Eckler
CONSULTANTS + ACTUARIES

Eckler Ltd.
110 Sheppard Ave. East, Suite 900
Toronto, Ontario M2N 7A3
Canada

Tel 416-429-3330 **Fax** 416-696-3040
www.eckler.ca

Writer's Tel 416-696-3011
Email bweiland@eckler.ca

24 January 2018

Ms. Joy MacPhail
Chair, Board of Directors
Insurance Corporation of British Columbia
151 West Esplanade
North Vancouver, BC – V7M 3H9

Dear Ms. MacPhail:

In my capacity as the external actuary appointed by the Board of Directors of ICBC to provide an opinion each year on the appropriateness under accepted actuarial practice in Canada ("AAP") of the amount of the policy liabilities shown in the Corporation's audited financial statements and also as the actuary who provided an opinion that the indicated rate changes in the Revenue Requirement Applications ("RRA") are in accordance with accepted actuarial practice in Canada, I am writing to you, at your request, to respond to two specific criticisms that were part of the paper, *Separating Fact From Alarmist Forecasting in ICBC's Alleged Rate Gap* ("TLABC Paper") by the Trial Lawyers Association of BC. The two criticisms I am addressing in this letter are those relating to the projection of investment income and the methodology used to project the anticipated number of bodily injury claims. Please note that even though I only have addressed these two items, this does not imply agreement with any of the other conclusions provided in the TLABC Paper.

Before I discuss the specifics of these two matters, I want to articulate some aspects of accepted actuarial practice in Canada that are relevant.

First, under AAP the rate indication determines the indicated rate at which the present value of cash flows relating to revenue (i.e., premium and investment income) equals the present value of cash flows relating to the corresponding claim and expenses costs, over the period represented by the 2017 Policy Year (November 1, 2017 to October 31, 2018). The report date for rate indications is the date on which the actuaries complete their work, in this case September 15, 2017, although due to the extensive time required for analysis and preparation of documentation for review by BCUC and others, information available until about June 2017 was considered in the rate indication. Under AAP, any information which arises after the report date, for instance changes to the new money rate, would not be considered. If for some reason the rate indication was updated after the report date, then the update of information would not be done in a piecemeal fashion but instead would consider updates to all information underlying the rate indications.

Secondly, under AAP the actuary is required under the Standards of Practice of the Canadian Institute of Actuaries to select assumptions that are in aggregate appropriate and which are reasonable when taken individually (i.e., assumptions are to be independently reasonable). This means, for instance, that when the actuary selects assumptions for claims frequency and claims severity that these assumptions must be appropriate when taken together and must also be reasonable on a standalone basis.

Investment Income – Pages 11-12

The TLABC Paper suggests that ICBC's investment income forecast is too low in its Revenue Requirement Application filed in September 2017. To support this point, the TLABC Paper notes interest rate forecasts projected from December 2017 and January 2018, which is after the September 15, 2017 report date for the filing. These forecasts were higher than the forecasted rates of return that ICBC used in preparing its rate indication (ICBC's rate filing relied on June 2017 interest rate forecasts). As noted above, it would not be consistent with AAP to recognize these higher forecasted rates in the 2017 RRA without considering changes to the other assumptions underlying the indications.

ICBC updates its rate and claims cost assumptions quarterly and provides these updates to its Board of Directors as part of its revisions to rate and net income outlooks. Each quarterly outlook includes up-to-date interest rate forecasts to that quarter, in its projections for investment income and those quarterly outlooks consider updated information for all other data types.

Differences are expected to occur as a matter of course after a rate filing is submitted, owing to the inherent volatility of claims costs and investment income. Differences that occurred after the most recent rate filing would normally be reflected in the next rate application. Because under AAP an actuary is required to select assumptions that are independently reasonable and appropriate in the aggregate, assumptions relating to investment income would only be used to update forecasts, including those in a future rate filing, if the update included other new information that impacts rate requirements as well, such as Basic claims costs. Recent trends in Basic claims costs suggest that an update of all relevant information is unlikely to reduce ICBC's assumptions relating to the level of rate need.

It is my opinion that the assumptions used by ICBC in its most recent rate filing were appropriate at the time the work was done. Although the investment income would be greater based on updated forecasts, it is unlikely that the rate need would be lower if all other assumptions were updated to reflect the latest information available.

Change in Counting BI Claims – Pages 21-25

The TLABC Paper suggests that ICBC should have used a 3.4% bodily injury ("BI") frequency trend rather than a 5.5% trend by including claims without payment ("CWP") in the analysis, consistent with ICBC's methodology before 2016. If this had been done, the TLABC Paper argues that this would have substantially decreased the current trend assumptions made by ICBC.

ICBC's claim cost trends are a function of both the number of claims (frequency) and the cost per claim (severity). While the exclusion of CWPs increases the frequency trend observed in recent years, this treatment of CWPs also reduces the severity trend: since the number of CWP claims (each contributing $0) have declined over recent years, by excluding these claims from the severity estimates, historical severities are increased more than recent severities, thus producing a lower trend. ICBC made this change in the 2016 RRA, and demonstrated at the time that it had no significant impact on the forecasted loss amounts nor overall loss cost trends.

As ICBC explained in the 2016 RRA, since the number of CWPs had declined over recent years, ICBC's actuaries chose to exclude these claims for reporting purposes in order to remove the volatility and underlying impacts on frequency and severity trends caused by changes in CWP counts year over year. Determining claim costs on a compensable claim basis improves the ability to recognize and identify meaningful loss trends when the proportion of CWP claims is shifting significantly. As well, this approach increases the stability of loss trend models.

Applying the methodology change to frequency only (as opposed to frequency and severity), as is suggested in the TLABC Paper, would be inconsistent with AAP. This was clearly noted in the 2016 Revenue Requirements Application although the relevant reference did not form part of the quote provided in the TLABC Paper (the underlined portion shown below was omitted from the quote in the TLABC Paper):

"...once the CWPs are excluded from the frequency analysis, the BI frequency for compensable claims exhibits an upward trend while BI severity for compensable claims exhibits a lower trend than shown in previous filings."[1]

Removing CWPs from their BI frequency analysis enabled ICBC to appropriately forecast the upward BI frequency trend of compensable claims, however offset with a lower BI severity trend. When combining the frequency and severity trends, it has led to very similar loss cost trends for all coverages (see last 2 columns in figure below) before and after the change in methodology. The overall impact on the rate change to cover costs of the change in treatment of CWPs was estimated at +0.1 percentage points of rate impact. The figure below is directly copied from the 2016 RRA which provides the overall impact to loss cost as a result of moving to a compensable claim basis.

Analyzing the trends excluding CWPs is an appropriate method and is consistent with AAP. Further, excluding CWPs is a standard approach to reporting insurance industry results. Reports from the national reporting agency, the General Insurance Statistical Agency, are standard reports of aggregated insurance industry data used in other jurisdictions to allow individual companies to compare themselves to industry averages. These reports present frequency and severity data excluding CWPs.

PY 2015 Loss Cost Trends as at May 31, 2015 Restated excluding CWP Claims

	Frequency		Severity		Loss Cost	
	2015 Application	Restated	2015 Application	Restated	2015 Application	Restated
BI	0.0%	2.0%	5.3%	3.1%	5.3%	5.2%
PD	-0.9%	-1.2%	1.7%	1.9%	0.7%	0.7%
MR	0.0%	0.0%	3.0%	3.3%	3.0%	3.3%
WB	-0.2%	-0.2%	3.2%	3.9%	3.0%	3.7%
DB	-6.2%	-6.7%	0.0%	0.0%	-6.2%	-6.7%

Notes to Table:

1. Frequency is defined as a ratio of claim counts to policy exposures (full-year policies)
2. Severity is defined as a ratio of losses to claim counts
3. Loss Cost is defined as a ratio of losses to policy exposures. It can also be calculated as the product of Frequency and Severity
4. The trends shown under the columns labeled "2015 Application" include CWPs.
5. The trends shown under the columns labeled "Restated" exclude CWPs

It is my opinion that it was appropriate for ICBC to exclude CWPs from its claims trend analysis beginning in 2016. Further, had ICBC continued to include CWPs in both its frequency and severity trend analysis, this would have had almost no impact on its estimated rate need.

[1] RRA 2016, Chapter 2, p. 2-28

Summary

In summary, these two arguments I have been asked to review in the TLABC Paper do not have any substance that would change ICBC's calculations, or the result of those calculations, relating to its policy year 2017 rate requirements.

I am available to discuss this letter and the TLABC Paper, if that would be helpful.

Yours truly,

W.T. Weiland

William T. Weiland, FCIA, FCAS

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