Excerpts from PUB Board Orders

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TAB 1

MANITOBA)
)
THE PUBLIC UTILITIES BOARD ACT) Order 128/15
)
THE MANITOBA PUBLIC INSURANCE ACT)
) December 1, 2015
THE CROWN CORPORATIONS PUBLIC)
REVIEW AND ACCOUNTABILITY ACT)

Before: Régis Gosselin, B ès Arts, M.B.A., C.P.A., C.G.A, Chair
Karen Botting, B.A., B.Ed., M.Ed., Vice Chair, Acting Chair
The Hon. Anita Neville, P.C., B.A. (Hons.), Member
Susan Proven, P.H.Ec., Member
Allan Morin, B.A., ICD.D., Member

MANITOBA PUBLIC INSURANCE CORPORATION (MPI OR THE CORPORATION): COMPULSORY 2016/2017 DRIVER AND VEHICLE INSURANCE PREMIUMS AND OTHER MATTERS

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is forecast at about $12.9 million annually. The low level of investment income is negatively impacted by the ($75.9) million in average losses on the marketable bond portfolio due to the rising interest rates being forecasted. If total losses on marketable bonds from the rising interest rates forecast were excluded, Basic would realize, on average, $88.8 million over this time period ($85.3 million in 2016/17 and $92.1 million in 2017/18). The subject of interest rate risk to the Corporation and to Basic is addressed in the following section.

4.4 Interest Rate Risk

Last year, at the request of MPI, PricewaterhouseCoopers (PWC) reviewed the issue of interest rate risk to the Corporation. PWC defined interest rate risk as follows:

> Interest rate risk represents the risk of economic loss resulting from market changes in interest rates and the impact on interest rate sensitive assets and liabilities. Interest rate risk arises due to the volatility and uncertainty of future interest rates.

The Corporation acknowledged that historically, small changes in interest rates have had a significant impact upon investment income. Within MPI's investment portfolio, due to its weighting to long-term bonds, some of which are marketable, investment returns are impacted materially by changes in interest rates. In particular, if interest rates increase, marketable bond values fall, as do the discounted value of the claim liabilities. If interest rates decrease, bond values and claims liabilities increase. The effect of these changes can, to a large extent, offset each other if managed appropriately so that the net impact on financial results is neutralized. For example, if there is a mismatch between the duration of claims liabilities and supporting investment assets, as was the case historically, the net effect can mean increased gains or losses relative to a neutral situation, including a negative impact on net income. The same is true if there is a mismatch between the underlying forecasted cash flows (claims liabilities vs. supporting investment assets), even if the durations are matched.

If interest rates decrease relative to the forecast used to support a rate application, mismatching of durations will have an adverse effect if claims liabilities are longer in

duration than the supporting investment assets, as was the case last year. When the increase in the value of the bonds is less than the increase in the value of claims liabilities, financial results will be worse than anticipated and, as a consequence, could lead to a need for increased Basic insurance rates.

MPI models changes in the fair market value of its marketable bonds and the changes to bond values flow through Basic's net income because those assets are categorized as Fair Value Through Profit and Loss. Basic's operating results have been very sensitive to interest rate changes, including the timing and the amount of the interest rate changes. Because it is difficult to predict the amount and timing of assumed interest rate changes, Basic net income has been very difficult to forecast accurately.

MPI managed interest rate risk last year pursuant to a +/- 1 year duration match, and this year, based on the recommendation of AON Hewitt (AON), implemented full duration matching and has included that assumption in the forecasts in the Application. Duration matching of investments and claims liabilities does not mean that net income is fully immunized against interest rate changes, since only average durations are being matched, not the cash flows underlying those durations. Matching cash flows is a more complex and a more effective alternative in order to immunize net income, but there are practical limitations to cash flow matching, and adverse consequences for investment returns.

The effectiveness of duration matching for the Corporation is also complicated by the fact that its investment portfolio is managed for the Corporation as a whole, rather than Basic's portfolio being separately managed. Further, over 37% of the fixed income portfolio supporting the claims liabilities is invested in non-marketable (i.e. MUSH) bonds, which are not interest rate sensitive (their value does not fluctuate with changes in interest rates).

MPI has stated in the past that the longer the duration mismatch (with assets shorter term than liabilities), the more favourable the results for the Corporation <u>if interest rates rise</u> (the drop in value of the assets is less than the decrease in liabilities). Moving to full duration

matching has lowered the impact upon net income of changes in interest rates but has not eliminated the impact.

Last year PWC, in reviewing the practices of Property and Casualty insurance companies in managing interest rate risk, found that cash flow matching is the predominant methodology employed among its sample group. The majority of companies/branches sampled matched their assets to the claims liabilities to minimize interest rate risk.

The Board stated in Order 151/13, on p. 32:

> It is the view of the Board that the Corporation's current approach to duration mismatching makes it too vulnerable to interest rate risk. The Board believes that the Corporation should match exposures, including cash flow, beyond duration matching on a go-forward basis. The Board directs MPI to submit a discussion paper of the duration matching of its claims liabilities and investments as part of the next GRA.

Last year, MPI provided a Duration Matching Discussion Paper in which it evaluated the interest rate risk faced by MPI. MPI found that the interest rate risk to the Corporation was more significant with a larger duration bandwidth and changed the duration gap from +/- 2 years to +/- 1 year on or about August 31, 2014. MPI characterized this change as a stopgap measure pending the completion of the ALM Study underway at the time, which was to address the merits of cash flow matching within the Corporation.

The Board in Order 135/14, on page 43, stated that:

> MPI should seek to substantially immunize itself from the impact of changing interest rates....
>
> The Board also notes that if the Corporation's interest rate risk is eliminated or substantially mitigated, there will be an impact upon the Combined

> Scenario in the Dynamic Capital Adequacy Testing (DCAT) report such that required rate reserve levels could be decreased....
>
> Once the ALM Study is completed MPI must take steps to substantially mitigate interest rate risk, and the Board directs MPI to provide, at next year's GRA, the details of the steps that MPI has taken to do so.

The second aspect of the ALM study filed in the Application, as referenced above, related to duration matching. AON recommended full duration matching along with a change in the composition of the investment portfolio rather than cash flow matching or a hybrid matching approach, due in part to reduced investment returns from the alternatives relative to the interest rate risk protection afforded. As a result of the ALM study, and to better mitigate interest rate risk, the Corporation's duration matching strategy was changed such that the duration of the fixed income portfolio will match the claims liabilities duration including all actuarial provisions.

The Corporation has stated that full matching of the duration of the fixed income portfolio and claims liabilities does not completely eliminate all interest rate risk. In the Application, the Corporation states that the net interest rate impact was $18.1 million on average over the rating years, compared to $24.0 million using last year's assumptions; a $5.9 million difference.

The Corporation stated also that the combined impact of the change to the duration matching strategy and the new asset allocation on Basic net income over the rating years was relatively small. In particular, the forecasted Basic net income in the Application was $1.2 million lower on average in the rating years compared to last year's duration and asset allocation assumptions.

4.5 Investment Income Forecasting

At the 2014 GRA, the Corporation proposed a new methodology by which to forecast its investment income, which measured the impact of interest rate changes on investment income and claims liabilities, whereas the methodology employed by the Corporation previously did not do so. In addition, the methodology proposed by the Corporation at the 2014 GRA utilized a five-year interest rate growth forecast from the five major Banks and Global Insight but stretched that forecast growth over ten years, effectively halving the growth rate (Low Growth Rate Forecasting Methodology).

At the 2014 GRA, the Board concluded that there should be more discussion and analysis with respect to interest rate forecasting and pursuant to Order 151/13 ordered that a technical conference take place for that purpose. After learning that the Corporation would attend a technical conference but would not bring forward expert evidence, the Board varied Order 151/13, withdrew the requirement of a technical conference and ordered that at the 2015 GRA the following evidence be filed:

- the particulars of the interest rate forecasting methodology preferred by MPI and relied upon in the Application;
- the particulars of the research, review and analysis conducted by MPI in ascertaining the details of its preferred interest rate forecasting methodology; and
- expert evidence regarding a reasonable and appropriate interest rate forecasting methodology to be used by MPI.

The Corporation has acknowledged that it does not have expertise in interest rate forecasting but stated that it has an in-depth understanding of the interest rate risks which it faces. The Corporation acknowledges that the GRA must be prepared on a best estimate basis.

The Corporation has stated that it uses only one long-term interest rate forecast because other long-term forecasts do not provide timely or monthly forecast changes, or cannot be disclosed publicly.

4.6 Interveners' Positions

CAC

CAC noted that there has been a challenge with the Corporation's interest rate forecasting for many years. CAC questioned whether the Corporation's interest rate forecasting methodology should be revisited and whether there is now sufficient immunization for the Corporation's investment portfolio. In particular, Basic suffered losses of $30.8 million in 2011/12 and $38.1 million in 2014/15 due to the negative impact of interest rates when the marketable bond yield fell by 0.33% and 0.53% respectively. CAC also noted MPI's evidence that if the Application had been based upon the Bank industry forecast as at September 30, 2015, a 1.6% overall rate increase would have been requested by the Corporation.

CAC expressed the concern that the Corporation has not done enough to mitigate interest rate risk, even after implementation of the recommendations on duration matching found within the ALM Study, and stated that MPI's ongoing exposure to significant interest rate risk must be addressed in the near future, perhaps through a comparison with other organizations.

CAC noted also that there was an unrealized opportunity for investment in higher yield corporate bonds and queried how MPI's investment portfolio is performing relative to other significant organizations in Manitoba. CAC recommended that AON be brought in to review the yields earned by these similar organizations and comment on performance to date.

4.7 Board Findings

With respect to the composition of the Corporation's investment portfolio and its management of interest rate risk, the Board was pleased to receive the ALM Study completed by AON Hewitt, but notes that the GRA process would have been enhanced if appropriate witness(es) from AON Hewitt were produced by the Corporation to discuss the Study. The Board directs MPI to bring an expert witness to the 2017 GRA hearing to testify with respect to its current asset mix, duration matching strategy and strategy to manage Basic interest rate risk, and that this expert provide a report regarding those issues, to be filed together with the 2017 GRA. In addition, the Board seeks an update on the status of the use of corporate bonds in the bond portfolio including insight on the performance of those bonds.

The Board notes that there are other entities in Manitoba with substantial investment portfolios under the control of the Government of Manitoba, such as the Workers' Compensation Board, the Teachers' Retirement Allowances Fund and the Civil Service Superannuation Board of Manitoba. The Board orders MPI to prepare and file at next year's GRA a study with respect to the composition and performance of the investment portfolios of each of those entities for review.

The Board notes that volatility in the value of the investment portfolio is one of the major risks faced by the Corporation and that pursuant to its current approach, the Corporation, and in particular Basic, are not fully immunized from interest rate risk. The Board recognizes that significant improvements have been implemented by the Corporation relative to the approach that it utilized in years past, but in the view of the Board, the interest rate risk remains at a level that requires further review and analysis.

The Board also notes that if the Corporation's interest rate risk is eliminated or substantially mitigated, there will be an impact upon the Combined Scenario in the DCAT report such that required rate reserve levels could be decreased.

The Board has in the past expressed the view that the standard interest rate forecast prepared by the 5 major Banks and Global Insight is the best information that is available with respect to interest rate forecasts, other than longer term forecasts available for purchase, which MPI has not done. It is the view of the Board that MPI should utilize at least one additional longer term forecast to enhance the accuracy of the information on which MPI relies to prepare its interest rate forecast on which the GRA is based. As such, the Board orders that next year, MPI file its application on the basis of the interest rate forecasting methodology used currently, and that it also file on the basis of an Olympic style average (i.e. excluding each of the highest and lowest values of the non-long term standard interest rate forecasts utilized), and utilizing at least one additional longer term forecast.

The Board notes that if the updated September 2015 standard interest rate forecast materializes, MPI's revenues will decrease in 2015/16 and following, such that the net result for 2016/17 and 2017/18 would not be a break even position. This is the case even after the implementation of full duration matching as at August 31, 2015.

5.0 RATE STABILIZATION RESERVE

5.1 *RSR Balance*

The stated purpose of the RSR is to protect motorists from rate increases made necessary by unexpected events and losses arising from non-recurring events or factors. The RSR balance was $102.3 million as at February 28, 2015, after a net income in Basic of $2.4 million, which was increased to $177.8 million after a transfer of $75.5 million from non-Basic retained earnings. With Accumulated Other Comprehensive Income (AOCI), Basic Total Equity was $213 million as at February 28, 2015; the minimum Total Equity target set by the Corporation. AOCI represents an aggregate of the difference between net income reflected in an income statement and total comprehensive income, and includes unrealized gains or losses on available for sale securities.

TAB 2

Public Utilities Board
Régie des services publics

Order No. 162/16

MANITOBA PUBLIC INSURANCE CORPORATION (MPI OR THE CORPORATION): COMPULSORY 2017/2018 DRIVER AND VEHICLE INSURANCE PREMIUMS AND OTHER MATTERS

December 15, 2016

BEFORE: Robert Gabor, Q.C., Chair
Karen Botting, B.A., B.Ed., M.Ed., Vice Chair
The Hon. Anita Neville, P.C., B.A. (Hons.), Member
Allan Morin, B.A., ICD.D., Member

Room 400 – 330 Portage Avenue
Winnipeg, MB R3C 0C4
www.pub.gov.mb.ca

330, avenue Portage, pièce 400
Winnipeg (Manitoba) Canada R3C 0C4
www.pub.gov.mb.ca

In Order 128/15, the Board requested a comparison of investment returns with other entities in Manitoba. The Board stated:

> *The Board notes that there are other entities in Manitoba with substantial investment portfolios under the control of the Government of Manitoba, such as the Workers' Compensation Board, the Teachers' Retirement Allowances Fund and the Civil Service Superannuation Board of Manitoba. The Board orders MPI to prepare and file at next year's GRA a study with respect to the composition and performance of the investment portfolios of each of those entities for review.*

Based on the comparison, MPI's investment portfolio earned a return of 2.5% in 2015, while the average of the returns earned by the Teachers' Retirement Allowances Fund (TRAF), the Civil Service Superannuation Board of Manitoba (CSSB) and the Workers' Compensation Board (WCB) was 7.9%. MPI attributed 2.5 percentage points of the 5.4 percentage points difference to the difference in asset allocations. MPI indicated that the 3 percentage points remaining underperformance represented about $12.1 million in lower investment income returns for 2015.

MPI indicated CSSB and TRAF are pension plans, which have a much longer investment time horizon due to their very long duration liabilities. As a result, these organizations are able to take more investment risk and have a much higher allocation to equities than MPI. Over the last ten years MPI's portfolio has underperformed CSSB by 0.4%, WCB by 1.2% and TRAF by 1.7%. MPI indicated that adjusting the asset allocations of CSSB, TRAF and WCB similar to that of MPI's allocation would reduce or potentially eliminate the difference in performance between MPI and those organizations.

4.4. Interest Rate Risk

MPI submitted that the objective of reducing exposure to interest rate movement is key for a property and casualty insurer like MPI. In the absence of MPI's actions to match liabilities, MPI would face significant risk of financial losses. Small changes in interest rates have had a significant impact upon investment income. MPI's investment portfolio is weighted heavily to long-term bonds. A large portion of the bonds are marketable, which means investment returns can be impacted materially by changes in interest rates. In particular, if interest rates increase, marketable bond values fall, as do the discounted value of the claim liabilities. If interest rates

decrease, bond values and claims liabilities increase. The effect of these changes can, to a large extent, largely offset each other if managed appropriately so that the net impact on financial results is neutralized. The situation is complicated by the presence of the MUSH bonds which also support the claims liabilities but are not interest rate sensitive.

In Order 151/13, the Board directed MPI to have the composition of its investment portfolio reviewed by an external expert consultant, with a view to determining whether the current asset mix should continue, or should be revised.

The Board stated the review should encompass an examination that generates recommendations for improving the management of the portfolio, including strategies to manage the volatility of the portfolio, given that the volatility in the value of the investment portfolio is one of the major risks faced by the Corporation.

As stated above, MPI engaged AON to complete the ALM Study in 2014, and filed the study at last year's 2016 GRA. MPI did not put forward a witness from AON last year to speak to its report.

In Order 128/15 the Board stated:

> *The Board notes that volatility in the value of the investment portfolio is one of the major risks faced by the Corporation and that pursuant to its current approach, the Corporation, and in particular Basic, are not fully immunized from interest rate risk. The Board recognizes that significant improvements have been implemented by the Corporation relative to the approach that it utilized in years past, but in the view of the Board, the interest rate risk remains at a level that requires further review and analysis.*

The Board directed MPI to bring an expert witness to the 2017 GRA hearing to testify with respect to its current asset mix, duration matching strategy and strategy to manage Basic interest rate risk. This expert was to provide a report regarding those issues, which would be filed with the 2017 GRA.

In addition, the Board sought an update on the status of the use of corporate bonds in the bond portfolio, including insight on the performance of those bonds. In response, the Corporation indicated that it had not implemented the recommendation, previously made by AON to add a

specific allocation to corporate bonds, as the Corporation was of the view that non-marketable (MUSH) bonds were a reasonable substitute for corporate bonds.

MPI advised that it had engaged AON to study the issue further and, in the Application, provided a report from AON on the issue. The AON study noted that as a Crown Corporation, MPI has a commitment to invest in Manitoba, which it fulfills by investing in MUSH bonds. AON commented on the benefits MUSH bonds bring to a fixed income portfolio: having comparable yields across the front half of the yield curve, where the majority of corporate bonds are issued; attractive long-term returns, effective high credit quality, and an absence of historical defaults. The disadvantages of MUSH bonds were noted by AON as: a lack of liquidity, a lack of sector and/or credit diversification, a lack of market price discovery, and a lack of options as to terms and features. AON concluded that, assuming that MPI's objective is to employ a duration matching strategy, if the Corporation's desired portfolio return and duration is achievable with a combination of federal, provincial and MUSH bonds, replacement of the existing bonds with corporate bonds would not be necessary. AON did state, however, that it maintains its recommendations from the 2014 ALM study, and would still recommend that the Government of Manitoba and MPI agree upon an acceptable range for corporate bonds, to facilitate tactical allocations within the overall duration matching strategy.

Julianna Spiropoulos of AON appeared at the hearing to provide evidence in respect of the 2014 ALM Study, for which she was responsible. Ms. Spiropoulos holds a Bachelor of Science degree in Actuarial Science, a Masters in Business Administration, and is a Chartered Financial Analyst. Ms. Spiropoulos stated that AON used MPI-selected metrics based on the ten-year average Basic net income to measure "reward" and ten year average standard deviation of Basic RSR to measure "risk". She noted that MPI's primary concern is to address short-term volatility of the premium rate requirement.

In terms of the asset mix, Ms. Spiropoulos stated that MPI's risk tolerance was low given MPI's mandate to break even rather than targeting for profit. As well, there is an extensive process to change the targeted levels of reserve and MPI does not have direct control over the premium rates. Therefore, AON had recommended that MPI adopt a specific portfolio at the lower end of the risk spectrum with a significant allocation to real estate and infrastructure. This would provide some inflation protection over the long-term, and a balance of more liquid equity

allocation. Proceeding in this manner would ensure that growth portfolio was not entirely in illiquid assets and that it had some diversification into more liquid asset classes.

As observed by AON, duration matching of investments and claims liabilities would not mean that net income is fully immunized against interest rate changes, as only average durations are being matched, not the cash flows underlying those durations. Also, over 35% of the fixed income portfolio supporting the interest rate sensitive claim liabilities was invested in non-marketable (i.e. MUSH) bonds, which are not interest rate sensitive and do not fluctuate with changes in interest rates. This large investment in non-marketable bonds would make it difficult for MPI to fully protect at the Basic level its net income exposure to changes in interest rates.

MPI implemented the ALM duration matching at the Corporate level, as it provides a better risk versus return profile. The Corporation indicated that undertaking the matching at the Basic level would increase the indicated rate increase in this Application from the initially proposed 2% to 3.7%.

The Corporation stated that fully matching the duration of the fixed income portfolio and claims liabilities does not completely eliminate all interest rate risk to the Corporation, nor would it eliminate what it considered to be the need for an IRFRF. In the Application, the Corporation stated that the net interest rate impact was $16.0 million on average over the rating years, compared to $18.1 million using last year's assumptions, a $2.1 million difference.

Mr. Valter Viola was called as an expert witness in the hearing, on behalf of CAC. Mr. Viola is a Chartered Financial Analyst and holds a Masters in Business Administration and a Bachelor of Commerce degree. He provides consulting services to institutional investors, Boards, Investment Committees and Management Teams on investment strategies and investment risk management. The focus of Mr. Viola's evidence, and his report filed as an exhibit in the GRA, was to discuss investment portfolio management and the risk/reward framework, and to provide several recommendations related to MPI's investment portfolio design. Mr. Viola was qualified to give evidence in the hearing as an expert in (1) investment portfolio management; (2) investment portfolio research, economics and risk management; and (3) quantitative asset liability modelling.

Mr. Viola questioned the reliance on accounting metrics based on net income, which metrics were used by AON for the asset portfolio design for MPI. Those metrics would not capture

changes in the market value of material assets such as equities or MUSH bonds, or changes in the value of pension liabilities. Mr. Viola recommended that MPI make elections that minimize the discrepancy between net income and comprehensive income for asset/liability modelling purposes, even if only on a notional basis.

Mr. Viola also recommended that MPI redefine return risk, to inform its long-term asset mix decisions based on valuations that reflect market values rather than accounting values, which may be materially different. Regardless of the accounting convention, for portfolio management and asset mix decision making, according to Mr. Viola, there needs to be an adjustment to assets and liabilities to the extent that the accounting is not market-value based.

Mr. Viola also questioned the high concentration of Canadian equities in the Corporation's portfolio. Mr. Viola indicated that international diversification was important to Canadian investors given the concentrated nature the Canadian Market with three (of ten) sectors in Canada where Financial Services, Energy and Materials represent a very large portion of the Canadian market. He noted that MPI had no investments in international equities, a large part of the global market. He further stated that there is a potential for missed opportunities to add value, have higher returns, and to diversify the portfolio. Mr. Viola stated his belief that through its focus on short-term rate stability, MPI is losing the opportunity for long-term lower premium rate levels.

4.5. Investment Income Forecasting

At the 2014 GRA, the Corporation proposed a new methodology to forecast its investment income. This methodology measured the impact of interest rate changes on investment income and claims liabilities, whereas the methodology employed by the Corporation previously did not do so. MPI now models changes in the fair market value of its marketable bonds and the changes to bond values flow through Basic's net income because those assets are categorized as Fair Value Through Profit and Loss. Basic's operating results are very sensitive to interest rate changes, including the timing and the amount of the interest rate changes. Because it is difficult to predict the amount and timing of assumed interest rate changes, Basic net income is very difficult to forecast accurately.

The Corporation acknowledged that it does not have expertise in interest rate forecasting but stated that it has an in-depth understanding of the interest rate risks which it faces. The Corporation acknowledges that the GRA must be prepared on a best estimate basis.

In Order 128/15, the Board directed the Corporation to file the Application on the basis of the interest rate methodology that it uses currently, as well as on the basis of an Olympic style average (i.e., excluding each of the highest and lowest values of the non-long term standard interest rate forecasts utilized), and utilizing at least one additional longer term forecast.

In this GRA, MPI stated that in its view, its Standard Interest Rate Forecast (SIRF), which is based on an average of the forecasts for the 10-year Government of Canada interest rate from the five major banks and Global Insight, is not a best estimate forecast. Based on the experience of the last several years, the forecasted changes in interest rates determined by the SIRF have been materially different from actual interest rate changes since 2008.

The Corporation stated that it uses only one long-term forecast because other long-term forecasts do not provide timely or monthly forecast changes, or cannot be disclosed publicly. It also filed additional forecast information including the long term forecasts from the five major banks which are not generally readily available for public disclosure. In response to the Board's information requests and undertakings, MPI filed an updated long-term interest rate forecast, incorporating additional confidential Bank long term forecast forecasts from the five major banks and excluding Global Insight. MPI also adjusted the forecast, eliminating the high forecast in each forecast quarter for the determination of the average.

MPI has indicated that based on the current SIRF, net income will be impacted positively in 2017/18 and 2018/19 by about $32 million. If the interest rates do not increase as forecast, there will be a shortfall. This loss alone, without accounting for any other cost pressures, would require a 5% rate increase. In light of this risk, the Corporation requested the IRFRF be incorporated in the Application.

MPI led a Technical Conference on Interest Rate Forecasting in August of 2016. The report prepared by its expert witness, Dr. Sean Cleary, was filed in this GRA. Dr. Cleary is the BMO Professor of Finance at the Smith School of Business at Queen's University and holds a Ph.D. in Finance from the University of Toronto. Dr. Cleary is also a Chartered Financial Analyst. Dr. Cleary was called as a witness for MPI to present the results of his research on interest rate

forecasting issues. Dr. Cleary was qualified as an expert in finance and capital markets, specifically with respect to the predictive power of different interest rate forecasting approaches, and risks to the forecasting of interest rates.

Dr. Cleary's evidence was that, based on the historical 10-Year Government of Canada bond data, the Naïve forecast approach (based on assuming no future change in interest rates) was better than the SIRF. Based on his historical analysis, the weighted average percentage forecasting error was -39.5% for Naïve versus -92.9% forecasting error for the SIRF.

Dr. Cleary recommended employing a "50-50" interest rate forecast, representing the midpoint between the SIRF and the Naïve forecasts. The use of such a forecast, according to Dr. Cleary, would minimize forecasting error as the 50-50 interest rate forecast in the long run would reflect the fact that interest rates may increase soon, but it may not happen as quickly as anticipated. In Dr. Cleary's opinion, it would also help to adjust for the errors in timing of changes in interest rates.

MPI filed an updated interest rate forecast as of August 2016 based on Dr. Cleary's recommended, and MPI's proposed 50-50 interest rate forecast. It indicated that interest rates would decrease from 1.19% at the end of 2015/16 to 1.11% at the end of 2016/17, a decrease of eight basis points during the year. This compared to the original March forecast increase of 57 basis points based on the SIRF.

Based upon this updated forecast, MPI advised that Basic's forecasted net loss in 2016/17 would increase by $21 million, from an originally forecast net loss of $13.4 million to a net loss of $34.4 million. The forecast also indicated a net loss of $10.8 million for 2017/18 and a net income of $24.1 million for 2018/19. Break-even rates based on the 50-50 interest rate forecast method raised the requested rate increase from 2% to 4.3%; the additional 2.3 percentage points attributable to the IRFRF.

The forecasted change in interest rates based on the Application, an updated August forecast, an expanded base forecast and MPI's 50-50 interest rate forecast proposal were as follows:

Government of Canada 10-Year Interest Rate Forecast

Fiscal Year	Application Standard Forecast	August Update Standard Forecast	August Expanded Standard Forecast	August Revised Application 50-50 Interest Rate Forecast
2015/16A	1.19%	1.19%	1.19%	1.19%
2016/17	1.76%	1.20%	1.17%	1.11%
2017/18	2.43%	1.72%	1.62%	1.37%
2018/19	3.30%	2.77%	2.39%	1.90%
Basis Point Change (2019-2016)	211 BPS	158 BPS	120 BPS	71 BPS

MPI submitted that the SIRF presented in the Application, reflected in the first column of the above table, was predicting a significant interest rate increase during the next three years. Relative to historical interest rate movements over three years, the forecast represents a 1-in-29 year interest rate movement. Even with a best estimate, interest rate forecasting risk remains. Interest rates have declined in recent months, they could remain flat through the forecast period, or as the markets currently predict, rise less aggressively than the 50-50 interest rate forecast predicts. Risk remains with any forecast, but MPI's position was that the 50-50 interest rate forecast reduces this risk on a forward looking basis.

As stated above, the Corporation requested the IRFRF be incorporated in the Application, and re-filed a 4.3% Basic rate change based on an August 50-50 interest rate forecast. The net interest rate impact is reduced from $16.0 million based on the originally filed Application to $10.2 million on average over the rating years.

CAC called as witnesses in the hearing, Dr. Wayne Simpson and Ms. Andrea Sherry. The focus of their evidence was on the proposed IRFRF, as well as on the DCAT.

Dr. Simpson is a Professor of Economics at the University of Manitoba, and was qualified as an expert in applied econometrics and applied microeconomics. Ms. Sherry was qualified as an

expert in actuarial matters, and specifically: (1) in valuation, including the calculation of policy liabilities, forecast premiums, and claims amounts based upon trends; and (2) in solvency and economic capital, including oversight of capital stress testing and economic capital calculations; and actuarial pricing and product development.

On the issue of the IRFRF, Dr. Simpson was of the view that the arguments made by MPI in support of the IRFRF mirror those made in support of the DCAT, and repeat those used to justify holding retained earnings in the RSR, which is determined by the DCAT. Dr. Simpson commented that it is noteworthy that no other insurance company or jurisdiction in Canada or North America uses a concept such as the suggested IRFRF. Dr. Simpson expressed concern with the use of the IRFRF as a result, taking into account what he referred to as the extensive collaborative efforts made by MPI to develop its version of the DCAT methodology. He also identified what he viewed as concerns with the methodology employed by Dr. Cleary in his report that recommended the 50-50 interest rate forecast method.

In Dr. Simpson's opinion, the risks associated with a forecast overstating the growth of interest rates between 2017/18 and 2020/21 is already addressed in the DCAT Report, which identifies the three most important risk factors facing the corporation, one of which is the interest rate decline scenario. And, because the scenario considers sustained low interest rates relative to a base forecast of interest rates rising according to a consensus bank forecast, this is exactly the same risk scenario cited for the IRFRF. The interest rate decline scenario is also an important component of the combined scenario which is ultimately used to justify an RSR minimum target level for total equity. Further, Dr. Simpson commented that the methodologies used to calculate the IRFRF and the DCAT interest rate decline scenario involve exactly the same elements.

In his view, prediction of interest rates carries inherent risk. As there is no precedent for an IRFRF rate adjustment elsewhere, and, given that MPI already employs a methodology which takes into account interest rate risk, Dr. Simpson's view was that MPI's proposal for an IRFRF should be abandoned.

4.6. Interveners' Positions

CAC

CAC suggested that Mr. Viola's recommendations regarding the Corporation's investment portfolio be given a significant amount of weight. The AON ALM study, according to CAC, has limited utility in allowing the Corporation to make portfolio decisions, given the return/risk metrics and excessive constraints, and remarked that Mr. Viola's evidence was that he viewed the ALM study as understating the risks of the Corporation, being market risks. CAC stated that the weight assigned to Canadian equities in the Corporation's portfolio is not consistent with evidence of the historic advice of experts. CAC asked the Board to find there is reason to be concerned the Corporation's portfolio is not adequately protected against interest rate risk. Furthermore, an emphasis by MPI on short-term rate stability leads to an excessive level of risk for the investment returns gained. CAC followed Mr. Viola's evidence, that one should look to the use of Real Return Bonds as a starting point for a benchmark portfolio with minimum risk. CAC noted that one of the factors of a major loss in the Corporation's investment portfolio was a $28.5 million write-down in Canadian equities. Accordingly, CAC argued that MPI is putting itself at risk by being too heavily weighted in favour of Canadian equities.

With all of that in mind, CAC argued that a new ALM study is required. CAC expressed concern that undue risk is being placed on Manitoba consumers as a result of investment portfolio selections. The ALM study conducted by AON in 2014 was based on accounting metrics which were driven by concern with short-term volatility, and Accumulated Other Comprehensive Income (AOCI) was excluded from the metrics. As a result, as stated by Mr. Viola, MPI's portfolio design is being driven by inappropriate selection of risk and return metrics, understating the risk, and unduly constraining the portfolio outcomes.

On the issue of interest rate forecasting, CAC stated that interest rate forecasting has been challenging since the financial crisis of 2008. CAC argued that the Naïve forecast should not be adopted as a sustainable best estimate, and that it could not find a precedent for the 50-50 forecast proposed by the Corporation. CAC stated that the evidence in the hearing did not favour reliance on the 50-50 forecast, and that the SIRF should be adopted. CAC argued that the Corporation had not met its onus to establish that the 50-50 interest rate forecast is the best estimate.

CAC argued that the evidence of Dr. Cleary, in support of the 50-50 interest rate forecast, should be given limited weight given the absence of statistical tests and the lack of any robust foundation for his conclusions. By contrast, CAC argued that its expert witness, Dr. Wayne Simpson (although not retained by CAC to provide comment on the predictive accuracy of the interest rate forecast) offered evidence-based recommendations in that regard. CAC characterized the Technical Conference on interest rate forecasting which took place in August of 2016 as not reflective of true collaboration. CAC recommended a further Technical Conference on the issue of interest rate forecasting, including MPI and Manitoba Hydro to set a precedent for both of these Crown Corporations and their customers, involving a literature review and a review of regulatory practice in other jurisdictions.

CMMG

CMMG expressed the view that the IRFRF is not necessary, and that the DCAT adequately addresses interest rate risk. CMMG questioned whether the Corporation was adequately matching investments to claims liabilities, and suggested that a more diversified portfolio would assist in that regard. CMMG characterized the IRFRF as a creative way for MPI to collect more funds from ratepayers to allow a wider margin for the Corporation to make errors in its forecasting.

CAA

CAA was supportive of CAC's position, that MPI should investigate and adopt a conservative, properly balanced, and diversified portfolio with the aim of reducing the risk of financial shortfalls.

4.7. Board Findings

The Board remains concerned with the Corporation's continued exposure to interest rate risk. The Corporation's reliance on interest rate forecasting to make accurate financial forecasts is challenging, it requires not only the quantum, but also the timing of interest rate changes. This makes it very difficult for MPI to provide a reasonable forecast of net income for rate-setting purposes. Although the Corporation has, through its AON-recommended ALM strategy, provided the Corporation an investment portfolio mix that provides substantial protection from changes in interest rates, the risk to Basic and its ratepayers remains material.

The Board notes that MPI maintains a material portion of its fixed income securities used to meet its claims liabilities in non-interest-sensitive MUSH bonds. In fact, its holdings in MUSH bonds are set at the maximum proportion allowable under its Investment Policy Statement. This hampers MPI's ability to protect the Corporation's Basic net income from changes in interest rates. This pool of capital being provided to Manitoba entities has an indirect and material impact on Basic net income. The Board also understands that, given the manner in which the Corporation's investment portfolio is managed, that MPI is limited in the extent to which it can direct the composition of its investment portfolio. However, the Board is finds that further study of the Corporation's portfolio is warranted, with a view to informing the Corporation and the ICWG as to the optimal investment portfolio that might be recommended for approval by the Department of Finance. The current Investment Policy Statement filed in the Application excludes International equities as a permitted investment class.

The Board finds that an ALM study should take place more frequently than has been the practice with the Corporation. The Board finds there is a need to update the ALM study, given that now the RSR target is based on total equity. The ALM study filed in the 2016 GRA used a constraint based on retained earnings that excluded AOCI, a significant component of total equity. The Board directs that MPI obtain an updated ALM study to be filed in the 2018 GRA, which study shall address each of the 18 recommendations made by Mr. Viola, which are set out in Appendix E of this Order.

With respect to interest rate forecasting, the Board has considered the evidence of Dr. Cleary along with the evidence filed in this Application as to interest rate forecasting generally. While the Board recognizes that Dr. Cleary has expertise, it is not satisfied on the basis of the report filed and the testimony in this hearing that MPI has met its onus to establish the 50-50 interest rate forecast as a best estimate. The Board therefore does not approve the use of the 50-50 interest rate forecast for rate-setting purposes. Although the proposed approach might, from time to time, temper the forecasted bank interest rate increases, it represents neither a generally accepted nor a widely used interest rate forecasting methodology.

The Board recognizes that bank forecasts have struggled with accuracy in the last several years, due to global economic circumstances which have seen interest rates at historically low levels. Dr. Cleary has observed that over the last eight years, the standard interest rate forecasts based on Bank forecasts have exceeded actual 10-year Canada bond yields by a

wide margin – 1.7% on average, representing a forecasting error percentage of -93% of the actual yields. The Naïve forecast was the closest to accurate over the past eight years, but no expert recommended its use. The Board did not find any of the experts provided compelling evidence of the best estimate in interest rate forecasting. The evidence before the Board to date has not provided clarity to it on the issue of interest rate forecasting.

The Board finds that the Technical Conference on interest rate forecasting which took place in August of 2016 did not represent optimal conditions for true collaboration. As a result, and rather than employing any of the proposed interest rate forecast methodologies, the Board directs that MPI participate in a further Technical Conference on interest rate forecasting. The Board anticipates that this Technical Conference will allow for further opportunity to critically examine current interest rate forecasting methodology, and to allow for further, more rigorous collaboration. This should result in a reasonable opportunity for exchange of written materials and/or expert reports prior to the conference taking place. The Technical Conference will be organized by the Board with the input of intervenors and MPI. The Technical Conference shall take place on a date mutually agreed upon as between the Board and MPI, which date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA.

MPI reported a net investment loss in Basic of $4.0 million in 2015/16. The net investment loss incurred by MPI in 2015/16 was impacted by a $33.4 million investment impairment write-off in Canadian equities, much of which were related to energy resource investments. The Board finds that the Canadian economy is highly concentrated in a limited number of sectors including Financial, Energy and Material natural resources, which increases the risk of underperformance for the MPI portfolio by overweighting in Canadian equity investments.

MPI's investment portfolio, with an overall return in 2015 of 2.5%, is not performing favourably when compared to the other Manitoba entities reviewed (CSSB, WCB and TRAF), which had an average return of 7.9%. While MPI has attributed 2.5 percentage points of this difference to portfolio design, the Board notes that 3 percentage points of it relate to comparative returns, which represent in MPI's calculations approximately $12.1 million in lower investment income which is a material amount.

The Board wishes to point out that had the performance of the Corporation's investment portfolio more closely matched that of its peers, a rate increase might not have been necessary. Further, while the Corporation has argued that CSSB and TRAF have much longer investment time horizons due to their long duration liabilities, the Board notes that SGI had a portfolio which includes a public equity mix where almost ¼ is in International equities, while MPI has limited its equity investments to Canadian and US equities. The Board considers these lower comparative returns to be attributable to the current investment asset mix employed by the Corporation, which includes a large proportion in Canadian equities with no exposure to International equities, outside the U.S.

TAB 3

Public Utilities Board

Régie des services publics

Order No. 130/17

MANITOBA PUBLIC INSURANCE CORPORATION (MPI OR THE CORPORATION): COMPULSORY 2018/2019 DRIVER AND VEHICLE INSURANCE PREMIUMS AND OTHER MATTERS

December 4, 2017

BEFORE: Robert Gabor, Q.C., Chair
Carol Hainsworth, Member
Allan Morin, B.A., ICD.D., Member
Robert Vandewater, B.A., FCSI, CPA (Hon), CA (Hon), KStJ., C.D., Member
Michael Watson, Member

Room 400 – 330 Portage Avenue
Winnipeg, MB R3C 0C4
www.pubmanitoba.ca

330, avenue Portage, pièce 400
Winnipeg (Manitoba) Canada R3C 0C4
www.pubmanitoba.ca

SAF also employs two distinct invesment portfolios: a matching portfolio comprised of mortgage securities, and a return-seeking portfolio that includes equities, real estate, and infrastructure investments.

6.5. Interest Rate Risk

In Order 151/13, the Board directed MPI to have the composition of its investment portfolio reviewed by an external expert consultant, with a view to determining whether the current asset mix should continue, or should be revised. MPI engaged AON to complete an Asset Liability Management study in 2014, and filed the study in the 2016 GRA. In the 2017 GRA, the Corporation brought forward a witness from AON to speak to the report. CAC called Mr. Valter Viola to discuss investment portfolio management and the risk/reward framework, and to provide several recommendations related to MPI's investment portfolio design.

In Order 162/16, the Board expressed its concern with the Corporation's continued exposure to interest rate risk and found an ALM study should be conducted more frequently than has been the practice with the Corporation. The Board directed MPI to obtain an updated ALM study to be filed in the 2018 GRA, which study was to address each of 18 recommendations that had been made by Mr. Viola.

The Corporation did not file an updated ALM study in this Application. The Corporation stated that it was not "logistically possible" to do so in time for the 2018 GRA. The Corporation further advised that an updated ALM study could not be usefully and purposefully be completed in the absence of RSR capital targets.

In the hearing the Corporation advised that, since the filing of the Application in June 2017, it had issued a Request for Proposals for the Study on September 12, 2017, and had engaged Mercer Canada to deliver the Study by November 30, 2017. The Corporation put in place an accelerated process to have a study produced in that time frame. The Corporation further advised that Mercer Canada was aware of the RSR capital targets for which it had applied in this Application.

6.6. Investment Income Forecasting

At the 2014 GRA, the Corporation proposed a new methodology to forecast its investment income. This methodology measured the impact of interest rate changes on investment income and claims liabilities, whereas the methodology employed by the Corporation previously did not do so. MPI now models changes in the fair market value of its marketable bonds and the changes to bond values flow through the allocation of net income to Basic because those assets are categorized as Fair Value Through Profit and Loss.

In the 2017 GRA, the Corporation put forward a request for the 50/50 interest rate forecast. In Order 162/16, the Board found that there was no compelling evidence that persuaded it to accept the 50/50 forecast, and, citing the challenges in interest rate forecasting in recent years, directed the Corporation that a Technical Conference on Interest Rate Forecasting be held to further explore that issue. The Corporation reported on those aspects of the discussion in the Technical Conference that were incorporated into its forecasting methodology.

MPI's Board of Directors has rejected the SIRF for budgeting purposes, as it has proven to be inaccurate, and produces financial forecasts that bear little resemblance to reality. The bank forecasting approach(s) are proprietary, but MPI observed that they appear to rely on a mean reversion approach. The long-term average yield of long term bonds is higher than current yields, producing an upward bias that has been both inaccurate and detrimental to MPI's financial health. Utilization of the bank interest rate forecasts in the 2014/15 through 2016/17 GRAs resulted in a $163 million premium deficiency (relative to what would have been charged based on the actual interest rates). The majority of this risk is created from the forecasting process rather than from the inherent risk of interest rate movements. MPI accordingly submitted that the Naïve forecast presented in the Application should be used for rate-setting purposes, which indicated that interest rates had increased to 2.10%, a 46 basis point increase from when the Application was filed. Last year MPI had indicated that risk remains with any forecast, but MPI's position was that the 50/50 interest rate forecast reduced this risk on a forward looking basis.

The forecasted changes in interest rates based on the Application, an updated September forecast, and an expanded base forecast and MPI's 50/50 interest rate forecast proposal were as follows:

Government of Canada 10-Year Interest Rate Forecast

Fiscal Year	Application			SEPTEMBER 30th UPDATE		
	Naïve Forecast Application	Expanded SIRF	50-50 Forecast	Naïve Forecast Update	Expanded SIRF	50-50 Forecast
2016/17A	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%
2017/18	1.64%	2.10%	1.87%	2.10%	2.20%	2.15%
2018/19	1.64%	2.58%	2.11%	2.10%	2.72%	2.41%
2019/20	1.64%	2.92%	2.28%	2.10%	3.10%	2.60%
Basis Point Change (2020-2017)	0 BPS	128 BPS	64 BPS	46 BPS	146 BPS	96 BPS

In his testimony, Mr. Steski stated that provision was made in the Government of Manitoba's 2017 budget for an increase in interest rates.

6.7. Interveners' Positions

CAC

Along with Andrea Sherry, CAC called Dr. Wayne Simpson as a witness in this hearing. Dr. Simpson is a Professor of Economics at the University of Manitoba, and was pre-qualified in Order 73/17 as an expert in applied econometrics, applied microeconomics, and quantitative methods.

Dr. Simpson and Ms. Sherry prepared a report on the RSR target capital range, and in the context of that report, addressed interest rate assumptions. Dr. Simpson also testified in the public hearings as to interest rate assumptions. Dr. Simpson noted that the SIRF has continued to predict that interest rates would begin to rise and accordingly, the Naïve forecast would be unrealistic. The Bank of Canada announced increases in the overnight interest rate to 0.75% on July 12, 2017, and 1% on September 6, 2017. This was followed by increases at Canadian banks and in bond markets, with the Government of Canada bond rate rising to 2.07% as of September 14, 2017, as compared to 1.64% in the Naïve forecast. Dr. Simpson's opinion was that there is now good reason to believe

that interest rates will continue to rise. Accordingly, Dr. Simpson was supportive of the use of the 50/50 interest rate forecast, as a cautious approach to interest rate forecasting, taking into account what appears to be a trend of increasing interest rates.

CAC was critical of the Corporation's approach in responding to the ALM study ordered by the Board. In particular, it was critical of the fact that the Corporation had initially suggested that it would require a six month period to complete the study, and then managed to compress the schedule to approximately two and a half months. Further, CAC expressed concern that the analysis to be conducted by Mercer Canada will be unduly constrained, because it has been provided with the Corporation's intended RSR targets as a key constraint.

With respect to MPI's investment portfolio, CAC stated that there are grounds to be concerned that the Corporation is accepting undue investment risk for insufficient benefit, and that the equities portfolio is unduly concentrated in Canadian equities when compared with SAF. There may be opportunities to reduce portfolio risk through diversification and maintain or improve returns. CAC made the overall comment that MPI does not look like other "well regarded portfolios". Further, CAC was of the view that the Corporation had delayed the implementation of an unrealized opportunity for investment in higher yield corporate bonds, which was recommended by AON in 2014.

With respect to the decision-making process for the investment portfolio, CAC noted that key decisions made by MPI do not require approval from the Minister. CAC commented that there may be a significant opportunity for the Corporation to invest in corporate bonds, noting that Mr. Steski was of the view that the Department of Finance would be supportive of further investment in corporate bonds.

With respect to interest rate forecasting, although made in the context of comments regarding the RSR total target capital range, CAC stated that the Corporation's proposal to use the Naïve forecast had been overtaken by actual fluctuations in interest rates since the filing of the Application. Based on the evidence of Dr. Simpson, CAC was supportive of the use of at least the 50/50 interest rate forecast for forecasting of its revenue requirement, but also indicated that it would not object to the use of the SIRF.

CMMG

CMMG commented that the Corporation is showing reasonably robust returns in its investment portfolio for fiscal year 2017/2018 through to 2021/2022. Accordingly, CMMG was of the view that the Corporation is not in any vulnerable financial position and given the increases in interest rates since the filing of the application and expected further increases in rates, this should have a positive impact on the Corporation's financial position.

CAA

CAA was of the view that the Corporation could take some simple steps to improve its financial outlook by enhancing its investment portfolio, which it in turn believed would significantly assist in reducing costs to ratepayers.

6.8. Board Findings

The Board has previously expressed its view that the Corporation should be investing in corporate bonds. The Board notes that the Corporation took the step in the Investment Policy Statement to include reference to corporate bonds, and is supportive of the Corporation's intention to increase its allocation to corporate bonds to 18% of its investment portfolio.

The Board recognizes that this increased allocation to corporate bonds is contingent on approval by the Minister of Finance. However, the Board refers to the testimony of Mr. Steski, which served to clarify for the Board the role of the Corporation and the Department of Finance in decision-making regarding MPI's investment portfolio generally. In Order 151/13, the Board had commented, based on the testimony of the previous Assistant Deputy Minister, that the ICWG seeks consensus between the Department and MPI on recommendations to be provided to the Minister of Finance on investment decisions, that the ICWG was responsible for the investment returns, but the ultimate responsibility rested with the Minister of Finance. Mr. Steski's testimony provided the helpful distinction between those investment decisions falling within *The Financial Administration Act* and those falling outside it. The Board accepts Mr. Steski's testimony and finds that the ICWG is a forum for discussion, with investment decisions being driven by the Investment Committee of the MPI Board of Directors, and that ultimate responsibility for the Fund rests with MPI.

The Board also finds that the Corporation's investment returns do not compare favourably with those of SAF. The Board notes the diversification in the SAF portfolio as compared to that of the

Corporation, and accepts that the lack of diversification in the current composition of MPI's investment portfolio is contributing to its lower returns. The Board expects that there will be further opportunity for the Corporation to explore diversification of its investment portfolio, following the results of the ALM study, due to be complete by November 30, 2017.

With respect to the ALM study, MPI failed to comply with the Board's directives in Order 162/16, to have the study complete and filed in this Application. Considering that MPI is now of the view that it will be able to have the process completed in under three months, the Board rejects the Corporation's response that it would not have been logistically possible to comply with the Board's directive. Further, the Board is concerned the study may be of limited utility in that it will be issued after this hearing and the Corporation has provided constraints to Mercer Canada based on an RSR range that, until the issuance of this Order, remained under consideration by the Board. By delaying the ALM study, this unfortunately creates a perception that the Corporation was intending to influence the Board's decision on the RSR range, because the results of the study would not prove useful if the Board were to order a range other than that applied for by MPI. Nevertheless, the Board hereby orders the Corporation to file the Mercer Canada ALM study with the Board concurrently with its delivery to the MPI Board of Directors, and the Board further orders that:

- The Corporation shall require Mercer Canada to update the ALM study as necessary in order to take into account the directives issued in this Order, and to add an analysis of the bucket matching approach similar to that used by SAF;
- The Corporation shall require Mercer Canada to update the ALM study as necessary in order to address each of the 18 recommendations made by Mr. Viola in the 2017 GRA, which recommendations are set out in Appendix E to Order 162/16; and
- That a Technical Conference be held on the ALM study, on a date to be mutually agreed upon by the Board and MPI, but early enough so the information shared in the Technical Conference will be included in the 2019 GRA.

With respect to interest rate forecasting, the Board notes that a Technical Conference was held in accordance with the directive in Order 162/16 and that the Corporation has reported that it incorporated some of the discussions into its forecasting. In Order 162/16, the Board commented on the challenges associated with interest rate forecasting due to the economic climate of the previous number of years. In this Application, the evidence was that the economic climate is now changing; in particular, the Board would point out that interest rates have risen on two occasions since the Application was filed. As reported by the Corporation, the actual market interest rate as of September 30, 2017 was 2.10%, which reflected an increase of 0.46% from 1.64% when the 2018 GRA was filed.

Given that interest rates have begun to rise in recent months, the Board does not accept that the Naïve forecast should be relied on for rate-setting purposes. The Board has difficulty with the Corporation having proposed a 50/50 interest forecast last year, when interest rates were flat, and in this Application, proposing a Naïve forecast, and continuing to do so after recent increases in interest rates. However, the Board refers to its previous finding in Order 162/16 that the bank forecasts in the previous years were inaccurate. As interest rates have not risen in some time until recently, the Board expresses caution in reliance on the SIRF at this time.

The Board also notes the evidence of Mr. Steski, that in its most recent budget, the Government of Manitoba took into account an increase in interest rates.

The only expert testimony before the Board on interest rate forecasting was from CAC's expert, Dr. Simpson. The Board accepts the evidence of Dr. Simpson that the 50/50 interest rate forecast is the appropriate approach for rate-setting and target capital purposes at this time. The Board acknowledges that this is a departure from its findings in Order 162/16, and grounds its decision in this regard on the recent change in interest rates, the lack of accuracy in the SIRF, and the evidence of Dr. Simpson and Mr. Steski.

As the Board has endorsed the 50/50 interest rate forecast, the Compliance Filing process requested by the Corporation is rendered moot.