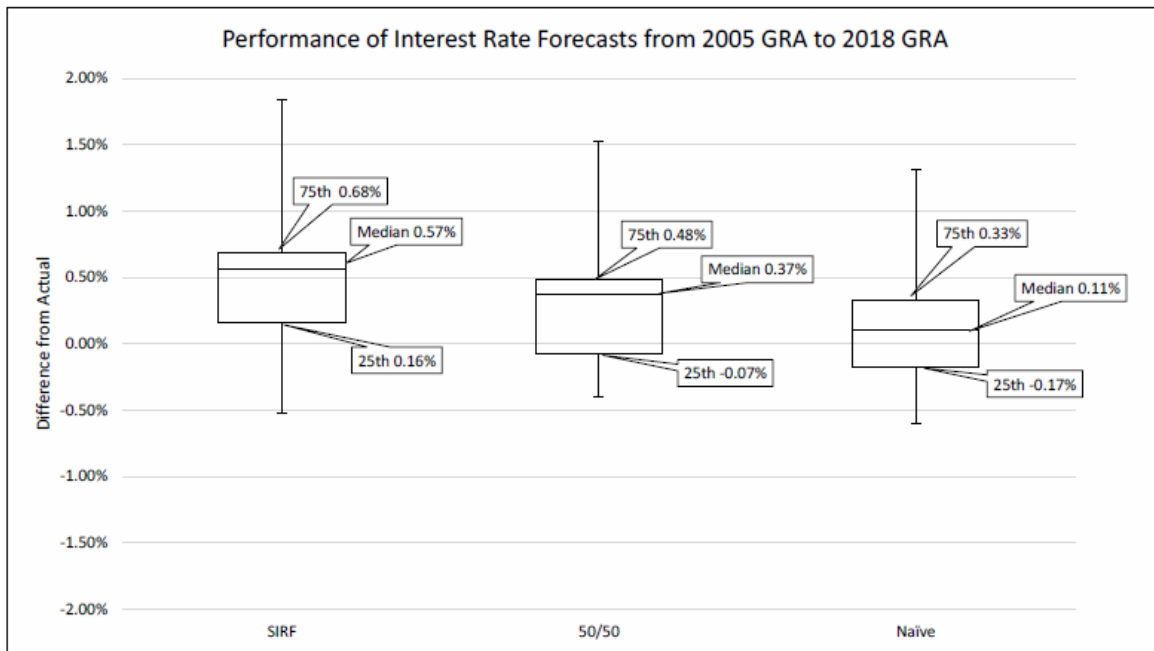
5           The wrong interest rate forecast can (and has) cost MPI millions in under collected  
6           premium. Adopting the recommendations of this evidence only serves to further the  
7           under-collection of premium, to the detriment of MPI, and the long term interests of  
8           its customers.

#### 2.4.2    The Naïve Forecast is a best estimate

9           The evidence on the record of this proceeding supports the conclusion that the naïve  
10          forecast is a best estimate.

11          PUB (MPI) 1-11 lays out the first leg of the analytical basis for this claim. Over the  
12          past 14 years the 50/50 forecast has produced a forecast which has statistically  
13          significant bias when compared to the naïve forecast. This shows that the 50/50  
14          forecast is a 'worse' forecast than the naïve forecast.

15          CAC (MPI) 1-6 lays out the second leg of the analytical basis for this claim, which is  
16          that the naïve forecast produces a forecast that is statistically the same as the actual.  
17          That is to say it is unbiased. The diagram in CAC (MPI) 1-4, reproduced below, visually  
18          depicts that the naïve forecast is more 'centered' around the zero difference from  
19          actual, than either the 50/50 or the SIRF.



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That is to say, the naïve forecast is “more like the actual” than either the 50/50 or the SIRF. The variance of all three forecasts (% difference from actual) is material, however the naïve forecast does slightly outperform the 50/50 and the SIRF.

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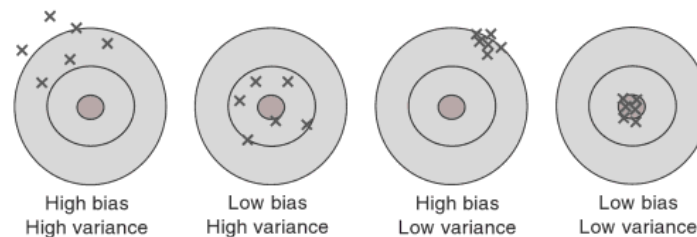
A useful diagram for understanding these concepts is provided below. While diagram exaggerates the scenarios for effect, it is reasonable to say that the Naïve forecast is most like the “low bias, high variance” example, while the 50/50 and SIRF forecasts are more like the “high bias, high variance” (or, less like the “low bias, high variance” example than the naïve forecast).

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**Bias Variance Decomposition. Figure 1.** The bias-variance decomposition is like trying to hit the bullseye on a dartboard. Each dart is thrown after training our “dart-throwing” model in a slightly different manner. If the darts vary wildly, the learner is *high variance*. If they are far from the bullseye, the learner is *high bias*. The ideal is clearly to have both low bias and low variance; however this is often difficult, giving an alternative terminology as the bias-variance “dilemma” (*Dartboard analogy, Moore & McCabe (2002)*)

10



1 The evidence on the record is clear:

- 2 i. The naïve forecast outperforms the 50/50 and SIRF forecasts
- 3 ii. Changes in the Bank of Canada overnight rate are not a reliable leading  
4 indicator (or proxy) of changes in the 10 Yr GoC bond rate, over the  
5 relevant time horizon
- 6 iii. The recommendation of Dr. Simpson and Ms. Sherry to rely on the  
7 50/50 interest rate forecast ignores this evidence, and engrains recency  
8 bias into the forecast.

### 3. Rebuttal to The Capital Maintenance Provision Proposal by Manitoba Public Insurance

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9 This evidence appears to misunderstand or misrepresent several aspects of the Capital  
10 Maintenance Provision (CMP) proposal, points which will be clarified in the following  
11 sections.

#### 3.1 MPI is applying for approval of the CMP as part of its 2019 GRA

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12 The CMP is an element of the 2019 GRA for which MPI is seeking PUB approval. The  
13 CMP proposal does not require approval of the PUB to be included in the application,  
14 nor is a consensus among stakeholders required for the CMP to be included in the  
15 application.

16 MPI did not rely on an agreement from the participants at the technical conference as  
17 the basis to include a CMP proposal in its application. Nor does MPI expect that the  
18 position of parties, whatever they might be, to be prejudiced by any (dis)agreement  
19 expressed at a technical conference. The CMP proposal is reasonable, and can be  
20 judged on its own merits.

1 Further the GRA process is an open and public venue for testing the reasonableness of  
2 MPI's applications. Ms. Sherry and Dr. Simpson's concerns related to 'public vetting'  
3 should be assuaged by the Public Utilities Board application and hearing process.

### 3.2 Accepted Actuarial Practice is Silent on the Capital Maintenance

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4 The response to MPI (CAC) 1-4, and PUB (CAC) 1-8 (b), indicates that the Actuarial  
5 Standards of Practice are silent on "how" capital should be maintained. In effect,  
6 determining the approach to maintaining capital is a management function, not an  
7 actuarial function, and MPI's proposal is consistent with this distinction. MPI's applied  
8 for breakeven rate increase, **consistent with AAP**, is 0.1%. MPI's applied for Net  
9 Capital Maintenance Provision, is 2.1%.

10 The assertion that the CMP does not align with Accepted Actuarial Practice in  
11 Canada<sup>13</sup>, but is not "technically non-complaint"<sup>14</sup> is meaningless and illogical.

### 3.3 The MCT Ratio is a meaningful measure of capitalization around which to build a Capital Maintenance Provision

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12 The claim that the MCT "has no basis in actual capital need but is an arbitrary figure  
13 used to force through a CMP in this application" <sup>15</sup> hints at a misunderstanding of the  
14 CMP as applied for in this application.

15 The MCT ratio is used to express the level of current capitalization and establish a  
16 measure against which the amount of capital to be collected can be determined. The  
17 70% MCT figure is a meaningful expression of the current level of capital held by Basic  
18 to start the 2019/20 year. The Net CMP ensures that the MCT ratio, which compares  
19 capital available to capital required, at fiscal year-end 2019/20 does not deteriorate

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<sup>13</sup> The Capital Maintenance Provision Proposal by Manitoba Public Insurance, page 3

<sup>14</sup> PUB (CAC) 1-8

<sup>15</sup> The Capital Maintenance Provision Proposal by Manitoba Public Insurance, page 4

1 (decrease) from fiscal year end 2018/19. The amount collected through the Net CMP is  
2 determined net of investment income earned on the Rate Stabilization Reserve (RSR).

3 By combining the investment income on the RSR and the capital maintenance  
4 requirement into a single 'Net CMP', MPI has separated the rate requirement for  
5 break-even AAP rates from the rate requirement for capital factors (i.e. investment  
6 income on the RSR, CMP).

7 In this regard, the CMP is not directly relevant to the determination of the amount of  
8 capital MPI **should** have, only how much it does have. The particular method for  
9 setting the upper and lower RSR targets has no bearing on the actual level of capital  
10 held by Basic. The RSR targets are abstract concepts, while the level of capitalization  
11 is a hard reality. The statement:

12 *The RSR range will go up in dollar terms as the size of the Corporation*  
13 *increases. This negates the need for a CMP.<sup>16</sup>*

14 confuses the concept of an abstract target and the practical reality actual  
15 capitalization. When pressed on this point, the response to IRs PUB (CAC) 1-9 and MPI  
16 (CAC) 1-6 offer no explanation how changing capital targets will actually protect  
17 against the depletion of Basic's Capital **position**. Protecting against the depletion of  
18 Basic's capital position is precisely what the Net CMP is designed to do, and is  
19 consistent with PUB findings in Order 130/17:

20 *the Board appreciates the need to protect Basic's capital position*  
21 *against depletion due to the natural growth in Basic's risk profile, i.e.,*  
22 *the expectation for Basic claim liabilities (and investment portfolio) to*  
23 *grow over time since the addition of new claims is expected to outpace*  
24 *the settlement and closing of old claims.<sup>17</sup>*

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<sup>16</sup> The Capital Maintenance Provision Proposal by Manitoba Public Insurance, page 5

<sup>17</sup> Manitoba Public Utilities Board Order 130/17 page 29

#### 4. Rebuttal to MPI'S Investment Portfolio: Asset/Liability Analysis and Previous Recommendations

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1 At page 12 of his report, Mr. Viola posits three key questions that are central to his  
2 concerns. These are reasonable questions to ask, and MPI offers the following  
3 response:

- 4 1. Have the real and inflation risks been **identified** clearly by those who are  
5 responsible for their management and oversight?

6 **Yes**

- 7 2. Have these risks been **measured** as accurately as possible?

8 **Yes, as accurately as is reasonably needed**

- 9 3. Are these risks being **managed** effectively?

10 **Yes, as effectively as is reasonably needed**

11 Below, MPI elaborates on the factors that allow these conclusions to be reached.

#### 4.1 The Difference between a nominal liability benchmark and a real liability benchmark

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12 There are material differences between real and nominal liability benchmarks, and  
13 both can be appropriate depending upon the nature of the liabilities, and the outlook  
14 for inflation. But the key point here is that both factors matter, and must be  
15 considered.

16 A Nominal Liability Benchmark assumes a 2% inflation rate that is static throughout  
17 the modelling exercise. That is, it assumes no variability in inflation over time.  
18 Whereas, a Real Liability Benchmark assumes a variable inflation rate. This difference

1 has a material impact on modelling outcomes, but the tradeoffs between the two  
2 benchmarks is complicated.

3 The degree to which inflation is expected to vary matters in the selection of a liability  
4 benchmark, and is the core issue from MPI's perspective.

5 Based upon MPI's review of inflation forecasts from the Canadian chartered banks,  
6 Mercer, the Bank of Canada, and break-even inflation rates currently implied by real  
7 return bonds, all data indicates that inflation will be approximately 2.0% over the  
8 outlook period.

#### 4.2 MPI chose to accept the threat of inflation volatility with good reason

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9 A fact perhaps too easily overlooked is that MPI 'chose' to accept the risk of inflation  
10 volatility, and did so for the reasons outlined below. As alluded to above, there are  
11 also costs associated with hedging inflation risk, which are explored below.

12 MPI's Board of Directors establishes the risk appetite for the Corporation, and on  
13 careful consideration, through the ALM process, decided to hedge nominal interest  
14 rate risk, and thereby 'chose' to accept the lesser threat of inflation volatility risk.

15 The Investment Committee of the Board of Directors is comprised of individuals with  
16 extensive expertise in investments, in fact characterized by Mr. Gary Steski as "very  
17 highly competent" under cross examination in the 2018 GRA<sup>18</sup>, and further evidenced  
18 by the biographies of investment Committee members presented in Appendix 1 to this  
19 rebuttal evidence.

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<sup>18</sup> 2018 GRA Transcript page 1403 to 1406

### 4.2.1 Inflation variability risk is the lesser threat

1 The Bank of Canada (BoC) is highly credible, in that it has been and is expected to  
 2 continue to be successful in controlling inflation. The inflation expectation chart below  
 3 from the BoC website shows that the consensus estimate<sup>19</sup> of inflation is expected to  
 4 be at or below 2.0% for the next 10 years. The forecast is as of August 1, 2018. It is  
 5 important to note that despite the recent increases in headline inflation, the mid and  
 6 long-term consensus forecasts have not changed.



7  
 8 \* Source: Consensus Economics Inc. Prior to April 2014, forecasts were semi-annual (semi-  
 9 annual values are shown for the two appropriate quarters in the graph above). Since then,  
 10 they are available quarterly.

11 It is also telling that Real Return Bonds (RRBs) have not increased in price<sup>20</sup> even with  
 12 higher headline inflation – that is to say, the market isn't pricing in significant inflation  
 13 in the future<sup>21</sup>. If the market consensus was for inflation to be persistently higher in

<sup>19</sup> <https://www.bankofcanada.ca/rates/indicators/capacity-and-inflation-pressures/expectations/expectations-graph/>

<sup>20</sup> The return on the FTSE TMX Canada RRB index in 2017 was 0.7% and to October 2, 2018 was 0.5%.

<sup>21</sup> The Break-Even Inflation Rate implied by RRBs was approximately 1.75% in August 2018.

1 the long-term, the price investors were willing to pay for RRBs, and the return holders  
2 of RRBs would have realized, would have been higher.

3 While it's a fact that headline inflation increased to 3.0% for July 2018 and then  
4 declined to 2.8% for August 2018, it is also true that the Bank of Canada expects  
5 inflation to return to its target of 2.0% in 2019<sup>22</sup> while the current consensus forecast  
6 by the Canadian chartered banks is 2.2%.

7 All evidence points to the view that inflation will return to approximately 2%, whether  
8 one looks to the markets, the Bank of Canada, or the Canadian chartered banks.

9 Further, MPI's inflation forecast has not been challenged by any evidence placed on  
10 the record of this proceeding, and the response to MPI (CAC) 1-11 is fairly  
11 characterized as a cautionary note about confidence in inflation forecasts over the  
12 medium to long term.

13 Insofar as investment beliefs and qualitative analysis matter, and MPI agrees they do,  
14 then MPI's belief in the inflation forecast (and the implicit belief in the Bank of  
15 Canada's commitment to control inflation within the published 1% range around the  
16 2.0% target, resulting in low inflation volatility), indicates that modelling portfolios  
17 based upon the nominal liability benchmark is a very reasonable approach, particularly  
18 given the fact that the break-even inflation rate implied by RRB prices as of August  
19 2018 was approximately 1.75%.

20 Main goal of ALM study was to mitigate nominal interest rate risk; since inflation is  
21 expected to be relatively low and stable over the outlook period the difference  
22 between nominal and real interest rates should be low and stable and hedging nominal  
23 interest rate risk is reasonable.

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<sup>22</sup> BoC's July 2018 Monetary Policy Report, page 18.

#### 4.2.2 Hedging inflation variability is not without a cost

1 While real return bonds can provide an effective hedge against variability in inflation,  
2 there is a cost to obtaining this insurance. The costs include:

- 3 - Making a significant allocation to RRBs reduces the set of investible assets.  
4 Leverage can be used to reduce this effect but MPI's Investment Committee  
5 was not comfortable with the use of leverage
  
- 6 - RRBs have a very low yield (relative to Provincial, municipal or corporate  
7 bonds) because they are issued by the Government of Canada (ie: RRBs have  
8 no credit spread). They are 'expensive' in the sense of foregone return.
  
- 9 - There are implementation issues as very few RRBs are available (it is difficult  
10 to construct a portfolio of RRBs that is well diversified across the term  
11 spectrum). Further, if MPI were to make a sizable allocation, it would have to  
12 patiently build its position or overpay for 'quicker' exposure.

13 These cost factors, when weighed against the low risk of inflation volatility, illustrate  
14 that the selection of a nominal liability benchmark is indeed reasonable.

#### 4.2.3 The cost of inflation variability is low

15 MPI conducted further modelling on the impact of inflation on the pro forma financial  
16 statements to quantify the impact of the sustained high inflation. Given the Bank of  
17 Canada's inflation target range of 1 to 3%, it was assumed that a plausible worst case  
18 scenario for inflation was sustained 3.0% inflation over a four year forecast period.

19 Results of the modelling, **before** management action, show that the net income  
20 impact was an annual average loss of \$19.7M. The majority of this impact is due to  
21 increased claims cost associated with coverages that are indexed to CPI.

22 In DCAT.5.8, MPI tested a 1-in-40 inflation scenario of 2.8% for 4 years and  
23 determined it was not a top three adverse scenario.



1 The conclusion to be drawn from this analysis is that sustained high inflation will have  
2 a negative impact on MPI's results and capitalization, but that impact is modest in the  
3 overall context of the basic investment portfolio, and comes with a low risk of being  
4 realized.

## Appendix 1

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### **MANITOBA PUBLIC INSURANCE BOARD OF DIRECTORS – INVESTMENT COMMITTEE MEMBERS**

#### **Domenic Grestoni**

Domenic, also known as Dom, retired from Investors Group in June 2014, where he spent close to 40 years in various positions including audit operations, cash management, treasury operations and investment and portfolio management. He holds a CGA, CPA and a business administration degree from Red River College.

Domenic, CFP, was a Managing Partner, Senior Vice-President, Head of North American Equities, and Portfolio Manager at IG Investment Management, Ltd. Domenic provided key North American perspective combined with substantial financial analysis and investment knowledge expertise. Domenic was the lead manager of the \$17-billion Investors Group Dividend fund for 11 years before his retirement. He holds both Certified General Accountant and Certified Financial Planner designations.

#### **Daniel Bubis**

Dan was the former president, chief investment officer and founder of Tetrem Capital Management. Prior to founding Tetrem in 2004, Daniel was the chief investment officer at Assante Asset Management Ltd., where he oversaw all investment management function. He holds an honours business administration degree from the University of Western Ontario and holds a chartered financial analyst designation.

#### **Valerie Wowryk**

Valerie is a chartered financial analyst and is a past president of the CFA Winnipeg, the local society of chartered financial analysts. She is Director of Wealth Management & Portfolio Manager with Richardson GMP and has more than 30 years of

experience in providing customized portfolio management, oversight and guidance to a diverse client base.

Valerie's investment career began at a leading Canadian trust company where she managed portfolios for the institutional and not-for-profit sectors, high net worth private clients, Estates and Trusts, and First Nations Communities. In 2001, she joined an independent investment counseling firm, mentoring with one of Canada's leading investment managers.

Valerie's full curriculum vitae is set out below:

## **Valerie G. Wowryk CFA, ICD.D**

### **Pertinent Board Experience**

- Manitoba Public Insurance Corporation – Appointed May 2016

Director, Governance and HR Committee Chair and Member of the Investment Committee

- CFA Winnipeg – the local Chapter of CFA Charterholders 1994 – 2008

Director holding various Board positions including President (1998-2000)

- Jewish Foundation of Manitoba – Investment Committee 2013 – Present

### **Pertinent Education**

- Institute of Corporate Directors, ICD.D - May 2017
- ICD-Rotman, Directors Education Program – May 2017

The Institute of Corporate Directors is an organization dedicated to the education associated with corporate governance, policy and practice. The Institute strives to lead and demonstrate the value of excellence in directorship and enlightens directors to anticipate, influence and meet boardroom challenges.

- Chartered Financial Analyst Designation - The CFA Institute 1997

The Chartered Financial Analyst (CFA) Program is a professional credential offered internationally by the American-based CFA Institute. The CFA Program and its extensive Body of Knowledge provides a strong foundation of advanced investment analysis and the highest standards of ethics.

### **Pertinent Career Experience**

- July 2011 to Present - Richardson GMP Limited.

Position and Key Responsibilities: Director, Wealth Management & Portfolio Manager  
A fully accredited Portfolio Manager providing asset management to a select number of personal and institutional clients including; prominent families, estates and trusts, not-for profit organizations, pension plans and corporate portfolios.

- March 2001 to July 2011 – Goodman Investment Counsel Inc.

Position and Key Responsibilities: Portfolio Manager  
Responsible for building the Winnipeg branch of the Toronto-based asset management firm.  
Developed new client relationships and provided professional portfolio management.

- May 1981 to March 2001 – Royal Trust - RT Investment Counsel Inc.

Position and Key Responsibilities: Investment Officer, Royal Trust  
Manager Prairie District, RT Investment Counsel  
Managed the Investment Department for the Prairies District which included the development and supervision of personnel serving clients in Manitoba and Saskatchewan.