Appendix C

The Role of the DCAT and Interest Rate Forecasting in the 2019 GRA

Manitoba Public Insurance

2019/20 GRA

Consumers' Association of Canada (Manitoba)

Submitted by the Public Interest Law Centre

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1. Introduction

This report looks at two significant features of the 2019 MPI GRA. The first is renewed emphasis on attaching the Minimum Capital Test (MCT) to the determination of the Rate Stabilization Reserve (RSR). The second is the continued application of a naïve approach to interest rate forecasting to establish a break even rate indication and conduct Dynamic Capital Adequacy Testing (DCAT). While Wayne Simpson has taken primary writing leadership on this report, it reflects the views of both co-authors, Dr. Simpson and Ms. Sherry.

2. How Should the RSR be Set? A Chronology of Proposals

The 1988 Autopac Review Commission (Kopstein Report) provides the modern foundation for MPI rate applications.[1] It provides for the PUB to set rates for Universal Compulsory Automobile (Basic) Insurance. These rates are to be set to break even on forecasted net income, allowing for staggered renewals. To absorb variances around the break even forecast, the Kopstein Report recommended a retained surplus target of about 15% of premiums (Kopstein, 1988, 64). The same recommendation 7.11 recommended that, "if the Autopac surplus falls below ten percent or exceeds 20 percent of premiums, the corporation should and would be expected to take remedial action."

This recommendation provided the foundation for the establishment of what is now referred to as the Rate Stabilization Reserve (RSR) in a range of 10% to 20% of annual premiums to protect motorists from rate increases associated with unexpected events and losses arising from non-recurring events or factors. While this percentage of premiums (POP) methodology provides a simple and transparent mechanism that is effectively indexed to the size of the enterprise, concerns were expressed that the POP method bore no relationship to the actual risks facing MPI, which could well be increasing or decreasing through time.

The first attempt to devise a strategy to set the RSR on the basis of risk assessment was the Risk Analysis Approach (RAA), introduced by MPI in the 2000 GRA and subsequently known as the Operational and Investment Risk Analysis or RA/VaR. The RA/VaR approach would have used statistical analysis of the pattern of underwriting income to retrieve an objective measure of risk, the 95% or 97.5% confidence intervals associated with the historical experience of the volatility of MPI's operations. This approach was discussed at several GRAs between 2000 and 2009 but MPI raised concerns that the annual data available for this analysis was too limited and did not reflect current operations and risks.[2]

The RA/VaR approach, while never formally implemented to set the RSR range, did serve one useful purpose. It redirected the discussion of risk analysis to a more scientific approach

1 2017 GRA – MPI Exhibit #14 at http://www.pubmanitoba.ca/v1/pdf/mpi17/mpi-14.pdf

2 In principle, the hypothesis of growing (or declining) risk could be tested within the RA/VaR framework as a rise (or decline) in the net income volatility, but the limited number of annual data points (well under 30) hampered the reliability of such testing.

involving the specification of a risk tolerance level, corresponding to the confidence level used in the RA/VaR statistical analysis. A confidence level commonly adopted is 97.5%, which would correspond to an event having a 2.5% annual chance of occurring, or a one-in-forty year event. This standard has been endorsed by Board Order No. 150/07 which accepted that the "RSR should be large enough to be able to withstand an unforeseen loss of a magnitude not anticipated to occur more than once in 40 years."

MPI introduced the Minimum Capital Adequacy Test (MCT) in the 2005 GRA to establish a target for the RSR. The MCT is relatively easy to calculate and associates risks with the current financial statements of MPI. It is recognized by the Office of the Superintendent of Financial Institutions (OSFI). Discussions at the time of its introduction revolved around the fact that it does not address the specific risks facing MPI, since the MCT was designed to assess the capital required for a private company in a competitive industry to forestall insolvency. The MCT methodology uses a common risk assessment of the insurance industry despite the differing risk profiles and insolvency concerns of private insurers in competitive insurance markets and crown corporation monopolies like MPI that are protected from insolvency by the government and the same taxpayers who purchase vehicle insurance. Thus, MPI's recommended RSR target range of 50% to 100% MCT in the 2007 GRA lacked any analytical method or direct evidence that related this recommendation to the risks facing a crown monopoly insurance provider.

Board Order 157/08 indicated a desire to bring about "a consensus on a RSR target range that can be accepted by all parties." MPI's response was to once again change emphasis in the 2010 GRA to favour use of the Dynamic Capital Adequacy Test (DCAT) to establish a RSR target. The DCAT reports were initially commissioned by MPI to assess the future financial condition of Basic insurance operations but the report was now to be relied upon to substantiate MPI's proposed RSR target level. Reservations about the DCAT rested, at least in part, on the choice of plausible adverse scenarios. Initially, a large catastrophe scenario equal to twice the largest adverse event experienced by MPI and a second scenario assuming that inflation increased by 3% per year for five years were analyzed, although the plausibility of scenarios of this nature in terms of established risk tolerance standards such as the 97.5% confidence level (a one-in-forty years event) could not established. While these scenarios illustrate that it is not difficult to imagine highly implausible scenarios or stress tests that would present serious risk to MPI, a more informative if more challenging approach would be to develop scenarios that are plausible according to established risk tolerance levels and consistent with applicable historical evidence.

MPI acknowledged in the DCAT report for the 2010 GRA (p.4) that previous DCAT scenarios "were generic and not formulated with significant input from management regarding the company's specific circumstances and specific management action" and that the DCAT analysis would now be "closely integrated with the risk identification process." Moreover, the DCAT procedures would henceforth be performed "in house" rather than commissioned to an outside agency, allowing for greater integration of the DCAT with MPI's operational risk issues. In subsequent GRA hearings and technical conferences, this approach appeared to achieve a significant degree of consensus, provided that the methodology was transparent and consistent with established risk tolerance preferences (centered around the 1-in-40 year standard).

Preference for the DCAT over previous approaches rested on the direct connection of specific and justifiable risks, posed as adverse events grounded in the analysis of historical evidence, to the future financial condition of MPI. One drawback was that the DCAT, unlike the POP and

RA/VaR approaches, provided only a RSR target and not a range. The POP originating from the Kopstein Report had been retained to this point to establish an RSR range, while the other three methodologies (RA/VaR, MCT and DCAT) were provided as additional information. The implication of the POP range was that ratemaking action should be taken to restore the RSR when it fell short of the minimum (10% of premiums, currently about $108M) and to reduce the RSR when it exceeded the maximum (20% of premiums, currently about $215M). While the DCAT process did not naturally produce a RSR range, a range could be produced by setting low and high risk tolerance levels for the specified adverse scenarios. MPI proposed instead a hybrid approach in which the DCAT produced an RSR target, effectively a minimum or lower threshold, and the RSR maximum or upper threshold would be set to provide an MCT of 100%. This hybrid approach has not been accepted by the PUB or stakeholders. PUB Order 162/16 (pp. 60-61) rejects the use of the MCT criterion to set RSR thresholds in favour of a consistent application of the DCAT:

> "The Board continues to favour the use of scenario testing adapted from the annual Basic DCAT investigation for the purposes of setting Basic target capital levels, expressed in terms of Basic total equity. . . For purposes of setting the upper threshold of the Basic target capital range, the Board withdraws its support for the use of the MCT and a MCT threshold ratio of 100%."

In this chronology of events it is difficult to understand how proposals in the current GRA and DCAT Report that relate the RSR targets to specific MCT levels represents a step forward. Rather, it raises the old issues. The MCT is designed to assess the capital required for a private company in a competitive industry to forestall insolvency. As such, it is not linked to the specific risks facing MPI as a monopoly crown insurer except insofar as an MCT level can be determined from RSR target levels calculated in the DCAT analysis. The DCAT is able to capture specific financial risks as they evolve while the MCT approach cannot. Moreover, it raises again the questions around the setting of appropriate MCT levels for a monopoly crown corporation that does not face the competitive and insolvency challenges of the private insurance industry. In other words, what would be the justification for a RSR range associated with MCT levels of 34% and 85% in the 2019 GRA (RSR.2, p.3) or previous recommendations for an upper RSR target of 100%, other than their connection to specific DCAT scenarios? Indeed, there is little to recommend the MCT methodology over the longstanding Percentage of Premiums approach, since both approaches are indexed to the size of MPI's operation but both lack any apparent link to the justifiable risks that the Corporation would face.

A considerable amount of time has been devoted this decade to developing a transparent and collaborative DCAT process for risk assessment as the basis, along with the traditional POP methodology, for the RSR range. What has occurred to the risk profile of MPI, beyond what is captured in the DCAT methodology, that would argue for consideration of yet another approach to setting the RSR range? Absent such events, the current POP and DCAT methodologies should continue to inform the setting of the RSR range.

3. Interest Rate Forecasting in the 2019 DCAT Report

The purpose of the RSR continues to be to "protect motorists from rate increases that would otherwise have been necessary due to unexpected variances from forecasted results and due to events and losses arising from non-recurring events or factors." The focus is on risk to MPI as we would normally understand it in a statistical sense, i.e. unexpected and non-recurring adverse events that would lead to significant losses requiring substantial and unanticipated rate increases. As the current GRA indicates, a strong collaborative effort has been made since 2010 to develop an in-house DCAT methodology to assess these risks as input to determining an appropriate RSR target range. Indeed, MPI now claims that "it is optimistic that both parties are close to reaching a consensus on a permanent and stable RSR methodology" (RSR.4, p.4). It is therefore curious to see the apparent reversion to expressing RSR targets in terms of specific MCT levels that reflect neither the risks assessed in the DCAT analysis nor the circumstances of a monopoly crown insurer, as discussed in the previous section.

The collaborative effort on the DCAT has produced tangible results, including general agreement on appropriate adverse scenarios and the methodology to assess them. The DCAT report in this GRA reflects those general understandings, albeit in the context of an unusual period of low interest rates. One consequence of the low-interest rate era has been an interest rate decline scenario that necessarily lacks grounding in historical evidence and continues to be based on *ad hoc* assumptions, as has been discussed in previous PUB hearings.

Another consequence of the era of low interest rates in the aftermath of the recession of 2008 has been a challenging period for interest rate forecasting. The DCAT methodology relies on a base scenario that includes "a realistic set of assumptions that are used to forecast the insurer's financial position over the forecast period" (DCAT.1.2, p.6), including assumptions about interest rates going forward. In statistical terms, this "realistic set of assumptions" should provide the most likely outcome that is not biased toward less likely adverse or favourable outcomes.

The interest rate assumptions have traditionally been based on the Standard Interest Rate Forecast (SIRF) that is a simple average of the forecasts from Canadian financial institutions (the 5 major Canadian Banks and Global Insight) that have a strong track record, substantial forecasting resources, and significant vested interests devoted to providing good interest rate forecasts. Since the 2008 recession, the SIRF has predicted that interest rates will rise going forward as the economy recovers. In hindsight, the SIRF has been too optimistic about economic recovery and has overestimated interest rates, as the now familiar Fig. Inv-10 (Inv2.3.1, p.28) illustrates. The foundation for rising interests remains solid, as there are limitations on the extent to which interest rates can fall without severe monetary disruption and economic recovery has historically been associated with rising interest rates to prevent an excessively rapid economic expansion and undue inflationary pressure. Those foundations remain and the SIRF continues to predict rising interest rates, albeit at a slower pace than earlier forecasts.

The current GRA continues to argue for a naïve interest rate forecast that keeps the 10-year Government of Canada benchmark bond yield at its value as of February 28, 2018 (2.24%) until the fourth quarter of 2022. MPI argues that the naive interest rate forecast is superior to both the SIRF and a 50/50 forecast that averages the SIRF and the naïve forecast because the naïve forecast has a smaller standard forecast error of 0.15 compared to 0.16 for the 50-50 forecast and

0.18 for the SIRF. These differences in forecasting accuracy are modest, as MPI acknowledges (2019 GRA Information Requests – Round 1 CAC (MPI) 1-4 (a)). Moreover, as the economy begins to recover in a more typical fashion in the previous two years, the SIRF has clearly outperformed the naïve forecast (Figure INV-11, INV2.3.1, p.29). In the 2017 GRA, the SIRF forecast of 1.76% for the 10-year bond rate only differed from the realized rate of 1.64% by 0.12%, whereas the naïve forecast of 1.19% underestimated the rate by 0.45%. In the 2018 GRA, the SIRF forecast of 2.10% missed the actual rate of 2.24% by 0.14%, whereas the naïve forecast of 1.64% again underestimated the rate, this time by 0.60%. The SIRF has actually been quite close to the actual rate both years, while the naïve forecast has consistently underestimated it.

In response to the previous GRA, the PUB directed that MPI use a 50/50 interest rate forecast for rate setting and target capital (PUB Order 130/17 Directive 11.19). It is therefore difficult to understand why MPI would continue to advocate the naïve interest rate forecast, since it has done worse than both the 50/50 and SIRF forecasts in recent years. Reliance on the naïve interest rate forecast for 2019 GRA also ignores recent developments in which the Bank of Canada has already twice raised the overnight lending rate this year, labelling the Bank of Canada's "policy rate" to be "not material" (2019 GRA Information Requests – Round 1 CAC (MPI) 1-6). This response flies in the face of both common knowledge about the conduct of modern monetary policy and the Bank of Canada's clear official position, based on leading research:

> "Following the announcement of the Bank's policy action to increase its target for the overnight rate, the actual overnight interest rate adjusts almost instantly. As the overnight interest rate rises, two responses are observed. First, the hike in the overnight rate leads to an increase in longer-term interest rates in Canada. This increase occurs because there is an entire spectrum of financial assets, ranging from overnight loans to 30-year bonds, and their rates tend to move together."[3]

Indeed, each quarterly *Monetary Policy Report* begins with a discussion of Canada's inflation control strategy which reads:

> "The Bank carries out monetary policy through changes in the target for the overnight rate of interest. These changes are transmitted to the economy through their influence on market interest rates, domestic asset prices and the exchange rate, which affect total demand for Canadian goods and services. The balance between this demand and the economy's production capacity is, over time, the primary determinant of inflation pressures in the economy."[4]

We should not expect these increases in the policy rate, and their influence on longer term bond yields in the future, to stop. At the latest meeting on the policy rate, the Bank of Canada concluded that: "Recent data reinforce Governing Council's assessment that higher interest rates will be warranted to achieve the inflation target. We will continue to take a gradual approach, guided by incoming data. In particular, the Bank continues to gauge the economy's reaction to

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3 "Monetary Policy: How It Works, and What it Takes" (https://www.bankofcanada.ca/publications/books-and-monographs/why-monetary-policy-matters/4-monetary-policy/ , section 4.1)

4 *Monetary Policy Report July 2018* at https://www.bankofcanada.ca/wp-content/uploads/2018/07/mpr-2018-07-11.pdf but this is repeated in every quarterly issue.

higher interest rates,"[5] a theme that has been repeated consistently in the Bank of Canada's *Monetary Policy Reports* throughout 2018.[6] The same report notes that the Canada's annual inflation rate rose to 3% in July which was "higher than expected." It was also the highest inflation figure since 2011,"[7] which provides yet another indication that further increases in the policy interest rate to counter rising inflation are likely to occur quite soon. The naïve interest rate forecast used by MPI explicitly ignores this important information from our central banking authority and other sources (2019 GRA Information Requests – Round 1 CAC (MPI) 1-8 (b)).

Equally puzzling is MPI's claim that the naïve forecast is unbiased since it "produces an estimate that is statistically the same as the actual forecast. That is, the actual difference of the naïve to the actual forecast is between 0.48% and -0.17%, with 95% confidence (2019 GRA Information Requests – Round 1 CAC (MPI) 1-6 (c))." This reference to forecasting accuracy provides no information about bias, since even an accurate forecast would be biased if it had a low standard error of forecast and consistently overpredicted or underpredicted interest rates. But recent naïve forecasts, which have underpredicted interest rates by 0.45% and 0.60%, and recent economic events, all of which point toward higher interest rates as the economy approaches full capacity, imply a much higher probability that the naïve forecast will underpredict than overpredict interest rates. In that sense, the naïve forecast is more likely to be biased in the current economic environment than the forecasts of modestly rising interest rates provided by the SIRF and 50/50 forecast methodologies.

Choice of the naïve interest rate forecast in the 2019 GRA against the PUB's latest directive and recent economic and monetary policy developments has important implications. Figure INV-12 (INV2.3.2, p.29) shows that the break even rate indication is 0.1% under the naïve interest rate forecast but -0.5% under the 50/50 forecast and -1.0% under the SIRF. Since the 50/50 forecast used in previous hearings and the SIRF both seem to be better forecasts today, the current GRA seriously overstates break even rate requirements.

CAC (MPI) 1-18 suggests that the 50/50 interest rate forecast slightly improves MPI's financial position, as Total Equity is higher under the 50/50 forecast than the naïve forecast throughout, but the basis of this comparison is the proposed rate increase of 0.1% under the naïve forecast for both base scenarios and ignores the break even rate increase of -0.5% implied by the 50/50 forecast. Nonetheless, it suggests that the finding of satisfactory financial condition for Basic under the naïve forecast (DCAT.1, p.4) will not be adversely affected by adoption of the 50/50 or SIRF forecasts.

It is not clear what effect the use of the 50/50 interest rate forecast or SIRF in place of the naïve forecast might have on the DCAT analysis of the four adverse scenarios used to inform the setting of the RSR range. There are, however, two interesting developments in the DCAT report to note:

(1) The high loss ratio scenario has replaced the equity decline and interest rate decline scenarios as the most important individual adverse event (Figure RSR-2, RSR4.5.1.2,

5 https://www.bankofcanada.ca/2018/09/fad-press-release-2018-09-05/

6 The quarterly *Monetary Policy Reports* for January through July, 2018 are at https://www.bankofcanada.ca/publications/mpr/

7 https://www.ctvnews.ca/business/annual-inflation-rate-jumped-to-3-per-cent-in-july-highest-reading-since-2011-1.4056819

p.12). This seems, at least in part, to reflect a degree of success in management action to reduce interest rate and investment risk through the Asset and Liability Management (ALM) program (RSR4.6, p.19).

(2) The levels of risk implied by the calculated RSR thresholds in the DCAT have fallen. The lower RSR threshold in the 2019 DCAT is $120M compared to $201M in the 2018 DCAT using the same methodology. MPI has rejected this result, arguing that the lower threshold must be $143 million for "satisfactory financial condition," but this is still a considerable decline over the 2018 DCAT. The upper RSR threshold is now $305M compared to a requested $438M in the previous DCAT, but the $305M represents a change in "methodology" (or, more correctly, a change in the arbitrary benchmark unrelated to the DCAT analysis of risk) from a 100% MCT for the upper threshold in 2018 to 85% in 2019. This still appears to indicate declining risk.

4. Recommendations

(1) The current POP and DCAT methodologies should continue to inform the setting of the RSR range. MCT levels should not inform the RSR range.

(2) The 50/50 interest rate forecast should be used for the break even rate indication and the DCAT analysis. The naïve interest rate forecast is only marginally superior to the 50/50 forecast over the period since 2005 and inferior in recent years. The naïve interest rate forecast ignores recent monetary policy and economic events that indicate rising interest rates that are more consistent with the Standard Interest Rate Forecast.

References

Kopstein, Robert L. (1988) *Report of the Autopac Review Commission Volume 1: Summary of Main Conclusions and Recommendations*, submitted to the Honurable Glen Cummings, Minister responsible for the Manitoba Public Insurance Corporation, Winnipeg

Appendix A:

Statement of Qualification and Duties – Dr. Wayne Simpson

Qualifications

Dr. Wayne Simpson has a PhD from the London School of Economics (1977) and is a Full Professor in the Department of Economics at the University of Manitoba, where he has taught since 1979. His areas of academic expertise include labour economics, applied econometrics, applied microeconomics, quantitative methods, and economic and social policy analysis.[8] He has authored or co-authored three books and more than sixty peer-reviewed articles on these and related topics, including two papers on the impact of risk on the behaviour of the firm. He is currently on the editorial board of *Canadian Public Policy*, Canada's foremost peer-reviewed academic journal for economic and social policy, and served on the executive council of the Canadian Economics Association. He was a 2014 recipient of the McCracken award for the development and analysis of economic statistics from the Canadian Economics Association. Dr. Simpson's expertise in applied microeconomics and econometrics are especially relevant to this hearing on Manitoba Public Insurance ("MPI") rates. Applied microeconomics is the study of the behavior of individual agents (e.g., firms and households) in the market using modern theory and empirical methods. It seeks to apply the analysis to practical problems such as risk management and investment strategies. Applied econometrics uses specific statistical techniques, particularly regression methods, to analyze and predict economic behavior and apply it to practical social problems.

In addition to his academic career, Dr. Simpson has worked at the Bank of Canada, the federal Department of Labour, and the Economic Council of Canada. He has also served as a consultant to the private sector and government, primarily in the areas of labour economics and policy evaluation. In recent years, he has served as an expert advisor to Prairie Research Associates (PRA) Inc. and Human Resources and Skill Development Canada as well as to CAC Manitoba through the Public Interest Law Centre.

Wayne Simpson has provided expert evidence at the Public Utilities Board including at the 2014 Needs for and Alternatives to Review of Manitoba Hydro's Preferred Development Plan, the 2007-2008 and 2016 hearings to determine maximum fees for payday loans and the 2007, 2010, 2013, 2014, 2016 and 2017 Manitoba Public Insurance Rate Applications on the Rate Stabilization Reserve and investment strategy. He also provided written evidence in the 2013 payday loan review.

Wayne Simpson relies on his expertise in applied econometrics, applied microeconomics, and social policy application and analysis in this proceeding. Dr. Simpson's curriculum vitae was filed with the Manitoba Branch of the Consumers' Association of Canada's application to intervene in this proceeding.

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8 His professional expertise in applied microeconomics and applied econometrics provides a foundationfor the analysis of issues related to the management of risk by firms and to the assessment of risk using modern economic and statistical techniques. His expertise also provides a framework to assess the contributions of equities, bonds and interest rates to investment risk.

Duties

The following duties were assigned to Dr. Simpson in the MPI General Rate Application. The Public Interest Law Centre retained Dr. Simpson's services to assist CAC Manitoba with its participation in the Public Utilities Board review of MPI's Application on issues related to ratemaking and interest rates.

Dr. Simpson's duties include:

- Reviewing the application
- Preparing first round information requests
- Reviewing responses to first round information requests and preparing second round information requests
- Preparing memos to client and legal counsel
- Preparing written evidence, and
- Preparing for and attending the hearing

Dr. Simpson's retainer letter also includes that his duty in providing assistance and giving evidence is to help the Public Utilities Board. This duty overrides any obligation to CAC Manitoba.

Appendix B:

Statement of Qualification and Duties – Ms. Andrea Sherry

Qualifications

Andrea Sherry received her Bachelor of Commerce (Honors) in December 1990 from the University of Manitoba with a major in Actuarial mathematics. She became a Fellow of the Casualty Actuarial Society and Fellow of the Canadian Institute of Actuaries in 2000. She became a Fellow Chartered Insurance Professional and received her Canadian Risk Management designation in 2005. She became a Certified Management Accountant in 2008 and is now a Chartered Professional Accountant, Certified Management Accountant.

Andrea Sherry is currently Vice President, Insurance Solutions at The Wawanesa Mutual Insurance Company in Winnipeg. In her current role, she is responsible for the company's actuarial pricing, product development and maintenance, as well as head office personal lines underwriting. Prior roles include work in solvency and capital, enterprise risk management and investments. She has had appointed actuary and valuation actuary roles prior to joining Wawanesa. She has worked on Dynamic Capital Adequacy Testing and internal models to satisfy the regulatory requirements in the United Kingdom (where internal models to determine capital adequacy are used by larger companies). She has also been involved in the preparation of an Own Risk Solvency Assessment.

Andrea has worked in the Property & Casualty insurance industry for over 25 years and will rely on all of the expertise she has gained, with particular emphasis on her expertise in actuarial work and investments.

Ms. Sherry's curriculum vitae was filed with the Manitoba Branch of the Consumers' Association of Canada's application to intervene in this proceeding.

Duties

The following duties were assigned to Ms. Sherry in the MPI General Rate Application. The Public Interest Law Centre retained Ms. Sherry's services to assist the Manitoba Branch of the Consumers' Association of Canada with its participation in the Public Utilities Board review of MPI's Application on issues related to actuarial ratemaking. Ms. Sherry's duties include:

- Assist in Interim Vehicle Hire Rates and Technical Conferences;
- Review of overall indication (actuarial report including long tail experience, claims forecast, actuarial rate indication calculation);
- Review of rates and methodology of Driver Safety Rating;
- Review of rates and methodology of Vehicles for Hire;
- Critical Review of Capital Maintenance Provision;
- Review for reasonableness and industry comparison of Asset Liability Management study;
- Develop first round Information Requests;

- Review RSR/DCAT submission;
- Review of first round Information Request responses;
- Develop second round Information Requests;
- Review second round Information Request responses; and
- Hearing preparation.

Ms. Sherry's retainer letter includes that she is to provide evidence that:

- is fair, objective and non-partisan;
- is related only to matters that are within her area of expertise; and
- to provide such additional assistance as the Public Utilities Board may reasonably require to determine an issue.