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File No.: 254656.00113/14797

**ELECTRONIC FILING**

British Columbia Utilities Commission  
6th floor, 900 Howe Street  
Vancouver, BC V6Z 2N3

**Attention: Erica Hamilton**  
**Commission Secretary**

Dear Sirs/Mesdames:

**Re: An Application by the Insurance Corporation of British Columbia ("ICBC") for  
Approval of the Revenue Requirements for Universal Compulsory Automobile  
Insurance Effective February 1, 2012**

We enclose for filing in the above proceeding the electronic version of the Submissions of the Insurance Corporation of British Columbia.

ICBC will be distributing the Submissions to the Registered Intervenors.

One hard copy of the Submissions will follow by courier.

Yours truly,

**FASKEN MARTINEAU DuMOULIN LLP**

A handwritten signature in black ink, appearing to read 'Matthew Ghikas', positioned above the printed name.

Matthew Ghikas

MTG/bqs  
Enc

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**IN THE MATTER OF  
THE *UTILITIES COMMISSION ACT*  
R.S.B.C. 1996, Chapter 473, as amended  
and the  
*INSURANCE CORPORATION ACT*  
R.S.B.C. 1996, Chapter 228, as amended  
and  
AN APPLICATION BY THE**

**INSURANCE CORPORATION OF BRITISH COLUMBIA (“ICBC”) FOR APPROVAL OF THE REVENUE  
REQUIREMENTS FOR UNIVERSAL COMPULSORY AUTOMOBILE INSURANCE  
EFFECTIVE FEBRUARY 1, 2012**

**SUBMISSIONS OF  
THE INSURANCE CORPORATION OF BRITISH COLUMBIA**

**June 8, 2012**

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## **PART ONE INTRODUCTION AND OVERVIEW**

### **A. INTRODUCTION**

1. The proposed Basic insurance rate increase of 11.2% for Policy Year (“PY”) 2012 reflects the actuarial rate indication determined according to accepted actuarial practice (“AAP”). It is required to cover the higher expected costs of providing Basic insurance in the context of volatility in ICBC’s loss costs, low investment returns, and low Basic capital levels that are approaching the regulatory minimum.

2. Two factors account for 9.9 percentage points of the proposed Basic insurance rate increase: increasing claims costs (particularly for Bodily Injury (“BI”) claims) and lower investment income.

#### ***Increasing BI Claims Costs***

3. The most significant driver of the rate indication is increasing BI claims costs. While the increase in the severity of BI claims continues to follow the expected trend, there has been a notable change in the frequency of claims (the number of claims per 1000 policies) since 2008 and 2009. BI frequency experience in 2008 and 2009 was more favourable than the long-term trend, due primarily to a combination of favourable weather and people driving less during the recession. The favourable BI frequency experience in those years permitted ICBC to keep Basic rates flat in 2008 and 2009 and to seek a decrease for PY 2010. However, ICBC is now in its third year of experience that either reflects a return to, or a further deterioration from, the long-term frequency trend that existed prior to 2008.

4. ICBC’s actuaries forecast claims costs using models and trends selected for their appropriateness for forecasting, and not just for their ability to describe or fit past claims data. The forecast for BI frequency that is reflected in the rate indication is based on the long-term trend that existed before 2008. These models do not give weight to the unusually favourable results in 2008 and 2009, which are not expected to be repeated in 2012 due to changing economic and other circumstances. The models also exclude the estimated 2011 data point

that was available at the time of the analysis, and which was emerging higher than the 2010 point and significantly higher than the pre-recession (long-term) trend line. Faced with uncertainty in terms of the direction of the BI frequency trend, ICBC's actuaries selected a best estimate that avoided both extremes. Their approach minimizes the risk of significant forecast variances over time as the impact of future uncertain events becomes realized.<sup>1</sup>

5. Alternative models advanced by hearing participants in the course of the information request ("IR") process, which have the effect of lowering the rate indication, are ill-suited for forecasting claims costs in the present circumstances facing ICBC. Selecting models and trends that (a) give too much weight to the favourable experience in 2008 and 2009 associated with unique circumstances, and (b) do not provide a good fit to the data since the recession that demonstrates BI frequency is as high, if not higher than the long-term trend, will produce estimates for PY 2012 that are optimistic (i.e., biased low). The introduction of an optimistic bias in the estimate of claims cost increases the likelihood that Basic insurance rates will be deficient by a significant margin. Given the uncertainty already surrounding the forecast of BI claims frequency and interest rates for future policy years, a biased selection would exacerbate the already significant pressure on future years' Basic insurance rates. It would also create a heightened risk that Basic insurance capital would fall below the regulatory minimum level of 100% MCT.<sup>2</sup>

### ***Lower Investment Income***

6. The second main driver is that there is less investment income available to offset rising claims costs than in past years due primarily to declining interest rates and lower Basic equity (on which ICBC earns a return for policyholders). Very low interest rates are a function of ongoing global economic stresses and a quick rebound in investment income is unlikely in the near term.

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<sup>1</sup> 2012.CP RR BCUCP.2.1.

<sup>2</sup> 2012.2 RR BCUC.133.1.

### ***Just and Reasonable Rates***

7. The rate pressure that ICBC is experiencing in PY 2012 is not a single-year phenomenon that ICBC is capable of offsetting with its successful measures to reduce operating expenses or with claims initiatives alone. The available data from 2012 to date suggests that, even with the proposed rate increase, Basic insurance rates may be deficient in PY 2012 and will regardless face significant pressure in 2013. ICBC's application of AAP to determine the expected costs of providing Basic insurance in PY 2012 has minimized the risk of significant forecast variances. As significant forecast variances can lead to even greater pressure on PY 2013 rates, ICBC's approach has encouraged relative rate stability and predictability. Under the proposed rate indication ICBC expects to continue to meet the regulatory minimum capital levels in the current uncertain operating environment. In short, ICBC submits that, for the reasons described in this Submission, the proposed rate increase for PY 2012 is just and reasonable and should be approved on a permanent basis effective February 1, 2012.

### **B. OVERVIEW OF SUBMISSION**

8. Part 2 of this Submission explains why the proposed rate indication meets the requirements of *Special Direction IC2* for the Commission to fix rates that reflect AAP, maintain Basic capital above the 100% Minimum Capital Test ("MCT"), and ensure that rates are "relatively stable and predictable".<sup>3</sup>

9. Part 3 addresses the components of the PY 2012 rate indication. Investment income has decreased largely due to interest rates and lower Basic equity. Operating expenses are not contributing to the rate indication as a result of ICBC's initiatives in 2011 and 2012 to control operating expenses.<sup>4</sup> As investment income is a function of factors beyond ICBC's control, and as operating expenses are not contributing to the indicated rate increase, the regulatory proceeding has been most focussed on the unfavourable BI claims cost experience

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<sup>3</sup> *Special Direction IC2 to the BC Utilities Commission*, BC Reg. 307/2004, as amended, section 3(1)(c) ("*Special Direction IC2*").

<sup>4</sup> Application pp.3-3 to 3-5.

that is the primary driver of 7.4 percentage points of the actuarial rate indication. The 7.4 percentage points is comprised of two elements:

- ***PY 2010 loss cost forecast variance:*** ICBC had held Basic rates flat in 2008 and 2009 on the strength of particularly favourable claims frequency in those years, which was due primarily to lower traffic volumes during the recession and favourable weather. ICBC reduced rates in PY 2010 with the expectation that frequency would remain below the long-term trend on the strength of lower traffic volumes until BC emerged completely from the recession. What ended up happening, however, was that claims frequency in 2010 immediately rebounded back to the long-term trend line and 2011 emerged at a point even higher than the long-term trend line. This is driving the loss cost forecast variance (+5.5 percentage points) in the PY 2012 rate indication.
- ***Loss trend to PY 2012:*** ICBC's modelling of BI frequency and BI loss costs for the purposes of developing the loss trend to PY 2012 minimizes the potential for significant loss cost variances that will affect future rates. The selected models avoid placing undue faith in the potential for the favourable experience of 2008 and 2009 to re-occur in the face of more recent experience that suggests to the contrary. At the same time, ICBC has not given full effect to the adverse experience in 2011 that might suggest a new, and significantly less favourable, frequency trend. ICBC's approach is consistent with AAP and is most reasonable in the uncertain circumstances facing ICBC.

**PART TWO**  
**THE APPLICABLE LEGISLATIVE FRAMEWORK**

10. In this Part, ICBC explains why the proposed rate increase of 11.2% is consistent with the applicable legislative framework. The framework established by *Special Direction IC2* requires the Commission to, among other things, fix rates that reflect AAP, maintain capital above 100% MCT, and ensure that rates are “relatively stable and predictable”. The proposed rate indication meets all of these criteria. In particular, the proposed rate increase:

- (a) reflects the application of AAP by providing for the expected costs and revenues associated with policies becoming effective in PY 2012;
- (b) is forecast to result in Basic capital being 108% MCT at December 31, 2012; and
- (c) is “relatively stable and predictable” because ICBC (i) has moderated the indicated rate increase to the extent possible within the regulatory framework for setting Basic insurance rates, and (ii) has forecasted loss costs in a manner that minimizes the potential for significant forecast variances.

**A. ACCEPTED ACTUARIAL PRACTICE**

11. *Special Direction IC2* requires the Commission to fix Basic insurance rates “on the basis of accepted actuarial practice”.<sup>5</sup> The rate indication was certified by the Filing Actuary, Ms. Minogue, and the Reviewing Actuary, Mr. Weiland<sup>6</sup>, as having been prepared in accordance with AAP.<sup>7</sup>

12. AAP includes adherence to the *Standards of Practice of the Canadian Institute of Actuaries*, as well as the *Statement of Principles Regarding Property and Casualty Loss and Loss*

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<sup>5</sup> *Special Direction IC2*, section 3(1)(c).

<sup>6</sup> Mr. Weiland of Eckler Ltd. is ICBC’s independent actuary, appointed pursuant to the *Insurance Corporation Act* sections 23(1)(c)(i) and section 26(1)(b). The scope of his retainer in respect of this Application and his qualifications are described in Exhibit B-9.

<sup>7</sup> Application, pp. 3-33 and 3-34.

*Adjustment Expense Reserves of the Casualty Actuarial Society and the Statement of Principles Regarding Property and Casualty Insurance Ratemaking of the Casualty Actuarial Society.*<sup>8</sup>

13. A key requirement of AAP, to which the Application adheres, is that the actuarial rate indication provide for all costs so that the Basic insurance business remains financially sound. This is significant for two reasons. First, ICBC is precluded from adopting a policy contemplated in some IRs of setting rates below the level of costs in PY 2012 with the expectation of recovering those costs in rates in subsequent years.<sup>9</sup> Second, the AAP requirement helps ICBC to minimize forecast variances and promote relative rate stability and predictability; deficiencies associated with biased forecasting or setting rates inadequately would lead to further pressure on future rates.<sup>10</sup> Minimizing forecast variances is particularly important in the present context where the rate pressure being experienced in PY 2012 does not appear to be a single year phenomenon. As ICBC addresses later, ICBC's current analysis is that even with the proposed PY 2012 rate increase, the PY 2013 rate indication has the potential to be significant depending on how circumstances unfold.<sup>11</sup> Rate deficiencies in PY 2012 associated with setting rates below 11.2% will erode already low capital levels and add to rate pressure in PY 2013.

14. The vast majority of ICBC's Basic insurance costs (approximately 75%) are claims costs<sup>12</sup>, i.e., the cost of settling and paying out Basic insurance claims associated with policies written in PY 2012. Claims costs must be estimated, as they may not be finalized for many years. ICBC's actuaries estimate claims costs for past years by using standard actuarial methods, and forecast claims costs for future years in accordance with AAP by using accepted statistical methodologies that are selected based on an analysis of data from past periods. AAP is not synonymous with the rote application of statistical modelling. ICBC's actuaries must give consideration to economic and social factors that help to explain features in past data and

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<sup>8</sup> Application, page 3-6.

<sup>9</sup> 2012.1 RR DUCK.19.a.

<sup>10</sup> 2012.1 RR BCUC.2.4 Attachment B.

<sup>11</sup> 2012.CP RR BCUCP.5.2.

<sup>12</sup> Exhibit B-4, Workshop Presentation; Exhibit B-12.

assist in the assessment of whether those features were unique or are of ongoing significance.<sup>13</sup> This is relevant to why ICBC has not developed its modelling giving weight to the favourable experience from 2008 and 2009; the experience since 2010 has been more reflective of the long-term (pre-2008) trend or higher. The favourable circumstances of 2008 and 2009 are not expected to be repeated in PY 2012. ICBC's claims cost forecasting is addressed further in Part 3 of these Submissions.

15. AAP contemplates the inclusion in the rate indication of a capital maintenance provision to account for growth in the capital required under the Minimum Capital Test (MCT)<sup>14</sup>, as well as a capital build or release provision stipulated by management. The PY 2012 rate indication only includes a capital maintenance provision calculated according to the Basic insurance Capital Management Plan ("CMP"). ICBC has been directed by the *2011 Government Directive regarding Basic Rate Stability and Capitalization*<sup>15</sup> to exclude any provision to build capital that would otherwise have been required by the CMP, given the current low capital levels. The capital build has instead been used to offset the rate indication, thereby enhancing ICBC's ability to use capital to smooth rates in a period marked by low investment income and rising claims costs.<sup>16</sup>

16. As will be discussed later in this Submission, it is likely that the proposed PY 2012 rates will still be deficient. Claims costs have emerged unfavourably since ICBC filed the Application, and forecasted investment income has also deteriorated.<sup>17</sup> It is consistent with AAP for ICBC to proceed with the Application based on the proposed rate indication, absorb emerging variances in capital, and reflect new information in the next revenue requirements filing. ICBC articulated a number of reasons, including the size of the proposed rate increase, as to why it made sense in the current circumstances to proceed based on the Application.<sup>18</sup>

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<sup>13</sup> 2012.1 RR BCUC.37.3; 2012.2 RR BCUC.132.1-2.

<sup>14</sup> Attributable to, for instance, policy growth, inflation on claims costs and growth in investments.

<sup>15</sup> OIC 560/11, November 30, 2011.

<sup>16</sup> 2012.2 RR BCOAPO.33.7.

<sup>17</sup> 2012.1 RR BCUC.5.1.

<sup>18</sup> 2012.1 RR BCUC.48.3; 2012.2 RR BCUC.127.1; 127.2 and 130.1.1.

**B. BASIC CAPITAL ABOVE THE REGULATORY MINIMUM**

17. *Special Direction IC2* provides direction to the Commission in regulating ICBC to ensure the financial sustainability of Basic insurance. It provides in part:

3(1) With respect to the exercise of its powers and functions under the Act in relation to the corporation generally, the commission must do the following:

...

(b) set rates for the corporation's universal compulsory insurance business in a way that will allow the corporation to maintain capital available in relation to its universal compulsory insurance business equal to at least 100% of MCT;

18. The regulatory minimum was established as the minimum capital reserve that ICBC should hold to cover its Basic claims and other liabilities in the event that ICBC were to experience adverse financial circumstances. All insurers are subject to minimum capital requirements, and the minimum requirements for private insurers in Canada are set higher than the 100% MCT regulatory minimum applicable to Basic insurance.<sup>19</sup>

19. ICBC submits that, to comply with section 3(1)(b) of *Special Direction IC2*, the Commission must fix rates that contemplate Basic capital remaining above 100% MCT on an outlook and forecast basis. As section 3(1)(b) is concerned with fixing rates on a prospective basis, there is implicit recognition that unforeseen circumstances could arise after the Commission sets rates that cause the MCT ratio to fall below 100% on an actual, outlook or forecast basis. Should this occur, the Commission would not be in contravention of *Special Direction IC2*. It would, however, be necessary to take steps to rectify the situation.<sup>20</sup>

20. The proposed rate increase is compliant with the regulatory minimum capital requirements. The MCT as of April 2012 was 114%. The forecast MCT at December 31, 2012 is 108%, accounting for the proposed 11.2% rate increase and recent changes to the Office of the

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<sup>19</sup> 2012.2 RR BCOAPO.12.1.

<sup>20</sup> 2012.1 RR BCUC.42.3-4; 2012.2 RR BCUC.160.2 and 160.3.

Superintendent of Financial Institutions (“OSFI”) MCT Guidelines.<sup>21</sup> There is sufficient capital to absorb a 3.3 percentage point rate deficiency in PY 2012 suggested by a preliminary analysis undertaken in response to IRs;<sup>22</sup> the Basic MCT level is expected to drop to, but not below, the regulatory minimum in that scenario. The deteriorating claims costs and investment income since the Application was filed underscores, however, that any rate increase less than 11.2% creates a real risk that Basic capital levels will fall below the regulatory minimum.<sup>23</sup>

### **C. RELATIVELY STABLE AND PREDICTABLE RATES**

21. ICBC addresses below how the proposed rate increase meets the requirement in *Special Direction IC2* that rates remain “relatively stable and predictable”.<sup>24</sup> Assessing year-to-year rate changes against this *relative* criterion requires consideration of (a) the inherent uncertainty in the insurance business and the insurance cycle, and (b) the steps that ICBC is able to take within the applicable legal framework to mitigate year-over-year rate changes.

#### **(a) The Insurance Cycle**

22. ICBC’s consistent application of AAP to determine the expected costs of providing Basic insurance in a particular policy year minimizes the risk of significant forecast variances. However, the inherent uncertainty in the estimation of future costs leads to a degree of volatility in financial results that cannot be eliminated, even with the application of best practices reflected in AAP.

23. Basic rates over the past number of years have reflected the cyclical nature of the insurance business. Favourable circumstances in the years leading up to PY 2012 translated into modest rate increases and a rate decrease in 2010. PY 2012 is a year in which external circumstances – notably, lower investment income and an adverse change in the BI frequency trend - are driving rate increases that cannot be offset by ICBC’s successful efforts to reduce

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<sup>21</sup> 2012.CP RR BCUCP.9.1-2. The reasons for the decline in Basic MCT from the 154.5% as at December 31, 2010 are explained in 2012.1 RR BCUC.40.1.

<sup>22</sup> 2012.1 RR BCUC.5.1.

<sup>23</sup> 2012.1 RR DUCK.13.

<sup>24</sup> See 2012.1 RR BCUC.2.1 for further discussion.

operating expenses, or enhanced claims initiatives. The 5-year average rate change, which accounts for both favourable (including PY 2008 to 2010) and unfavourable years (including PY 2012) is only 1.8%.

24. The operating environment remains volatile. A significant rate increase for PY 2013 is a possibility, even with the proposed rate increase.<sup>25</sup> The scenarios depicting the potential increase for PY 2013 underscore the importance of the requirement of AAP for the rate indication to cover, and not defer through rate deficiencies, the expected costs associated with PY 2012 as represented by the rate indication reflected in the Application.<sup>26</sup> Additional rate deficiencies will add pressure to rates in future years.<sup>27</sup>

25. The requirements in *Special Direction IC2* to employ AAP and to maintain “relatively stable and predictable rates” are mutually consistent despite the year-to-year changes experienced in Basic rates in the past few years. The concept of *relative* rate stability and predictability allows for rate fluctuations that result from setting rates to cover the costs associated with a given policy year.

**(b) Mechanisms ICBC has Available to Affect Rate Indication**

26. As indicated above, the application of AAP encourages relative rate stability and predictability by minimizing the potential for significant variances, and thereby minimizing pressure from prior year rate deficiencies on future rates. This is important in the current circumstances where, as discussed later, there is uncertainty about how BI frequency will emerge over time.

27. ICBC can, in some circumstances, help to mitigate rate volatility by the way in which it releases excess capital.<sup>28</sup> As discussed above, AAP contemplates that management (on its own initiative or as directed) can specify the capital build or release provision in rates.

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<sup>25</sup> 2012.CP RR BCUCP.5.2; 2012.1 RR BCUC.2.4.

<sup>26</sup> 2012.2 RR DUCK.19.a.

<sup>27</sup> 2012.1 RR BCUC.2.4, Attachment B.

<sup>28</sup> 2012.2 RR BCOAPO.33.7.

Capital build and release provisions can be designed to moderate year-over-year rate changes. ICBC's CMP, as adjusted to reflect two Government Directives<sup>29</sup>, uses Basic capital to smooth rates.

28. Using a capital build and release provision to help partially mitigate rate volatility necessarily results in fluctuations in capital levels.<sup>30</sup> In circumstances where Basic insurance is on a strong financial footing and has significant capital reserves, there is much greater latitude to use a capital release to improve rate stability and predictability from year to year. The CMP provides for capital to be released when the MCT is over 130%. In the present circumstances, where capital levels are approaching the regulatory minimum, there is far less ability to reduce year-over-year rate changes. In fact, the CMP normally contemplates *building*, not releasing, capital when the MCT is between 100% MCT and 130% MCT; it is only by virtue of Government Directives that the capital build provision has been suspended for PY 2012. The low capital levels have meant that, unlike past years where there had been excess capital to reduce the rate indication, there is no additional capital release to offset a greater portion of the PY 2012 rate impacts caused by rising claims costs and low investment income.

29. The *2011 Government Directive regarding Rate Stability and Capitalization* has allowed ICBC to make the most of the capital available for the purposes of reducing rate impacts in PY 2012, while still leaving Basic capital above the regulatory minimum.<sup>31</sup> Just as the requirement for "relatively stable and predictable" rates is informed by the obligation to fix rates sufficient to cover costs in accordance with AAP, the relative nature of that requirement also recognizes the limitations imposed by legislation including the regulatory minimum MCT.<sup>32</sup>

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<sup>29</sup> *Government Directive regarding Basic Excess Capital*, OIC 287/10, May 27, 2010 and *Government Directive regarding Basic Rate Stability and Capitalization*, OIC 560/11, November 30, 2011.

<sup>30</sup> 2012.2 RR BCOAPO.33.7.

<sup>31</sup> 2012.2 RR BCUC.125.2.

<sup>32</sup> 2012.1 RR BCUC.40.4, 2.2-3 and 2.5

**D. SUMMARY REGARDING COMPLIANCE WITH REGULATORY FRAMEWORK**

30. Rates fixed based on the actuarial rate indication of 11.2% will meet the legal requirements imposed on the Commission by *Special Direction IC2*. The rate increase should be viewed in the context of the overall insurance cycle. The proposed rates are “relatively stable and predictable” as the rate indication reflects ICBC’s application of AAP to minimize variances and the use of available capital to moderate the inherent volatility of the insurance business to the extent permissible within the regulatory framework.<sup>33</sup>

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<sup>33</sup> 2012.1 RR BCUC.2.1.

### PART THREE DRIVERS OF THE ACTUARIAL RATE INDICATION

31. In this Part, ICBC addresses the components of the actuarial rate indication, which are identified in the table below.<sup>34</sup> There are two main drivers of the rate increase, which together represent 9.9 percentage points of the 11.2% rate indication:

- ***Rising BI claims costs:*** BI claims costs continue to increase, with the main change from past years being higher claims frequency. Increasing BI claims costs are the main driver of the PY 2010 loss cost forecast variance and the loss trend to PY 2012, a total of 7.4 percentage points.
- ***Reduced investment income:*** There is less investment income available to offset rate increases in PY 2012 than in PY 2010, with low interest rates accounting for a total of 2.5 percentage points of the rate indication.

The factors representing the remaining 1.3 percentage points were the subject of only a limited number of IRs. Almost half of the remaining amount is attributable to the required adoption of International Financial Reporting Standards (“IFRS”) and the increase in the capital maintenance provision mandated by the *2010 Government Directive regarding Basic Excess Capital*.<sup>35</sup> ICBC has been successful in limiting operating expense increases to the point where operating expenses do not contribute to the PY 2012 rate indication.

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<sup>34</sup> The “impact” column reflects the change from the PY 2010 indicated rate, i.e. the cumulative change over the period 2010 to 2012. The way in which ICBC calculates the rate impact from each component is set out in 2012.1 RR BCUC.6.1.

<sup>35</sup> The capital maintenance provision is specified in the CMP, and the *2012 Government Directive regarding Basic Excess Capital* requires the CMP to remain in its present form for PY 2012.

<b>Components</b>	<b>Impact (percentage points of PY 2012 indicated rate change)</b>
PY 2010 Loss Cost Forecast Variance	+5.5
Loss Trend to PY 2012	+1.9
Investment Income and Premium Financing Plan Revenue	+2.5
Trend in Average Premium	+0.4
Capital Provision (Maintenance Only, No Build)	+0.3
Impact of IFRS Changes	+0.4
Other	+0.2
Operating Expenses	0.0
<b>PY 2012 Indicated Rate Level Change</b>	<b>+11.2</b>

**A. PY 2010 LOSS COST FORECAST VARIANCE (+5.5 PERCENTAGE POINTS)**

32. Loss costs represent the cost of the incurred claims including loss adjustment expenses for an insured vehicle. The loss cost variance, which has an impact of +5.5 percentage points on the PY 2012 indicated rate change, represents the difference between the expected loss costs from the previous rate application (the 2010 Streamlined Revenue Requirements Application (“2010 SRRRA”)) and how the costs actually emerged during that policy year. The magnitude of the variance reflects new counter-forces affecting the downward frequency trend, and highlights the difficulty of forecasting claims costs in an environment where BI frequency is uncertain.

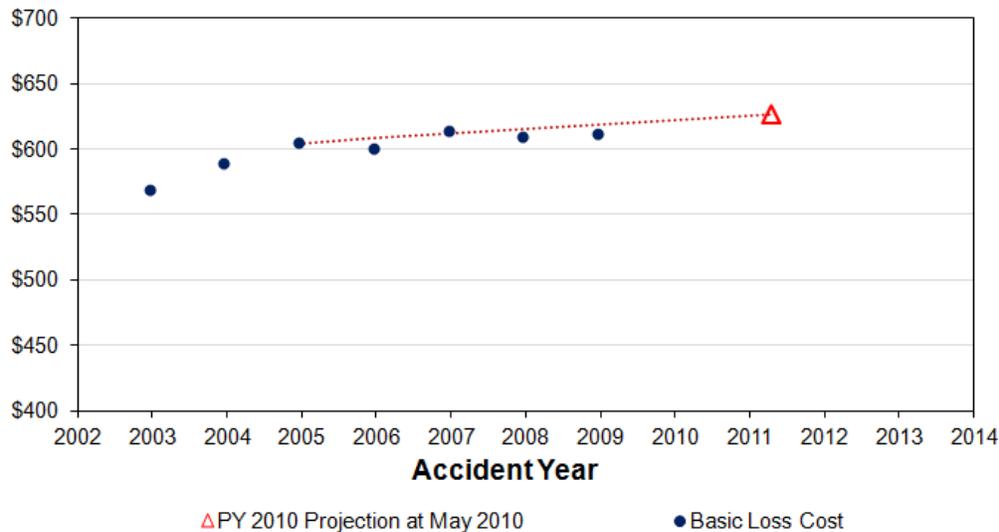
**(a) Quantifying the Loss Cost Forecast Variance**

33. In this section, ICBC explains how it determines the loss cost forecast variance.

34. The 2010 SRRRA was based on claims incurred data through 2009. The Basic loss costs had been exhibiting a flattening in the latest 5-year period (2005 to 2009), but had been expected to return slowly to the trend line that existed prior to 2008. The open triangle in Figure 1 below depicts ICBC’s PY 2010 Loss Cost Forecast of \$626 based on an actuarial analysis

with data as of February 2010. It was reasonable based on the flattening loss costs experienced to that point.

**Figure 1: 2010 SRRA Loss Cost Forecast**<sup>36</sup>

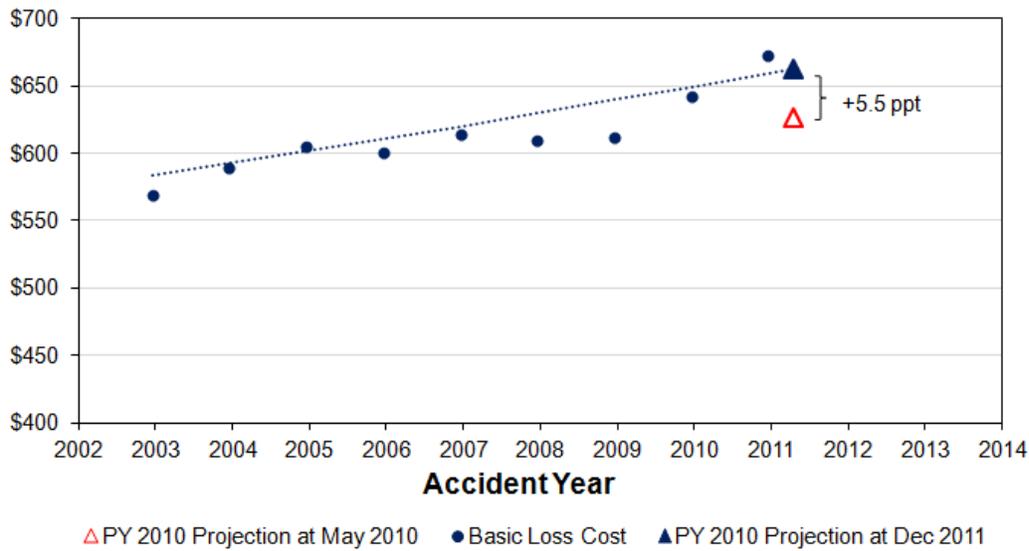


As a result of this forecast estimate, ICBC had filed for a modest rate reduction for PY 2010.

35. The Basic loss cost for PY 2010 emerged higher than expected at \$663. This is indicated by the fact that the two data points in 2010 and 2011 in Figure 2 below are much higher than any other data point since 2002. The loss cost estimates must be updated to reflect the new information. The dotted line in Figure 2 demonstrates the trend accounting for the newer information. The difference between the original loss cost forecast of \$626 (the open triangle) and the updated loss cost estimate of \$663 (the solid triangle) is the loss cost forecast variance.

<sup>36</sup> Exhibit B-4, Workshop Presentation, slide 36.

Figure 2: PY 2012 Loss Cost Forecast Variance<sup>37</sup>



36. The PY 2010 rate deficiency is a contributing factor to the significant decline in the Basic MCT ratio that has occurred over 2011 and that continues in 2012.<sup>38</sup>

**(b) Explaining the Cause of the PY 2010 Loss Cost Forecast Variance**

37. BI claims costs account for over 70% of all claims costs. The forecast variance from the forecast Basic loss costs used to set PY 2010 Basic insurance rates is primarily attributable to BI claims costs. The unfavourable BI claims experience that has emerged since 2010 is due primarily to BI claims frequency emerging higher than was forecasted in the 2010 SRRA.<sup>39</sup> ICBC has evidence of new counter-forces on the frequency trend that contributed to the variance: an increase in the number of claims involving non-motorists (cyclists and pedestrians) and low-cost property damage claims with injury.

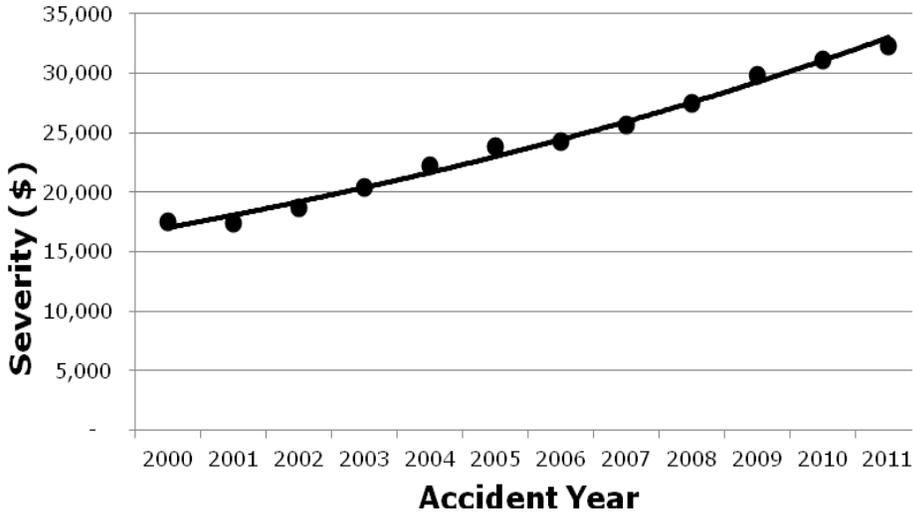
<sup>37</sup> Exhibit B-4, Workshop Presentation, slide 37.

<sup>38</sup> 2012.1 RR DUCK.18.

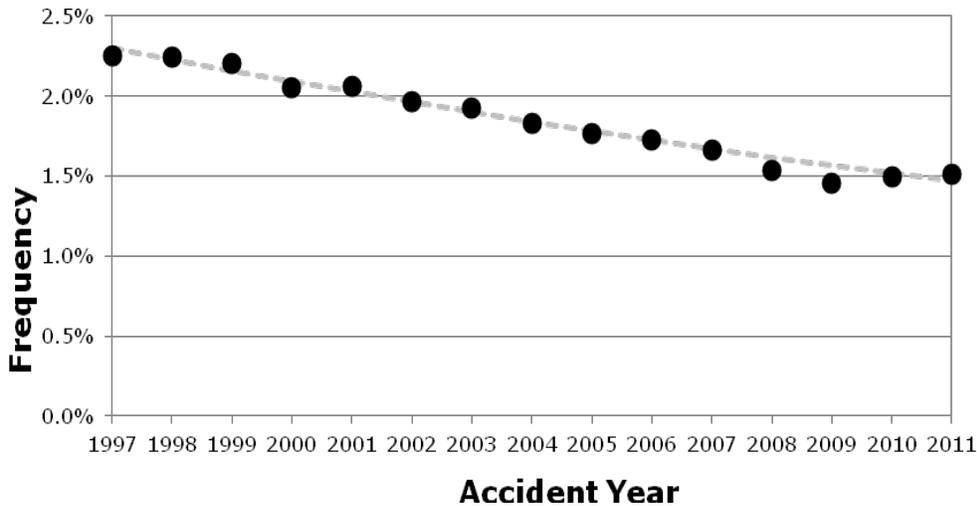
<sup>39</sup> Application, p. 3-7.

Annual BI severity increases since 2006 have averaged approximately 6% and the annual BI frequency decrease has been in the 3% to 4% range. Overall, the declining frequency has helped to offset the increasing severity. Figures 3 and 4<sup>40</sup> illustrate this point.

**Figure 3 – Basic Bodily Injury Severity**



**Figure 4 – Basic Bodily Injury Frequency**



38. In the 2010 SRRA, ICBC observed a more dramatic drop in the BI claims frequency for 2008 and 2009 coinciding with less driving during the recession<sup>41</sup> and drier than

<sup>40</sup> Exhibit B-4, Workshop Presentation; Exhibit B-12, Opening Statement.

average weather.<sup>42</sup> This is reflected in Figure 4 by the two data points for 2008 and 2009 being below the long-term trend line. The dramatic drop in frequency in these two years meant that ICBC had a larger offset to the rising severity than in past years, which resulted in the relatively flat loss costs. This contributed to ICBC being able to keep rates flat in 2008 and 2009. The forecast frequency for the 2010 SRRA assumed a gentle recovery to the longer-term trend after two years of unusually favourable results. This was a middle ground between assuming an abrupt recovery to the less favourable pre-recession (long-term) trend line, or alternatively a continuation of the low (very favourable) levels of BI frequency seen in 2008 and 2009. ICBC's approach was a key assumption in the actuarial rate indication analysis that led ICBC to apply for a rate decrease in 2010.

39. BI frequency for PY 2010 emerged higher than had been anticipated in the 2010 SRRA.<sup>43</sup> The frequency quickly returned to the moderate downward trend line that was observed prior to 2008, rather than maintaining the more favourable gentle return assumed in the PY 2010 rate indication.<sup>44</sup> The effect was that the decline in frequency was no longer able to offset rising severity to the extent anticipated in the 2010 SRRA, resulting in a loss cost forecast variance.

40. The impact of the forecast variance in BI severity on the PY 2012 rate indication is relatively small. BI claims severity is impacted by the type and complexity of injuries, as well as rising litigation costs. Many of the factors placing upward pressure on claim severity are beyond ICBC's control, but ICBC has made progress on factors within its control.<sup>45</sup> ICBC continues to build on claims initiatives in place since 2006, which is reflected in the more favourable claim severity trend since 2006. ICBC used the more favourable severity trend to determine the rate indication for the 2010 SRRA, and the experience emerged as expected.<sup>46</sup>

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<sup>41</sup> Application, pp. 3-10 to 3-12; 2012.1 RR BCUC.13.1 and 13.4.

<sup>42</sup> Application, pp. 3-9 and 3-10; 2012.1 RR BCUC.10.2.

<sup>43</sup> Application, p. 3-13.

<sup>44</sup> Application, pp. 3-7 and 3-8; 2012.1 RR CDI.1.3; BCUC.38.1.

<sup>45</sup> 2012.1 RR BCUC.62.1; 2012.2 RR BCUC.163.1; 2012.1 RR BCOAPO.8.1; 2012.2 RR BCOAPO.24.2; 2012.1 RR IBC.3.2.

<sup>46</sup> Application, p.3-12.

**(c) Summary Regarding Loss Cost Variance**

41. Unanticipated variance in estimated loss costs is a normal part of the insurance business.<sup>47</sup> The exercise of determining the loss cost forecast variance is primarily a comparison between a past forecast and updated estimates based on known claims data that has since emerged, and thus this portion of the rate indication should be accepted.

**B. LOSS TREND TO PY 2012 & PROSPECTIVE ADJUSTMENTS (+1.9 PERCENTAGE POINTS)**

42. In this section, ICBC addresses the loss trend to PY 2012 and prospective adjustments, which have an impact of +1.9 percentage points of the total rate indication. PY 2012 expected claims costs were determined with reference to the trend in loss costs over the 15 months between the PY 2010 effective date of November 1, 2010 and the PY 2012 effective date of February 1, 2012. BI claims costs are increasing because of a sustained upward trend in BI severity.<sup>48</sup> ICBC has assumed that BI frequency will continue to decline and provide some offset to the increasing severity. ICBC has also made one offsetting prospective adjustment to account for the expansion of the Intersection Safety Camera (“ISC”) Program, which is expected to generate claims cost savings in PY 2012 that cannot be captured using the loss trend models. ICBC makes two points below:

- (a) The loss trend to PY 2012 is the product of appropriate modelling that avoids giving undue weight to either very favourable or very unfavourable data in the face of ongoing uncertainty; and
- (b) ICBC has employed criteria for making prospective adjustments that are consistent with AAP.

**(a) ICBC’s Selection of Appropriate Models for Forecasting BI Loss Costs**

43. ICBC’s actuaries have applied AAP to arrive at a best fit trend line for loss costs. The loss cost trend to PY 2012 was based on detailed analysis by coverage and separately for

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<sup>47</sup> Application, p.3-13.

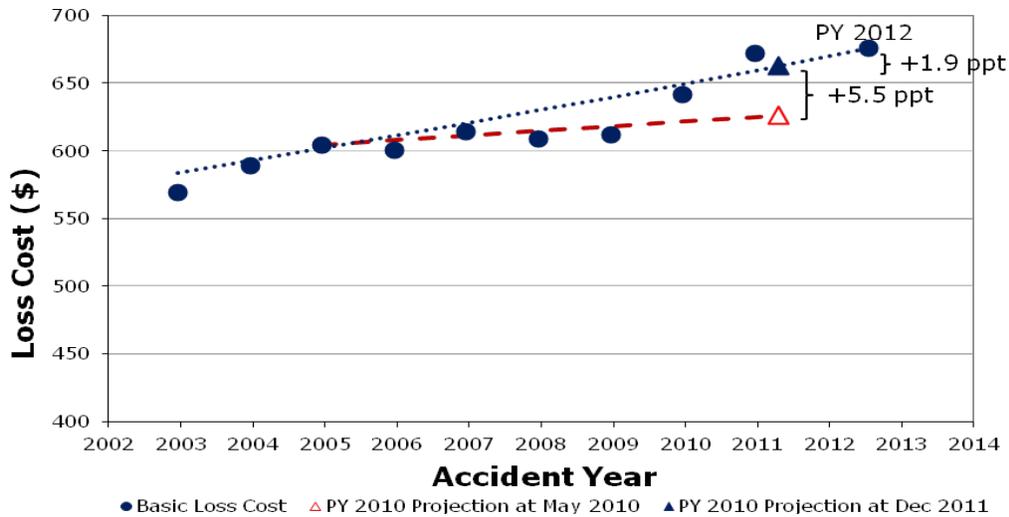
<sup>48</sup> Application, p.3-14.

frequency and severity.<sup>49</sup> The discussion below focuses on BI loss costs, which are the largest component of claims costs.

**Loss Trend to PY 2012**

44. The loss trend to PY 2012 is depicted in Figure 5 below as the +1.9 percentage point difference between where loss costs emerged in PY 2010 and what they are expected to be in PY 2012. The forecast of loss costs for PY 2012 is based on actuarial modelling.

**Figure 5 – Loss Trend to PY 2012**



**Application of AAP**

45. The exercise undertaken by the actuaries is one of forecasting claims costs for the future policy year, not of finding a trend that best describes or fits past data. In statistical terms, a model used for forecasting must necessarily be a *predictive model*, as opposed to

<sup>49</sup> Application, Exhibit D.0; 2012.2 RR BCUC.132.1-2.

merely a *descriptive model*, in order to estimate future costs according to AAP.<sup>50</sup> An actuary applying AAP must select appropriate methods, techniques and assumptions, giving consideration to changes in the social and economic environment, trends over time, and the distribution of the business, among other relevant factors.<sup>51</sup> Reliance on simple statistical measures, without sufficient regard for relevant social and economic factors, can lead to poor results. For instance, a high value for an  $R^2$  statistic indicates only that the model fits the historical data well. It says nothing about the model's ability to predict the future, especially if the historical data is unstable or the underlying patterns in the data are changing over time. In actuarial forecasting, it is more important to first determine an appropriate model with reference to potential influences and then optimize the model parameters to find the best fit.<sup>52</sup>

46. The distinction between descriptive modelling and predictive modelling is important in the current Application because of the volatility in the claims data since 2008. Ms. Minogue summarized in her Opening Statement how ICBC accounted for that volatility in arriving at an appropriate model for forecasting:

The actuaries determine forecast claims costs using models and trends selected for their appropriateness for forecasting, and not just for their ability to describe or fit past claims data. This distinction between forecasting and developing descriptive models is important in our context because we had experienced favourable results in 2008 and 2009 that we do not expect to be repeated due to changing economic and other circumstances. Selecting models and trends that give too much weight to the favourable experience we had in those two years, and not to a longer-term historical context in which more normal conditions existed, will in ICBC's view produce estimates for PY 2012 that are optimistic (i.e., biased low). Employing actuarial "best estimates", without bias, is essential to minimize the prospects of deficient rates.<sup>53</sup>

47. There were a number of IRs examining the role of economic considerations, weather and social trends in forecasting. The key point is that observed claims data is the fundamental source of ICBC's forecast of BI claims costs for PY 2012. ICBC does not forecast

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<sup>50</sup> 2012.2 RR BCUC.132.1-2.

<sup>51</sup> 2012.2 RR BCUC.132.1-2.

<sup>52</sup> 2012.1 RR BCUC.37.3.

<sup>53</sup> Exhibit B-12.

weather data and economic data; the weather and economic data is used to explain and understand features in the historical claims data against which a trend line is fit. This distinction has particular relevance to the BI frequency trend, discussed later. The data regarding weather and the economy was used to assess whether there was any basis for a forecast different from the long-term pre-2008 trend based on the unusually low frequency experience in 2008 and 2009. The weather and economic data reviewed by ICBC suggested that the low frequency in 2008 and 2009 was anomalous, not the new baseline upon which ICBC should be basing its forecasts.<sup>54</sup>

48. As actuaries are required to exercise judgement in the development of models for forecasting purposes, two different actuaries may develop different but equally valid models that accord with AAP. However, the actuaries must focus on producing the best estimate of the *expected value*.<sup>55</sup> The *expected value* is a mathematical term that refers to the theoretical mean of the estimated quantity that has uncertainty associated with it. A best estimate of expected value is not achieved by merely picking any value within a confidence interval.<sup>56</sup> Models that do not reflect the more normal conditions expected in the forecast period will, in ICBC's submission, produce estimates for PY 2012 that are biased, and are not consistent with AAP.<sup>57</sup>

49. Chapter 3, Actuarial Exhibit D.0 of the Application graphs historical versus modeled values, notes the explanatory variables, gives statistics for goodness-of-fit to historical values, and shows additional diagnostic graphs. The information demonstrates that ICBC's predictive models have strong intuitive appeal (e.g., explanatory variables should be logically related to the item being forecasted) as well being supported by statistical evidence. The variety of alternative approaches that were advanced in IRs, which are discussed below, yield

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<sup>54</sup> 2012 CP RR BCUCP.1.1-3 and 5.2; Exhibit B-12, Opening Statement.

<sup>55</sup> 2012.2 RR BCUC.132.1-2.

<sup>56</sup> The confidence interval is a theoretical range around an estimated quantity that has uncertainty associated with it, and it normally is computed with a certain "confidence level", which is the probability that the estimate lies within the range.

<sup>57</sup> 2012.CP RR BCUCP.4.1.

plausible results (of varying degrees of probability of occurrence) but cannot be considered best estimates in the circumstances.<sup>58</sup>

### ***BI Severity Trend***

50. BI severity has increased at a rate of about 6% per year from 2000 to 2011,<sup>59</sup> in large measure due to an increase in average general damage payments.<sup>60</sup> ICBC has selected a BI severity trend for Personal business that reflects a lower trend that has emerged since 2005, coinciding with ICBC's enhanced claims initiatives. Given the sustained focus of the Claims Division on claims handling, it is reasonable to expect that the existing claims initiatives, or future enhancements, will continue to be effective.<sup>61</sup>

### ***BI Frequency Trend***

51. The most significant contributor to the loss trend to PY 2012 is the fact that BI frequency has returned to the long-term trend line after more favourable experience in 2008 and 2009. The use of the long-term pre-2008 trend line for BI frequency is warranted based on:

- the causes of the favourable experience in 2008 and 2009; and
- the fact that frequency returned to the long-term trend in 2010, and has since remained at levels higher than the long-term trend.

52. ICBC's starting point in developing a model to determine the BI frequency trend is to assess past experience. There has been a long-term favourable trend in BI claims frequency, which has acted in past years to partially offset rising BI severity. BI claims frequency decreased at a rate of 3-4% per year from 1997 to 2007.<sup>62</sup> The years 2008 and 2009

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<sup>58</sup> 2012.1 RR BCOAPO.14.1; Exhibit B-12.

<sup>59</sup> 2012.1 RR AIC.11.5.

<sup>60</sup> 2012.1 RR BCOAPO.8.1.

<sup>61</sup> Application, pp. 3-14 and 3-15.

<sup>62</sup> 2012 RR AIC.11.6; Exhibit B-4, Workshop Presentation, slide 11.

were characterized by a distinct favourable dip below the long-term downward frequency trend. BI claims frequency levelled-off in 2010.<sup>63</sup> ICBC determined that a 12-year exponential model (1997-2008) was the best fit trend line for the purpose of forecasting based on the data.<sup>64</sup>

53. ICBC's selection of a BI frequency trend reflecting a return to the long-term trend that was present before 2008<sup>65</sup> was in part due to ICBC's determination that the low frequency experienced in 2008 and 2009 was the product of unusual events, specifically unusually dry weather and a declining amount of travel during the recession:<sup>66</sup>

- There is a strong correlation between changes in weather conditions and changes in claims frequency.<sup>67</sup> Precipitation in 2008 and 2009 was well below the 30-year average. A BI frequency model that gives weight to 2008 and 2009 is implicitly predicated on precipitation continuing to be more favourable than the 30-year average. There is no basis to introduce this optimistic assumption. The best information available for forecasting precipitation in future years is the 30-year average precipitation level.<sup>68</sup> Precipitation levels do not exhibit discernable annual trends or patterns, particularly over periods of only a few years. Precipitation so far this year has tracked quite closely to the 30-year average.<sup>69</sup>
- A model for BI frequency that gives weight to 2008 and 2009 implicitly assumes that vehicle travel in 2012 will be at levels consistent with the low levels seen during the recession. There is no basis for introducing this optimistic assumption into the modelling. Data on kilometres driven in 2010 and 2011 demonstrates

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<sup>63</sup> Application, p.3-9 (Figure 3.4b), updated for 2011 data in 2012.1 RR BCUC.37.1.

<sup>64</sup> 2012.1 RR BCUC.37.2; 39.1-2.

<sup>65</sup> Application, p.3-15.

<sup>66</sup> Application, pp.3-9 and 3-10.

<sup>67</sup> 2012.1 RR AIC.4.

<sup>68</sup> 2012.1 RR BCUC.11.1; 2012.1 RR BCOAPO.6.1.

<sup>69</sup> 2012.CP RR BCUCP.1.1-3.

that vehicle travel has returned to the levels experienced prior to 2008. While it is *possible* that vehicle travel could drop off again in 2012, that scenario is much less likely than the scenario that vehicle travel will maintain the levels experienced before 2008. The drop in vehicle travel in 2008 and 2009 coincided with the recession. Economic forecasts and GDP growth suggest that the economy is recovering, not returning to recession. In light of the external data available regarding the state of the economy, ICBC's assumption that vehicle travel will remain on the path exhibited prior to 2008 and since 2010 is most appropriate.<sup>70</sup>

54. The experience from 2011 and 2012 to date supports ICBC's selection of model for BI frequency. The experience in 2010 was consistent with the long-term trend prior to 2008, and 2011 was *less* favourable than the long-term trend. The reported BI claims frequency for accident year 2012 as of April 2012 is slightly higher than accident year 2011 was at April 2011. It is higher than any point since the beginning of the recession. It is at the same level as the 2008 accident year frequency reported as of April 2008, prior to the beginning of the recession.<sup>71</sup> ICBC has identified a potential cause of this flattening of the frequency. There is an increase in the number of claims involving non-motorists (cyclists and pedestrians) and low-cost property damage claims with injury. These circumstances are expected to persist in future years.<sup>72</sup> In light of this information, it is optimistic to assume that the BI claims frequency is going to drop back to 2008 and 2009 levels.

55. It should be noted that ICBC's selection of the long-term (pre-2008) trend for BI frequency also avoided giving full effect to the adverse experience in 2011 that would suggest a new potential trend line that is *higher* than the pre-recession levels.<sup>73</sup> ICBC has, in effect, taken

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<sup>70</sup> 2012.CP RR BCUCP.4.1.

<sup>71</sup> 2012.CP RR BCUCP.4.1 and 5.2.

<sup>72</sup> 2012.1 RR BCUC.38.1; 2012.CP RR BCUCP.5.2.

<sup>73</sup> 2012.CP RR BCUCP.4.1.

a middle ground between the two extremes marked by 2008/2009 on one hand, and 2011 on the other. ICBC stated in response to a Commission Panel IR:<sup>74</sup>

These models did not include the 2008 and 2009 points, which in each case exhibited a distinct dip from the pre-recession (long-term) trend line. They also did not include the estimated 2011 point that was available at the time of the analysis, and which particularly for BI frequency was emerging higher than the 2010 point and significantly higher than the pre-recession (long-term) trend line. When making this selection, ICBC was faced with a significant amount of uncertainty. Although the 2011 BI frequency was coming in higher than expected, the year's results were not yet complete, and meanwhile the recent years had been near (2010) or below (2008 and 2009) the pre-recession (long-term) trend line. When faced with this type of uncertainty, ICBC's actuaries select a best estimate which does not represent one extreme or the other, with the intent of minimizing the forecast variance over time as the impact of future uncertain events becomes realized. This balanced approach, which is consistent with accepted actuarial practice, was applied in the 2010 Streamlined Revenue Requirements Application, where instead of either an abrupt recovery to the pre-recession (long-term) trend line, or a continuation of the low levels of BI frequency seen in 2008 and 2009, ICBC's selected forecast represented a gentle recovery to the pre-recession (long-term) trend line. In the current circumstances, ICBC's selected forecast in the Application represents a balance between competing views, one view being that the recent data is anomalous and BI frequency levels going forward will be more in line with the 2008 and 2009 years, and the alternative view that BI frequency has levelled off and will remain flat. ICBC has balanced these relatively extreme possibilities and assumes a return to a downward trend line, as discussed in the response to information request 2012.1 RR BCUC.38.1.

ICBC submits that the approach described above has yielded an appropriate loss trend to PY 2012.

### ***Alternative Models Raised in Information Requests***

56. ICBC responded to a number of IRs that proposed the use of a variety of other models for determining BI frequency and loss costs. The suggested models have in common that they give weight to 2008 and 2009 data to reduce the actuarial rate indication. These models are either not consistent with AAP, or do a poor job in describing the claims experience

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<sup>74</sup> 2012.CP RR BCUCP.2.1.

since 2010.<sup>75</sup> ICBC is in its third year of experiencing claims frequency near or above the pre-recession long-term trend line. Selecting a model for BI frequency that gives weight to anomalous data points will result in a trend that may represent a plausible outcome, but is not a reasonable estimate for the expected value.

57. The scenarios envisioned by the alternative models referenced in IRs, while plausible, are also increasingly unlikely.<sup>76</sup> ICBC observed, for instance, in response to a Commission Panel IR:<sup>77</sup>

It is plausible, but highly unlikely, that recent and current economic conditions might prevent the Personal Bodily Injury (BI) claims frequency for the 2012 policy year from returning to the pre-recession (long-term) trend line. As discussed in the response to information request 2012.CP RR BCUCP.2.1, ICBC has applied a balanced approach in order to determine a best estimate in the face of significant uncertainty around future economic conditions and their effect on BI claims frequency. While the 11-year econometric model requested by information request 2012.2 RR BCUC.150.1 fits historical data well through the recession, it does not describe well the most recent accident year 2011 and it produces a forecast that is significantly lower than the pre-recession trend line despite the evidence that frequency levels have returned to the long-term trend line. These shortcomings alone are enough to render the requested model inappropriate for producing a reasonable forecast. Furthermore, in light of hard evidence of new counter-forces on the BI frequency trend line, as described in the response to information request 2012.1 RR BCUC.9.1, it is highly unlikely that the policy year 2012 frequency will emerge below the long-term trend line. In ICBC's view, any forecast estimate below the pre-recession (long-term) frequency trend line is not a valid alternative forecast estimate because it does not appropriately balance the favourable experience in 2008 and 2009 with the unfavourable recent experience and instead reflects an optimistic bias.

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Even with the adoption of an 11.2% Basic insurance rate increase, ICBC is expecting an adverse forecast variance to emerge for policy year 2012, which has implications for the actuarial rate indication for policy year 2013. The low end of the estimated 2012 range for BI claims frequency suggests an adverse forecast variance of about 3%, while the high end of the range suggests an adverse

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<sup>75</sup> 2012.CP RR BCUCP.3.1-4.

<sup>76</sup> 2012.CP RR BCUCP.4.1.

<sup>77</sup> 2012.CP RR BCUCP.5.2.

forecast variance of about 9%. A relatively flat frequency trend, consistent with the Scenario C in the response to information request 2012.1 RR BCUC.2.4, falls in the middle of the range and appears to be a reasonable expectation. An alternative forecast estimate that lies below the pre-recession (long-term) trend line now appears to be highly unlikely, and puts ICBC at greater risk of experiencing an even larger forecast variance and falling below its statutory minimum capital requirement. Even the forecast variance of 3% that would occur at the low end of the range would put ICBC very near to the statutory minimum capital requirement of 100% MCT.

58. The introduction of an optimistic bias in the estimate of claims cost by the use of models that (a) give weight to favourable BI frequency experience in 2008 and 2009, and (b) do not provide a good fit to the three years of more adverse experience since 2009, increases the likelihood that Basic insurance rates will be deficient by a significant margin. Given the uncertainty already surrounding the forecast of BI claims frequency and interest rates for future policy years, a biased selection would exacerbate pressure on future years' Basic insurance rates. It would also create a heightened risk that Basic insurance capital would fall below the regulatory minimum level of 100% MCT.<sup>78</sup>

**(b) Prospective Adjustments**

59. A rate indication according to AAP includes an unbiased estimate of claims costs associated with a future policy year. Such estimates must be based on data. It is appropriate to include a prospective adjustment where a future event is expected to have a meaningful and quantifiable effect on the future policy year that is not otherwise accounted for in the loss trend. ICBC has made a number of prospective adjustments in past years to reflect both costs and savings expected from future events.<sup>79</sup> ICBC assessed candidate events for inclusion in the PY 2012 rate indication, and determined that a prospective adjustment for the ISC Program expansion is warranted.

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<sup>78</sup> 2012.2 RR BCUC.133.1.

<sup>79</sup> Application, p.3-20.

60. A forecast of continued improvement in claims costs as a result of ongoing vehicle improvements and road design improvements (as well as a long list of other factors)<sup>80</sup> is already embedded in ICBC's trend rates. These types of safety measures have been occurring over a long period of time on a regular basis, and they are represented in ICBC's experience that is used for trending purposes.<sup>81</sup> Recognition of events or undertakings of an unusual size or impact relative to previous years as prospective adjustments ensures that associated costs or savings are reflected in rates before the developments occur, since rates are set on a prospective basis.<sup>82</sup>

61. ICBC has made a prospective adjustment for the expansion of the ISC Program, which represents a net savings of \$7.9 million for PY 2012.<sup>83</sup> The ISC Program expansion qualified for a prospective adjustment under AAP because (a) the timing of the ISC Program improvements coincides with PY 2012, (b) the improvements to the ISC Program are expected to yield benefits that are not captured in the existing trend, and (c) the impact of the improvements can be reliably estimated based on past data available from the ISC Program.

62. ICBC considered the Sea-to-Sky Highway Improvement Project, Canada Line Project, and PED Ban as candidates for prospective adjustments, but determined not to make adjustments based on when the three candidates were implemented. The Sea-to-Sky Highway, Canada Line and PED Ban all predate PY 2012.<sup>84</sup> ICBC actuaries monitor claims experience on a monthly basis, and update the trend models regularly throughout the year in order to take into account the most recent information available. As a result, direct or indirect impacts of events or developments are quickly reflected in the data underlying the actuarial rate indication analysis.<sup>85</sup> Impacts associated with these three candidates have been captured in the loss

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<sup>80</sup> 2012.2 RR IBC.35.1.

<sup>81</sup> Application, p.3A-2; 2012.2 RR IBC.35.1.

<sup>82</sup> Application, pp. 3-16 to 3-18; 2012.2 RR BCUC.140.1-2.

<sup>83</sup> Application, pp.3-28 and 3-29; 2012.1 RR BCUC.17.1 and 17.2.

<sup>84</sup> The discussion starts at p.3A-6 of the Application.

<sup>85</sup> 2012.2 RR BCUC.140.1-2; 2012.2 RR IBC.35.1

trends. Including a prospective adjustment for any of these past events would have resulted in double-counting.<sup>86</sup> Double-counting savings leads to rate inadequacy.<sup>87</sup>

63. Any favourable effects associated with the Sea-to-Sky Highway, the Canada Line and the PED Ban are not estimable in a way that would have permitted a prospective adjustment consistent with AAP in either PY 2010 or PY 2012.<sup>88</sup> An intuitive expectation that claims costs should decrease when significant road improvements, a rapid transit system and a PED Ban are implemented is the basis upon which ICBC had identified these initiatives as *candidates* for a prospective adjustment in PY 2010.<sup>89</sup> Intuition, anecdotal evidence, and studies based on limited data are not appropriate bases on which to make a prospective adjustment for these candidates. AAP requires that prospective adjustments be based on relevant evidence.<sup>90</sup>

64. The available data also casts some doubt on the intuitive expectation of material savings for the three rejected candidates, illustrating why a non-evidence based approach can produce a biased rate indication and deficient rates.<sup>91</sup> ICBC's determination of prospective adjustments in the manner described in the evidence ensures that the rate indication complies with AAP and reflects the best estimate of the rate level that is required to cover all costs associated with Basic insurance for the policy year.<sup>92</sup>

65. Participants in this proceeding identified a number of candidates for prospective adjustments in future rate applications. ICBC will apply the same criteria to evaluate candidates. The requirement for credible estimates will continue to pose an obstacle for

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<sup>86</sup> Sea-to-Sky Highway: 2012.2 RR BCUC.136.1; 2012.2 RR BCUC.138.2. Canada Line: 2012.2 RR BCUC.139.1. PED Ban: 2012.1 RR BCUC.26.4, 26.4.1.

<sup>87</sup> 2012.2 RR BCUC.140.1-2.

<sup>88</sup> Application, p.3A-6; 2012.1 RR BCOAPO.11.1.

<sup>89</sup> Application, p.3-18; 2012.2 RR BCUC.140.1-2.

<sup>90</sup> 2012.2 RR BCUC. 136.1 Attachment A

<sup>91</sup> Sea-to-Sky Highway: Application, pp.3A-6, 3A-9, 3A-15 and 3A-16; 2012.1 RR BCOAPO.12.1; 2012.1 RR BCUC.23.1 and 24.2; 2012.2 RR BCUC.140.1-2, 136.1 and 137.4. Canada Line: Application, pp.3A-6 and 3A-21; 2012.2 RR BCUC.139.2; 2012.1 RR BCOAPO.13.1. PED Ban: Application, pp.3A-6, 3A-24, 3A-25 and 3A-29; 2012.1 RR BCUC.26.1 and 26.2; 2012.2 RR BCOAPO.9.1; 2012.1 RR BCOAPO.11.1.

<sup>92</sup> 2012.1 RR BCUC.22.1 and 25.1

reflecting some candidates in rates as prospective adjustments. While investing in detailed studies and data collection can improve the reliability of data about a candidate, it is important to recognize two facts.

- First, the cost of undertaking studies is recovered from policyholders. Considering the inherent difficulties in gathering data and the likelihood of inconclusive estimates, large infrastructure projects may not be good candidates for prospective adjustment studies.<sup>93</sup>
- Second, the full impacts of these candidate events are quickly reflected in the loss trend once they have occurred, meaning that the benefit to customers of undertaking an investigation is transitory. ICBC operates in a closed system where any forecast variance or excluded prospective adjustment flows through the capital account triggering a correction to future premium rates.<sup>94</sup>

ICBC will undertake an assessment of the available data to accord with AAP, but ICBC submits that policyholders would be ill-served by a requirement that ICBC invest significantly in collecting primary data on future infrastructure projects and new legislation to achieve transitory benefits.

**(c) Summary Regarding Loss Trend to PY 2012 and Prospective Adjustments**

66. ICBC has employed AAP in the selection of appropriate models to determine an unbiased loss trend to PY 2012. ICBC's systematic application of its criteria for prospective adjustments ensures that impacts of events are captured where appropriate and based on credible evidence, and not double-counted.<sup>95</sup> ICBC submits that its approach, and the results of that approach in PY 2012, should be accepted.

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<sup>93</sup> 2012.2 RR BCUC.140.1-2.

<sup>94</sup> 2012.2 RR IBC.35.1; 2012.2 RR BCUC.140.1-2.

<sup>95</sup> 2012.2 RR BCUC.140.1-2.

### **C. CHANGE IN INVESTMENT INCOME (+2.5 PERCENTAGE POINTS)**

67. In this section, ICBC addresses the change in investment income and Premium Financing Plan revenue, which is the second key driver of the PY 2012 rate indication. Investment income is earned on new policyholder premium and Basic equity, and is credited to reduce the overall rate indication. The Premium Financing Plan also generates revenue based on the expected amount of the borrowings and the prime rate.<sup>96</sup> In past years, including 2010, favourable investment conditions have resulted in a significant offset.<sup>97</sup> However, a sudden and dramatic downward shift in interest rates occurred in Q3 of 2011. Central banks in developed economies have dropped interest rates to record lows and equity markets are volatile.<sup>98</sup> The reduction in the expected amount of investment income and Premium Financing Plan revenue available to offset costs in PY 2012, relative to the 2010 SRRA, is contributing 2.5 percentage points to the actuarial rate indication.<sup>99</sup> ICBC makes three points in this section:

- (a) The New Money Rate (“NMR”), which was determined according to a Commission-approved formula, has declined due to lower interest rates;<sup>100</sup>
- (b) The Yield on Basic Equity has declined due to lower interest rates and lower Basic equity, on which ICBC earns a yield; and
- (c) The adverse experience in 2012 to date reinforces ICBC’s expectation that interest rates will remain low and markets will remain volatile.

#### **(a) NMR Based on Commission-Approved Methodology**

68. The NMR is the investment yield expected to be achieved on future premiums between the time they are received and the time costs related to those premiums are paid

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<sup>96</sup> Application, p.3-16. 2012.1 RR BCUC.16.1; 2012.2 RR CDI.1.1 and 1.2.

<sup>97</sup> Application, p.5-1.

<sup>98</sup> A graph of Canada 3-year benchmark bond yields is included in the response to 2012.1 RR DUCK.4.c, illustrating the sharp decline in interest rates in Q3 2011.

<sup>99</sup> Application, p.3-15. Overall investment income and premium financing plan revenue was expected to contribute \$120 per policy to the PY 2010 rate level. It has been reduced to a contribution of \$103 per policy in the PY 2012 rate level.

<sup>100</sup> 2012.1 RR DUCK.1.c.

out.<sup>101</sup> The NMR is highly sensitive to interest rates. The interest rate forecasts, upon which the NMR is based, have dropped since the NMR was calculated for the 2010 SRRA. The lower NMR compared to the 2010 SRRA accounts for an impact of +1.9 percentage points of the PY 2012 rate indication.<sup>102</sup>

69. The NMR was calculated according to a methodology approved by the Commission in 2009.<sup>103</sup> The methodology involves the use of published forecasts from six predetermined major financial institutions that are understood to have the economic research and forecasting capabilities required to prepare appropriate forecasts.<sup>104</sup> ICBC has provided in Chapter 5 of the Application evidence regarding the forecasts upon which the NMR is based, and the detailed calculations of the NMR.<sup>105</sup>

70. A three year comparison of the forecasted NMR using the formula to the NMR calculated using actual yields shows both positive and negative variances. There will continue to be variances, both positive and negative, because of the inherent difficulty of predicting movements in interest rates. The continued use of an approved methodology benefits all parties by eliminating debate over the appropriate data employed.<sup>106</sup> ICBC submits that the NMR for PY 2012, and the way in which it was calculated, should be accepted.

**(b) PY 2012 Rate Indication Reflects Lower Yield on Basic Equity**

71. The Yield on Basic Equity is used to calculate the income earned on Basic equity during PY 2012, which reduces the required premium revenue.<sup>107</sup> Basic equity, upon which ICBC earns a yield, has decreased since 2010. There has also been a decrease in the yield rate; ICBC's investment portfolio has a significant bond component that is sensitive to declining interest rates. The fact that there is now less investment income on Basic equity means that

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<sup>101</sup> 2012.2 DUCK.3.a and 3.b.

<sup>102</sup> Application, p.5-3.

<sup>103</sup> Application, p.5-4.

<sup>104</sup> 2012.1 RR DUCK.3. Application, pp.5-4 and 5-5; 2012.1 RR DUCK.1.c

<sup>105</sup> Application, p.5-4.

<sup>106</sup> 2012.1 RR BCUC 49.1 and 49.1.1.

<sup>107</sup> 2012.2 RR DUCK.3.a.

the rate indication for PY 2012 must increase by approximately +0.4 percentage points to make up the difference. The calculation of the Yield on Basic Equity as of June 30, 2011 is set out on p.5-9 of the Application.

**(c) Recent Experience Reinforces Assumptions**

72. Interest rates have declined since September 2011, the date of the forecasts upon which the Application was based. ICBC's responses to the first round of IRs indicated that the NMR decreased from 3.76% in September 2011 to 3.13% in January 2012.<sup>108</sup> The Yield on Basic Equity declined from 4.60% to 4.0%.<sup>109</sup> Basic equity also declined by \$156 million, partially as a result of reduced unrealized investment gains.<sup>110</sup> The end result was that lower interest rates and reduced Basic equity are contributing to a potential rate deficiency for PY 2012 even based on the proposed rate increase. The NMR and Yield on Basic Equity were responsible for 2.2 percentage points of the 3.3 percentage point increase identified in the preliminary revised rate indication of 14.5% filed in 2012.1 RR BCUC.5.1.

73. The MCT ratio can be impacted significantly by investment market conditions during the year. Changes in investment markets impact realized investment income and net income and also unrealized investment income and other components of equity. ICBC's evidence in response to the recent Commission Panel IRs was that, at the end of April 2012, the value of the unrealized gains in the investment portfolio had decreased, reducing the Basic insurance MCT ratio by approximately 6% in one month (from 120% in March 2012 to 114% in April 2012).<sup>111</sup>

74. The ongoing uncertainty in interest rates and volatility in the equity markets will continue to pose challenges. The recent experience underscores the importance of setting rates in PY 2012 on the basis of ICBC's actuarial rate indication.

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<sup>108</sup> 2012.1 RR BCUC.48.1 and 2012.1 RR BCUC.5.1.

<sup>109</sup> 2012.1 RR BCUC.5.1.

<sup>110</sup> 2012.1 RR BCUC.5.1.

<sup>111</sup> 2012.CP RR BCUCP.9.1-2.

**D. OTHER ELEMENTS OF THE RATE INDICATION (+1.3 PERCENTAGE POINTS)**

75. The drivers other than claims cost increases and lower investment income collectively account for a relatively small portion (+1.3 percentage points) of the actuarial rate indication. The trend in average premium, capital maintenance provision, and transition to IFRS collectively account for most of this amount (+1.1 percentage points). These three elements of the rate indication, which were the subject of relatively few IRs, are addressed at a high level below.

**(a) Trend in Average Premium (+0.4 percentage points)**

76. The actuaries have projected the PY 2012 average premium by reflecting the expected premium trend to the PY 2012. The trend in average premium, a component of the actuarial rate indication, represents the changes in ICBC's average premium level that are not due to rate level changes. Factors such as annual movements of policyholders along the Claim Rated Scale ("CRS") and shifts in the mix of business by rate class and territory may create a detectable trend in the average Basic insurance premium.<sup>112</sup> The average premium paid by Basic policyholders is decreasing due to a combination of a greater number of seniors and migration towards greater discounts on the CRS.<sup>113</sup> Since the average premium paid by Basic policyholders is decreasing, higher rates are required to raise the additional revenue required. The impact of reflecting trend in the average premium is +0.4 percentage points on the PY 2012 indicated rate change.<sup>114</sup> ICBC submits that the trend was determined using appropriate statistical models<sup>115</sup> and should be accepted.

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<sup>112</sup> Application, p.3-5.

<sup>113</sup> 2012.1 RR BCUC.7.1; 2012.1 RR AIC.3.

<sup>114</sup> Application, p.3-5.

<sup>115</sup> Application, Exhibit B.0 and p.3-26; 2012.1 RR AIC.12.1.

**(b) Capital Maintenance Provision (+0.3 percentage points)**

77. The actuarial rate indication includes a capital maintenance provision determined according to the CMP.<sup>116</sup> It has increased slightly from PY 2010, with an impact of +0.3 percentage points of the actuarial rate indication.<sup>117</sup>

78. The purpose of the capital maintenance provision is to maintain the MCT ratio in the face of a growing capital requirement.<sup>118</sup> It represents a cost to the insurance business and AAP requires that all costs be provided for so that the insurance business remains financially sound.<sup>119</sup> The Commission accepted in the 2010 SRRA Decision that it is precluded from eliminating or suspending the capital maintenance provision by virtue of *Special Direction IC2* and the *2010 Government Directive regarding Basic Excess Capital*.<sup>120</sup> In any event, the inclusion of a capital maintenance provision on a permanent basis also helps to achieve “relatively stable and predictable” rates. The capital shortfall in the face of a growing capital requirement would have to be recovered through future rates on top of any rate increase associated with that year.<sup>121</sup>

79. The capital build/release provision is the mechanism used to build capital when there is a capital shortfall, and release capital where there is excess capital available. The CMP originally contemplated the inclusion of a capital build provision in circumstances, such as those present for PY 2012, where the Basic MCT is less than the management MCT target of 130%.<sup>122</sup> The *2011 Government Directive regarding Basic Rate Stability and Capital* instructed ICBC to

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<sup>116</sup> ICBC’s CMP was submitted to the Commission in the 2007 RRA. The Commission approved the determination of the capital provision in the *2008 Decision on Revenue Requirements*, page 17.

<sup>117</sup> See 2012.1 RR BCUC.21.1 for calculation of the +0.3 percentage points.

<sup>118</sup> 2012.1 RR BCUC.41.1; 2012.1 RR DUCK.10.a. As capital required (the denominator in the MCT ratio) increases due to growth of the business and inflation, the capital available (the numerator in the MCT ratio) must keep pace to maintain the existing MCT ratio. The MCT ratio would otherwise erode by three to four percentage points each year.

<sup>119</sup> November 2010 Reasons for Decision, page 15.

<sup>120</sup> The *2010 Government Directive regarding Basic Excess Capital* provides that “ICBC should continue to apply the Capital Management Plan” with the exception of the provisions specified in that Directive.

<sup>121</sup> 2012.1 RR DUCK.10.a.

<sup>122</sup> The CMP specifies that ICBC must recover 1/5 of the deficiency in capital below the 130% management MCT target per year in Basic insurance rates as a capital build provision: Application, p.4-1.

alter its CMP to exclude any capital build provision in Basic insurance rates from February 1, 2012 to January 31, 2015, when MCT in the quarter prior to a revenue requirements filing is between 100% and 130%. The Basic insurance MCT ratio in the quarter prior to ICBC filing this Application was 120%; therefore, ICBC excluded the capital build provision from the PY 2012 rate indication.<sup>123</sup>

**(c) IFRS (+0.4 percentage points)**

80. The transition from Canadian Generally Accepted Accounting Principles (CGAAP) to IFRS has had a +0.4 percentage point impact on the PY 2012 actuarial rate indication. This impact cannot be avoided. The Treasury Board has directed ICBC, in accordance with the *Budget Transparency and Accountability Act*, to adopt IFRS effective January 1, 2011.<sup>124</sup> An entity adopting IFRS must restate its financial statements and transition adjustments are not permitted to be phased in over a period of time.<sup>125</sup> The impact of this transition is an increase to the pension and post-retirement benefit expense base for 2011 and future years.<sup>126</sup>

**E. OPERATING EXPENSES NOT CONTRIBUTING TO RATE INDICATION**

81. Operating Expenses<sup>127</sup> are addressed in Chapter 7 of the Application. ICBC has a strong track record in managing its operating expenses. Since 2001, ICBC has maintained average year to year operating expense increases at about the rate of inflation.<sup>128</sup> Operating expenses do not contribute to the actuarial rate indication for PY 2012.<sup>129</sup> ICBC makes the following points in this section:

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<sup>123</sup> Application, p.4-2; 2012.1 RR BCOAPO.3.3.

<sup>124</sup> 2012.1.RR DUCK.17.a-c

<sup>125</sup> 2012.1 RR BCUC.44.2.

<sup>126</sup> Application, pp.4-9 and 7-12.

<sup>127</sup> ICBC has defined operating expenses as all costs (compensation and operating costs) to run ICBC's insurance and Non-insurance business with the exception of claims payments, broker commissions and premium taxes: Application, pp.3-31 and 7-2.

<sup>128</sup> Application, p.7-5.

<sup>129</sup> Application, p.7-1. The calculation showing that on a per policy basis there is no increase, representing a net zero percentage point impact on the actuarial rate indication, is explained on pages 7-29 and 7-30.

- (a) ICBC implemented cost control strategies in mid-2011 that generated significant operating expense savings, and the results are reflected in the 2012 forecast used for the PY 2012 rate indication;
- (b) The base operating expense increase for the 2012 forecast is largely the product of higher depreciation expense, higher project spending, and compensation increases in line with inflation; and
- (c) Costs relating to the Transformation Program (“TP”) have been appropriately allocated 100% to Optional insurance.

**(a) Cost Control Measures Reflected in PY 2012 Rate Indication**

82. ICBC introduced significant cost control measures in 2011 that reduced the average growth in base operating expenses from 2.4% per year from 2007-2010 to an average of 1.9% annually for the 2011 outlook and 2012 forecast.<sup>130</sup> The measures reduced corporate operating expenses for 2011 by \$26 million.<sup>131</sup> ICBC reflected those measures in the 2012 budgeting cycle. As a result of these cost control measures, operating expenses do not contribute to the rate increase requirement for PY 2012.<sup>132</sup>

83. The key cost control measures initiated in 2011 were:

- **Detailed budget reviews:** Conducting detailed budget reviews to search for cost savings opportunities across the organization right down to the cost centre and cost element levels. These reviews identified planned expenses that were no longer required due to changes in assumptions in the original annual budget. ICBC also conducted a detailed review of divisional operating expenses over a

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<sup>130</sup> Application, p.7-13.

<sup>131</sup> Application pp. 7-3 to 7-4. In comparison to the original 2011 plan as represented in ICBC’s 2011-2013 Service Plan.

<sup>132</sup> Application, p.7-1.

five-year time frame.<sup>133</sup> This step resulted in a cost savings of approximately \$13 million in 2011.<sup>134</sup>

- **Strategic Prioritization of Projects:** ICBC centralized its project planning and reprioritized projects based on a re-assessment of risks and opportunities to achieve savings. Some projects are not being pursued. Some projects were re-scoped based on identifying a new risk / reward balance and are still proceeding.<sup>135</sup> Projects that have been deferred to a future year will be re-assessed as part of the cross-corporate strategic prioritization process to ensure they remain consistent with corporate strategy.<sup>136</sup> ICBC's prioritization initiative targeted containing costs within inflation.<sup>137</sup>
- **Management of Staffing Vacancies:** Only vital positions are being filled, and executive sign-off is now required prior to undertaking any hiring.<sup>138</sup> This step resulted in a savings of approximately \$8 million in 2011.<sup>139</sup>
- **Functional Review:** ICBC reviewed how corporate support functions can be delivered more efficiently.<sup>140</sup>
- **Discretionary Spending:** ICBC established new Discretionary Spending Guidelines to contain discretionary spending within inflation.<sup>141</sup>

84. ICBC has captured the material savings achievable in 2012. Any opportunities for further savings going forward, should they arise, will be reflected in the baseline for

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<sup>133</sup> 2012.1 RR BCUC.70.1; 85.1-2.

<sup>134</sup> 2012.2 RR BCUC.164.1.

<sup>135</sup> 2012.1 RR BCUC.70.1; 85.1-2.

<sup>136</sup> 2012.1 RR BCUC.72.1.

<sup>137</sup> 2012.2 RR BCUC.164.1.

<sup>138</sup> 2012.1 RR BCOAPO.17.1; 2012.1 RR BCUC.70.1; 85.1-2.

<sup>139</sup> 2012.2 RR BCUC.164.1.

<sup>140</sup> 2012.2 RR BCUC.164.1.

<sup>141</sup> 2012.2 RR BCUC.164.1.

determining Basic insurance rates in subsequent years.<sup>142</sup> ICBC will maintain the discipline and rigour it applied to its 2011 mid-year review, and reflected in the 2012 budgeting cycle, in future years.<sup>143</sup>

**(b) Drivers of Operating Expense Increase for the 2012 Forecast**

85. Base operating expense increase for the 2012 forecast is largely the product of (i) higher depreciation expense, (ii) higher project spending, and (iii) compensation increases in line with inflation.

***Higher Depreciation Expense***

86. 2012 forecast operating expenses increased by \$8 million over 2010 actual due to higher depreciation associated with capital expenditures from current and prior years.<sup>144</sup> In the past few years, ICBC has invested in the areas of information technology and facilities capital projects, such as data centre relocation, facilities, voice over internet protocol projects, disaster recovery, and call-routing system (Genesys) upgrade. As a result, depreciation expenses have increased. Information technology projects were identified in past capital reporting to the Commission before being undertaken.

***Higher Project Spending***

87. In 2010, ICBC conducted non-TP projects at a much lower level than in the past (\$20 million), due to the simultaneous work on the initiation of many TP projects and on formalizing the governance model for TP within ICBC.<sup>145</sup> The 2012 forecast reflects non-TP project spending which has been contained at \$23 million due to the strategic project prioritization process, one of the cost control measures initiated in 2011.<sup>146</sup>

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<sup>142</sup> 2012.1 RR BCUC.87.2.

<sup>143</sup> 2012.1 RR BCUC.70.3.

<sup>144</sup> 2012.2 RR BCUC.166.2.

<sup>145</sup> Application, p.7-19.

<sup>146</sup> Application, p.7-19.

### ***Increase in Compensation Costs is Reasonable***

88. ICBC received a number of IRs regarding compensation costs. Compensation represents 74% of overall base operating expenses.<sup>147</sup> It is a function of the number of FTEs, compensation level changes, and changes in employee mix.<sup>148</sup> The 2012 forecast increase in compensation costs is within inflation and reasonable based on ICBC's business needs. As discussed below, even though ICBC has increased staff, the FTE's per policy is flat. Compensation level increases are limited to those that have been approved by the Public Sector Employers' Council ("PSEC"). The change of employee mix to include more M&C employees is driven by business imperatives.

### **FTE's Per Policy is Flat**

89. Although the absolute number of FTEs has been increasing, the number of FTEs per policy has steadily declined since 2005.<sup>149</sup> ICBC expects to maintain approximately 1.5 FTEs per 1,000 policies for 2012 forecast.<sup>150</sup> ICBC submits that employee numbers should be assessed in the context of ICBC's changing business needs and corporate objectives.

### **PSEC-Approved Compensation Level Changes**

90. ICBC has presented evidence regarding compensation level changes for Bargaining Unit ("BU") and Management & Confidential ("M&C") employee groups. All compensation level changes for BU and M&C have been approved by PSEC, which has a net zero compensation rate increase mandate.<sup>151</sup>

91. BU compensation changes include only BU length-of-service adjustments, together with expected changes in performance-based incentive pay (gainsharing).<sup>152</sup> Between 2006 and 2012 BU average compensation (inclusive of salary and benefits) increased by 11.5%

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<sup>147</sup> Application, p.7-13.

<sup>148</sup> Application, p.7-13.

<sup>149</sup> 2012.1 RR BCUC.86.1.

<sup>150</sup> 2012.1 RR BCUC.86.1.

<sup>151</sup> 2012.1 RR BCUC.77.0-1.

<sup>152</sup> Application, p.7-14.

or 1.92% per year.<sup>153</sup> The employee salaries and gainsharing are in keeping with the terms of the ICBC 2006 to 2010 Collective Agreement with COPE 378.<sup>154</sup>

92. Approximately \$17 million of a total increase of \$44 million for M&C compensation cost between 2007 and 2012 is due to ICBC's adoption of a labour market position, performance based wage adjustments, and benefits cost increases (the remaining \$27 million is associated with increases in the number of M&C FTEs).<sup>155</sup> However, M&C compensation changes are not a driver of the PY 2012 rate indication.

93. IRs on M&C compensation level increases focussed on labour market positioning and performance-based compensation programs approved by PSEC in 2007. ICBC's explanation of these increases was as follows:

- The adoption of a labour market position in 2007, following PSEC approval, allowed ICBC to align the salary ranges in the management compensation plan with the markets in which ICBC competes for talent.<sup>156</sup> ICBC aims for the market median (P50) for similar positions.<sup>157</sup> The mix of market comparators most accurately reflects ICBC's role as a large Crown Corporation.<sup>158</sup> ICBC's M&C salary structure is based on established salary ranges, and within each range individual employees progress through the salary range based on their individual performance.<sup>159</sup>
- ICBC's strong annual performance results between 2007 and 2010 impacted favourably the level of performance-based incentive payments under the Short-

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<sup>153</sup> 2012.1 RR BCUC.81.3-5.

<sup>154</sup> 2012.1 RR BCUC.77.0-1

<sup>155</sup> 2012.1 RR BCUC.76.2.

<sup>156</sup> Application, p.7-14; 2012.1 RR BCUC.77.0-1; 2012.1 RR BCUC 76.2.

<sup>157</sup> Application, p.7-17; 2012.1 RR BCUC 76.2.

<sup>158</sup> The comparator groups are Canadian Insurance Companies with assets between \$1 billion and \$15 billion, Canadian Broad Industry with revenue between \$1 billion and \$10 billion, and Canadian Government, Quasi-Government and Crown Corporations: Application, pp.7-17 to 7-18. See also: 2012.1 RR BCUC 76.2.

<sup>159</sup> 2012.1 RR BCUC.81.1-2.

Term Incentive Program ("STIP").<sup>160</sup> The STIP provides an incentive to employees to focus their efforts on agreed-upon objectives that are important to customers and to the corporate strategy.<sup>161</sup> Performance-based compensation is common in public and private sector organizations, including many insurance companies.

94. Since 2007, ICBC has increased the governance and rigour of its M&C compensation system, including: implementing quarterly and annual performance management reviews for each employee; shifting to a performance-based culture by eliminating automatic, fixed salary progression based on tenure in favour of movement through salary ranges based on performance only; capping the pension indexing for M&C employees; and, introducing a financial trigger in the STIP program.<sup>162</sup>

95. Some IRs addressed the magnitude of STIP pay-outs between 2007 and 2010. ICBC's STIP plan includes Corporate, Divisional and Individual measures. Recognition and subsequent reward payment for each component varies on a calibrated scale between 0% and 150% based upon actual results.<sup>163</sup> Individual performance is evaluated against a pre-developed annual performance plan. ICBC delivered strong annual performance results between 2007 and 2010, which impacted favourably the level of STIP payouts during that period. However, ICBC refined the STIP in 2011 to incorporate a financial trigger; ICBC must now meet a minimum level of annual target net income before STIP is paid. ICBC did not achieve its net income target in 2011, and STIP was adversely affected. ICBC's Executive Committee, for instance, experienced a year over year reduction in STIP of 52%.<sup>164</sup>

96. The 2012 STIP will again be dependent on actual performance results. If a corporate net loss is incurred in 2012, no STIP will be paid to any M&C group employees. If ICBC achieves between \$0 and less than 75% of 2012 corporate net income target, different

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<sup>160</sup> 2012.1 RR BCUC.81.1-2.

<sup>161</sup> 2012.1 RR.BCUC.82.1.

<sup>162</sup> 2012.1 RR BCUC.76.2.

<sup>163</sup> 2012.1 RR BCUC.82.2, Attachment A, STIP Methodology.

<sup>164</sup> 2012.2 RR BCUC.168.1; 2012.2 RR BCOAPO.31.2.

portions of the STIP components by employee group may be reduced or eliminated. If ICBC's corporate net income level is 75% or higher of the 2012 corporate net income target, STIP will pay out in accordance with its achievement levels against Corporate, Divisional and Individual targets.<sup>165</sup> ICBC also has high performance expectations and standards for individual employees.<sup>166</sup>

97. The potential for STIP pay-outs to impact overall Basic insurance costs is limited. Performance-based incentive pay is a very small component of ICBC's overall operating expenses (less than 3%), and operating expenses represent a small percentage of ICBC's total costs.<sup>167</sup>

#### Change in Employee Mix Due to Business Requirements

98. The number of FTEs in the M&C group has increased by 27% between 2007 and forecast 2012, while the number of BU FTEs has dropped by 4%.<sup>168</sup> As the remuneration of M&C employees is, in general, greater than the remuneration of BU employees, the change in employee mix has contributed to the overall compensation cost increase between 2007 and 2012 forecast.<sup>169</sup> The change in employee mix is due to two factors.

- First, ICBC has sought personnel from the private sector with skill sets that are not available within ICBC and have not been traditionally represented by the union in its ICBC BU.<sup>170</sup>
- Second, ICBC has identified instances where hiring additional management oversight is beneficial to address span of control, improve claims handling quality, and manage risk effectively.<sup>171</sup> Overall, the new M&C employees consist

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<sup>165</sup> 2012.2 RR BCUC.168.2.

<sup>166</sup> 2012.2 RR BCOAPO.31.4.

<sup>167</sup> 2012.2 RR BCUC.168.1.

<sup>168</sup> Application, p.7-15; 2012.1 RR BCUC.78.3.

<sup>169</sup> Application, p.7-16.

<sup>170</sup> 2012.1 RR BCUC.80.1.

<sup>171</sup> 2012.1 RR BCUC.81.3-5.

of Confidential FTEs who possess technical or specialized skills, and managers who oversee and implement the changes to ICBC's current business model.<sup>172</sup>

A detailed explanation of the change in employee mix by Division is provided in the response to 2012.1 RR BCUC.78.4.1.<sup>173</sup>

***Past Variances From Forecast are Not Indicative of Current Experience***

99. ICBC's experience of having favourable variances in operating expenses between 2006 and 2010 should not be extrapolated to 2012. Variances in 2006 to 2009 were largely due to one-off items (e.g., Collective Agreement negotiations, timing of expenses that are subject to government influence such as ISC Upgrades), and fluctuations in pension expense primarily due to changes in the discount rate.<sup>174</sup> The variance in 2010 was largely due to the secondment of staff to work on TP projects that are funded by Optional insurance.<sup>175</sup> The variance in 2011 was the result of a deliberate change in approach in management of operating expenses part way through 2011 that was intended to reduce pressure on rates for 2012.<sup>176</sup> That change in approach, the initiation of a suite of cost control measures, accounted for a savings of \$26 million. There is every reason to expect that the available savings have been realized and appropriately reflected in the 2012 forecast used for the PY 2012 rate indication.

100. ICBC has been highly motivated to seek out the available means of reducing the PY 2012 rate indication. Reducing operating expenses has been a key focus. ICBC's forecast of operating expenses is a sound basis upon which to fix rates for PY 2012.

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<sup>172</sup> Application, p.7-16; 2012.1 RR BCUC. 78.5.

<sup>173</sup> 2012.1 RR BCUC.78.5; 79.1; 79.2; 79.3; 80.1; 80.2 and 81.3-5. Application, pp. 7-15 to 7-16.

<sup>174</sup> 2012.1 RR BCUC.87.2 to 87.4.

<sup>175</sup> 2012.1 RR BCUC.87.2 to 87.4.

<sup>176</sup> 2012.1 RR BCUC.87.2 to 87.4.

**(c) TP Costs Allocated to Optional Insurance**

101. TP costs have been allocated 100% to Optional insurance as required by the *Government Directive regarding the Transformation Program*.<sup>177</sup> TP is currently transitioning from a planning and design phase into a major construction phase. ICBC is making good progress on replacing its aging technology and processes. However, no quantifiable TP benefits are expected to be realized for the 2012 policy year. ICBC expects that TP benefits will flow through subsequent policy years, and ICBC will report to the Commission regarding any implications for Basic insurance rates in future filings.<sup>178</sup> While financial benefits are an important outcome of TP, ICBC needed to replace its aging systems and processes regardless of the achievement of those benefits, in order to maintain services to customers.<sup>179</sup>

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<sup>177</sup> Application, p.7-2.

<sup>178</sup> 2012.1 RR BCUC.71.2.

<sup>179</sup> 2012.1 RR BCUC.71.2.

## **PART FOUR CONCLUSION**

102. The PY 2012 actuarial rate indication reflects the proverbial “perfect storm” of increasing BI claims frequency, historically low interest rates and challenging investment markets, occurring at a time when there is no excess Basic capital available to offset a portion of the rate indication. The most recent information available, which shows further deterioration in loss costs and investment income and the potential for a further increase in PY 2013, speaks to the reasonableness of the proposed rate indication.

103. The evidence before the Commission is that a number of the drivers of the rate indication are outside of ICBC’s control, and where ICBC is capable of influencing Basic insurance costs it has taken appropriate steps in that regard. ICBC’s investment income (+2.5 percentage points) is the product of interest rates, and the forecasts of interest rates for the NMR are based on a Commission-approved methodology. The loss cost forecast variance (+5.5 percentage points) relies on known claims data that has emerged since the 2010 SRRA. ICBC has contained operating expense increases through successful cost control measures. Operating expenses do not contribute to the rate indication despite ICBC’s investment in claims initiatives, new government initiatives, a skilled workforce, and aging facilities. The adoption of IFRS (+0.4 percentage points) is unavoidable. Capital provisions (+0.3 percentage points) are dictated by elements of the CMP that were affirmed by the *2010 Government Directive regarding Basic Excess Capital*.

104. In determining the loss trend to PY 2012, ICBC has employed techniques and assumptions that are in compliance with AAP and yield unbiased best estimates based on the available data. ICBC’s actuaries were faced with significant uncertainty in the BI frequency data in preparing the rate indication, including the potential emergence of a new and less favourable BI frequency trend. ICBC’s use of the long-term BI frequency trend for PY 2012 avoids undue

reliance on both the unusually favourable experience in 2008 and 2009 and the unfavourable experience in 2011. The unfavourable experience in 2011 is continuing in 2012.

105. ICBC's application of AAP to forecast the required costs of Basic insurance for PY minimizes the potential for significant variances that can impact rates in subsequent years. In doing so, it promotes relative rate stability and predictability. Under the proposed rate increase, ICBC expects that Basic capital will remain above the regulatory minimum. ICBC thus submits that the requested 11.2% increase in Basic insurance rates is just and reasonable and should be approved on the terms set out in Chapter 1 of the Application.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: June 8, 2012

*[original signed by Matthew Ghikas]*  
**Matthew Ghikas**  
**Counsel for the Insurance Corporation of**  
**British Columbia**