

**Subject: Input of MPI
DCAT Document
Email dated October 29, 2015**

The Corporation is in receipt of Ms. Candace Grammond's email, dated October 29, 2014, asking for feedback and input on the document¹ provided which has been labelled as an "Undertaking" for now".

Business Context

MPI's feedback is provided within the context of Basic's current financial situation, specifically, the need to deal with Basic's current deficiencies in premium and capital.

First, the PUB through the GRA and hearing testimony is aware of the negative impact that overly optimistic interest rate forecasts can have on MPI's financial results in a very short period of time².

Second, the Corporation has made the PUB aware of how critical it is to re-build the Basic RSR in order to protect rate payers against financial volatility. This provides rate stability which will help to ensure the long term success of public auto insurance in Manitoba. To ensure this stability, it requires the approval by the PUB of the DCAT and the approval of the lower and upper range of the RSR this year. MPI has been working collaboratively with the PUB, Interveners and their advisors on the DCAT for over four years. Through several hearings and two DCAT technical conferences many changes to the DCAT have been implemented. To facilitate the decision making process, MPI's Board of Directors has indicated its willingness to transfer excess retained earnings from MPI's competitive lines to rebuild the RSR over the next four years, provided the Corporation and the PUB come to agreement on the DCAT. By doing so, it is hoped the PUB will be able to move forward on the DCAT and the recommended MCT this year. Therefore, any undertaking that would preclude the PUB this year from accepting the DCAT and MCT for the lower and upper levels of the RSR, especially given the current deficiencies in premium and capital cannot be considered to be in the best interest of Manitoba's rate payers.

It is within this context that we provide our feedback.

¹ 214028 Draft Undertaking Request.docx

² see PUB_MPI_Pre_Ask_5

Feedback -- Phase 1 DCAT Adverse Scenarios Before Management/Regulatory Actions

- ◆ **Request:** For all modeled scenarios (base or adverse), please include in the summary of scenario results the modeled MCT ratio based on OSFI's 2015 MCT Guideline, if not now, then in the near future.

MPI Response: The OSFI 2015 MCT Guideline was recently approved – post GRA submission. Given the Corporation's February 28th year end, the OSFI 2015 MCT guideline is not applicable to MPI until February 29, 2016 and would be used in preparation of the 2017 GRA. MPI is of the belief that the Regulator can still proceed with approving the current DCAT and the proposed MCT using the current OSFI guidelines. In addition, in a study completed by OSFI on the impact of the proposed changes to the 2015 regulatory capital framework, it indicated that as a percentage of the total capital requirements, the total minimum capital requirements increased by 3% for Canadian companies. This study also indicates that total capital impact, on an industry average basis, results in an increase in the MCT ratio by 4 percentage points. Until the Corporation implements the 2015 guidelines for the 2016 year end, the actual impact to our MCT is not known. **Request:** For all adverse scenarios involving fitting of a probability distribution, please provide statistical and graphical evidence of the goodness of fit, both overall and with a particular focus in the adverse tail of the distribution, at least out to the 99.5th percentile.

MPI Response: While the response to this request is not believed to be necessary to enable the PUB to approve the DCAT this year, the Corporation is prepared to have staff incur the significant work effort and overtime to provide the requested information by November 14, 2014 if this will assist the PUB in approving this year's DCAT. As an alternative, the Corporation can commit to including this information in future DCAT reports if required.

- ◆ **Request:** For all adverse scenarios tested, please augment what is already shown for scenario results (before management/regulatory actions) to include results at a 1-in-200-year (99.5th percentile) level.

MPI Response: It was not the Corporation's understanding from previous hearings and technical conferences that a 1-in-200 year risk tolerance was relevant to the Board's determination of capital targets. However if this information will assist the PUB in approving the current DCAT then the Corporation will provide it as soon as possible but no later than November 14, 2014.

- ◆ **Request: Loss Ratio Scenario.** For each coverage, and for all coverages combined, please extend the tables shown to include the 99th percentile and 99.5th percentile simulation results.

MPI Response: As above the Corporation will provide the requested information as soon as possible but no later than November 14, 2014

- ◆ **Request: Equity Decline Scenario.** Please change the modeling approach to include a historically-based post-decline recovery effect, based on a shortened history of the S&P Composite Total Return Index comparable to that currently used in the DCAT.

MPI Response: MPI's understanding is that this approach has already been reflected in the filing.

- ◆ **Request: Interest Rate Decline Scenario.** Please change the modeling approach from using percentage point differences (e.g., 5.70% - 4.60% = +1.10 percentage points) to using percentage differences (e.g., $5.70\%/4.60\% - 1 = +23.91\%$), based on a shortened history of Government of Canada 10-year bond rates to exclude the "stagflation period".

MPI Response: The scope of this request is beyond MPI's ability to provide this information within this year's hearing timeframe. The Corporation does believe this request reflects the intended benefits of collaboration between the parties. The Corporation will work with the PUB and CAC actuaries to find a mutually agreeable solution. However, the Corporation has filed an Exhibit which shows that the indicated DCAT result would not materially change if the requested interest rate modeling was adopted. This is because the current Government of Canada 10 year bond rates at October 31, 2014 are only 37 basis points above the assumed minimum yield in the DCAT analysis. Any modifications to these assumptions would not be expected to change the results of the DCAT at the 1-in-40 probability level.

- ◆ **Request: Inflation Scenario.** Please change the modeling approach to include up front recognition of the full estimated impact of inflation on future claim and expense payments, and to include consideration of any correlation between inflation and interest rate movements, based on a shortened history of Canadian inflation and Government of Canada 10-year bond rates to exclude the "stagflation period".

MPI Response: The Corporation's Chief Actuary cannot recommend that up front recognition of the full estimated impact of inflation on future claim and expense payments would be a best estimate approach and therefore would not use it for MPI's DCAT and would not be able to sign his report on this basis.

- ◆ **Request: Mis-estimation Scenario.** Considering the magnitude of historical Basic reserve runoff levels, and considering this risk category is ranked #1 by Saskatchewan Auto Fund, further exploration of this risk category is indicated, if not now, then in the near future. One possibility would be to more deeply investigate the use of reserve variability modeling tools.

MPI Response: The scope of this request is beyond MPI's ability to provide this information within this year's hearing timeframe. The Corporation's Chief Actuary is willing to discuss this scenario further with the PUB and CAC actuarial advisors after the current hearing.

- ◆ **Request: Combined Scenario.** Please change the modeling approach to reflect the changes requested for the Equity Decline and the Interest Rate Decline scenarios. In addition, it has been noted that some results currently provided for the Combined Scenario (before management/regulatory actions) are counter-intuitive (e.g., the Total Equity impact of the 2-year Combined Scenario is greater at the 97.5th percentile than at the 99th percentile). Please provide an explanation for such counter-intuitive results, and please confirm that the described step taken to "*order the scenarios from most unfavourable to most favourable*" works with the two sets of simulation results (claims vs. equity/interest rates) in a pairwise manner. Also, please provide some demonstration of the stability of the Combined Scenario modeling results.

MPI Response: The Corporation does not believe that the results are counter-intuitive and will provide further explanation at the hearing.

- ◆ **Request: Alternate Combined Scenario.** Please provide the results of an alternate combined scenario (reflecting the modeling approach changes requested for the Equity Decline and the Interest Rate Decline scenarios) to illustrate the impact of the mitigation of interest rate risk that might be expected from the adoption of cash flow matching of the actuarial liabilities and the underlying investment assets.

MPI Response: Given that the Corporation is currently conducting an ALM study, we believe this request is premature in regard to the current DCAT. Each year the

DCAT report will be prepared based on the Corporation's latest forecast. If the Corporation's risk profile changes, the DCAT results will reflect that change. Although the Board may request alternate scenarios at the hearings with different levels of asset and liability matching, there is currently no evidence on the record to support that the Corporation will ultimately decide to move to such an approach based on the recommendations from the ALM study.

- ◆ **Request:** Please provide MPI's recommendations with respect to the following four criteria to be used in the process of selecting worst case adverse scenarios for purposes of applying management/regulatory actions in the estimation of capital target levels:

- 1) Whether the capital target is to be based on RSR level or Total Equity level.
- 2) An adverse scenario probability level appropriate for a capital target range lower limit.
- 3) An adverse scenario probability level appropriate for a capital target range upper limit.
- 4) The time horizon over which it is reasonable to require adverse scenario capital levels at or above \$0 for capital target level setting purposes.

MPI Response: MPI has provided our recommendations in the GRA. They are as follows:

- 1) The capital target to be based on the Total Equity level.
- 2) The capital target range lower limit to be based on a 1-in-40 adverse scenario probability level
- 3) The capital target range upper limit to be based on 100% MCT
- 4) If this is referring to the time frame over which to rebuild the RSR to within the recommended range, this would need to be based on the specific situation at the time. The DCAT assumes a maximum additional 5% (rate and rebuilding fee combined) in any given rating year.

Feedback -- Phase 2 – DCAT Adverse Scenarios After Management/Regulatory Actions, and Modified Capital Target Range Scenarios

It is anticipated that the PUB will select criteria (as described in Phase 1) for use in the estimation of capital target levels, based on consideration of MPI's evidence in support of its recommended criteria as initially provided and in response to cross examination by the PUB and interveners.

- ◆ **Request:** To achieve greater consistency across all adverse scenarios to be subject to management/regulatory actions, please derive the magnitude of the management/regulatory actions dynamically from the results of each adverse scenario before management/regulatory actions. Please also include a description of the logic for this dynamic derivation process.

MPI Response: The Management and Regulatory Action assumptions are clearly stated for the selected adverse scenarios in the DCAT. The Corporation does not believe it is practical or appropriate to automate the Management and Regulatory action for the adverse scenarios, nor does the Corporation believe that doing so will change the indicated result in the current DCAT report. This modeling functionality is not required for the Board to approve the current DCAT report.

- ◆ **Request:** For the selected worst case adverse scenario for each of the upper and lower limit probability level criterion for each risk category based on MPI's recommended criteria (from Phase 1), please provide the results of applying the dynamically derived management/regulatory actions.

MPI Response: The Corporation's recommended criteria are as presented in the DCAT report.

- ◆ For the selected worst case adverse scenario for each of the upper and lower limit probability level criterion for each risk category based on the PUB's selected criteria (if different), please provide the results of applying the dynamically derived management/regulatory actions.

MPI Response: The Corporation does not have the PUB selected criteria, but can provide additional relevant information to the Board if necessary to approve the current DCAT proposal.

- ◆ **Request:** For the overall worst case adverse scenario (across all risk categories) for each of the upper and lower limit probability level criterion based on MPI's recommended criteria (from Phase 1):

- 1) Create a modified lower limit base scenario under which the capital level as at 28 February 2014 is inflated to the estimated lower limit target capital level (with the new assets spread proportionately across the Basic investment portfolio).
- 2) Create a modified worst case lower limit adverse scenario by applying the worst case lower limit adverse scenario assumptions to the modified lower limit base scenario.

- 3) Repeat steps 1 to 3 iteratively, adjusting the estimated lower limit target capital level until the forecasted capital level under the modified worst case lower limit adverse scenario approximates \$0 at the originally chosen low point within the time horizon criterion.
- 4) Summarize the results of the final modified lower limit base scenario and modified worst case lower limit adverse scenario.
- 5) Repeat steps 1 to 4 for the estimated upper limit target capital level.

MPI Response: The DCAT is already prepared utilizing the 2015/16 base forecast, which includes the impact of growth in the business.

- ◆ **Request:** Repeat the previous iterative process for the overall worst case adverse scenario (across all risk categories) for each of the upper and lower limit probability level criterion based on the PUB's selected criteria (if different).

MPI Response: The DCAT is already prepared utilizing the 2015/16 base forecast, which includes the impact of growth in the business.

Conclusion

MPI is concerned with the deficiencies in premium and capital currently faced by the Basic line of business. We believe that we have provided well supported recommendations to the PUB in order to deal with both these issues

MPI and the PUB have been working together for over four years on the DCAT. In our opinion, the business context provided to you reinforces the need to approve the recommended RSR range this year. There is too much at stake for rate payers to do otherwise.