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August 31, 2018

British Columbia Utilities Commission
Suite 410
900 Howe Street
Vancouver, BC V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary and Manager, Regulatory Services

Re: Errata & Clarification to ICBC's 2018 Basic Insurance Rate Design Application

Dear Mr. Wruck:

On reviewing ICBC's 2018 Basic Insurance Rate Design Application (Application) filed on August 15, 2018, it has come to ICBC's attention that there is a mislabeling of Table 2 on page 11 of Schedule D of the Basic Insurance Tariff (Tariff) provided in Appendix B of the Application.

The mislabeling is in the column headings. The number "3" in the column headings, "Number of CCPs Aged Less than 3 Whole Years" and "Number of CCPs Aged 3 or More Whole Years", should be the number "2". The values that are presented in the table are based on a statistical analysis in accordance with accepted actuarial practice using the number of CCPs aged less than 2 whole years and the number of CCPs aged 2 or more whole years. The column headings do not accurately represent the values in the table nor the analysis that was undertaken to develop the table.

The mislabeled number was carried forward into the Application and is referenced on Chapter 3, page 3-12, in paragraph 27. Any occurrence of "three years" in that paragraph should be "two years".

In addition, there is a typographical error in Chapter 3, page 3-21, paragraph 47. The figure referred to in the last sentence should be Figure 3.12, not Figure 3.10.

ICBC also wishes to clarify two sentences in Chapter 3; one on page 3-25 in paragraph 62, and the other on page 3-26 in paragraph 64. Upon review, ICBC believes that the original sentences do not clearly describe what ICBC did to develop the off-balance factors for each of the three elements.

Instead, the sentence in paragraph 62 should read, with the clarifications underlined:

> Each off-balance factor was developed by comparing the premium that was collected during <u>calendar policy year 2016 (with transactions through October 31, 2017)</u> (i.e., prior to the rate design changes) and the estimate of premium that would be collected had the new rate design changes been in place for that same period.

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Similarly, the sentence in paragraph 64 should read, with the clarifications underlined:

> Each of the steps described above used actual calendar policy year 2016 Basic insurance transactional data from January 1, 2016 to October 31, 2017.

Please find attached page 11 of Schedule D of the Tariff, and the revised Chapter 3, pages 3-12, 3-21, 3-25, and 3-26 with the above corrections and clarifications.

Please accept our apologies for any inconvenience this may have caused.

Yours truly,

June Elder

June Elder
Manager, Corporate Regulatory Affairs

Cc: Registered Interveners
Nicolas Jimenez, President and CEO, ICBC

Attachments

and that individuals may have chosen to repay these claims had they been aware of the impacts. The $2,000 threshold is the same as the claim repayment threshold discussed above.

C.3.1.3 IMPACT FROM AT-FAULT CRASH

25. The timing of an at-fault crash directly relates to the level of risk for a future crash; more recent crashes (i.e., higher risk) have a higher premium impact compared to the premium impact of older at-fault crashes. In other words, based on actuarial analysis of ICBC's historical data, the annual impact on premium of the at-fault crash will decrease over the 10-year period since the risk of a driver having an additional at-fault crash decreases over time. This is reflected in the Experience Factor. Once it has been determined that a driver has an at-fault crash, that has not been repaid or is not eligible for claim forgiveness, a driver's Experience Factor will increase for the following 10 years compared to the Experience Factor of a driver with the same years of experience and no at-fault crashes.

C.3.2 MULTIPLE CHARGEABLE CLAIM PAYMENT FACTOR

26. The Multiple CCP Factor (MCF) will replace the current Multiple Crash Premium (MCP).[11] The MCF is based on both; i) a driver's total number of at-fault crashes, and ii) the distribution of those crashes across the scan period, with more recent crashes being weighted more heavily.

27. The Experience Factor described above considers only a driver's most recent at-fault crash. All other at-fault crashes in a driver's crash history are defined as additional crashes, and are taken into consideration through the MCF. The MCF considers two categories of additional crashes, or crash age groups; i) the number of at-fault crashes less than two years old, and ii) the number of at-fault crashes two years old or older, up to the end of the scan period. The distinction is made between at-fault crashes that are less than two years old and those at-fault crashes that are two years old or more to enable a higher factor to be applied to the more recent crashes given the higher risk associated with them. ICBC's claims data shows that drivers with recent at-fault crashes have a higher incidence of subsequent at-fault crashes than those with an older at-fault crash.

[11] The MCP applies to drivers who have had three at-fault crashes in three years, and are 50 per cent or more at-fault on those crashes. The MCP is $1,000 and, for each additional at-fault crash within three years, the driver pays an extra $500.

capped by the minimum allowable CDF, however at a lower amount of 0.510. It will not be until year three when the certificate will have the full discount factor of 0.480 available. To account for those certificates that have a Senior Driver Factor less than 1.0, the Minimum CDF is reduced as shown in Figure 3.12 below under the heading "Senior Minimum CDF".

Figure 3.12 – Minimum CDF

Certificate with Effective Date Between	Minimum CDF	Senior Minimum CDF
September 1, 2019 – August 31, 2020	0.540	0.415
September 1, 2020 – August 31, 2021	0.510	0.410
September 1, 2021 – August 31, 2022	0.480	0.405

48. The minimum CDF applies to all Basic insurance certificates for which a CDF is calculated, whether renewing or new business. This ensures that all customers with similar rating factors will be charged the same premium during this transition period.

49. Both upward and downward transitioning is anticipated to impact approximately half of current customers. It is estimated that 7% of customers will have their increases capped. The customer impacts of applying these transitioning rules are summarized below in Section D.2, which shows the total customer impact of the new rate design before and after these transitioning rules are applied.

C.8 NON-MULTIPLICATIVE COMPONENTS

50. There are three additional non-multiplicative components that may enter into the calculation of a customer's premium, each of which is an addition to the premium determined by the multiplication of the factors described above. Non-multiplicative components are added (not multiplied) in the new rating algorithm. These components are; i) the Learner Premium, ii) the Unlisted Driver Accident Premium, and iii) the Unlisted Driver Protection Premium.

C.8.1 LEARNER PREMIUM

51. The Learner Premium is charged when a combination of learners and non-learners are listed on a Basic insurance certificate.

52. A learner is a driver who holds a class 5L, 6L, 7L, or 8L BC driver's licence. Based on the 2018 Government Directive regarding Rate Design, during the period that a driver is

62. Actuarial analysis computes off-balance factors that ensure the indicated changes to the rating factors that are part of the rate design rating algorithm are revenue neutral. Each off-balance factor was developed by comparing the premium that was collected during calendar policy year 2016 (with transactions through October 31, 2017) (i.e., prior to the rate design changes) and the estimate of premium that would be collected had the new rate design changes been in place for that same period. Any difference in these amounts was accounted for by implementing an off-balance factor to ensure the collected premiums were the same, in aggregate.

63. Revenue neutrality was broken down between three categories within the overall rate design; i) policy or vehicle based elements; e.g., Distance Factor, ii) IDF elements; e.g., SDF, and iii) elements related to managing transition; e.g., Transition Factor. Each category requires a different process to achieve revenue neutrality which is further described below:

i) Policy or vehicle-based elements – revenue neutrality achieved through an off-balance factor applied to all Rate Class and Territory Factors.

- Rate Class and Territory Factors were first calculated using actuarial analysis based on historical data and statistical models representing the actual risk relativities between each rate class and territory segment. However, the introduction of the additional rating factors including the ASTF, Distance Factor, and Learner Premium resulted in an overall reduction in premium. In order to offset these decreases, all Rate Class and Territory Factors were adjusted by an off-balance factor of 1.005.

ii) IDF elements – revenue neutrality achieved through an off-balance factor applied to Experience Factor.

- The Experience Factor and the MCF were set at a level using actuarial analysis based on historical data and statistical models. However, with the introduction of additional rating factors and design elements, including the SDF, claim forgiveness, claim repayment and the phase-in to the full 10-year scan period, resulted in an overall reduction in premium. In order to offset these decreases, all values of the Experience Factor table were adjusted by an off-balance factor of 1.151.

iii) Transition elements – revenue neutrality achieved through the introduction of a minimum CDF.

- Since transition is temporary, revenue neutrality is handled differently for this component. Rather than applying an off-balance factor, the values for the minimum CDF were selected to offset the expected reduction in premium caused by the introduction of a Transition Factor as described in Section C.7.1.

64. Each of the steps described above used actual calendar policy year 2016 Basic insurance transactional data from January 1, 2016 to October 31, 2017. It was assumed that these transactions are a reasonable representation of the mix of drivers and policies to assess revenue neutrality for the first year of implementation. Given that ICBC has no knowledge or other comparative data on how customers will respond to these changes, it was also assumed that there would be no change in either customer mix or customer behaviour as a result of the new rate design.

D.2 CUSTOMER IMPACTS

65. The dollar impact of the rate design on existing certificates is summarized in Figures 3.14 and 3.15 below. Figure 3.14 shows the distribution of the full dollar impact for renewing Basic insurance certificates comparing the annual premium under the current rate design to the renewal annual premium under the new rate design (assuming no overall Basic rate changes will occur in the year and no transition factor is applied).

66. Figure 3.15 shows the distribution of the dollar impact after applying the Transition Factor to cap the upward movement and the minimum CDF rules to cap the downward movement. Based on Figure 3.15, approximately one-third of renewing customers will see an increase in their premium as a result of the changes in the rate design and two-thirds will see a decrease. The majority of customers that will experience significant increases in their premiums are those whose policies cover drivers with multiple historical at-fault crashes in the last three years. Customers with moderate increases include those policies that cover inexperienced drivers and those who live in Lower Mainland. Customers that will experience significant decreases are primarily those whose policies insure experienced drivers that are free of at-fault crashes and living in the northern territories or policies that had historical crashes caused by drivers currently not listed on the Basic insurance certificate.

Driving Experience (Whole Years)	Years Since Most Recent CCP (Whole Years)										
	No CCP in Scan Period	0	1	2	3	4	5	6	7	8	9
31	0.426	0.593	0.587	0.582	0.577	0.571	0.566	0.561	0.555	0.550	0.545
32	0.422	0.590	0.584	0.579	0.573	0.568	0.563	0.558	0.552	0.547	0.542
33	0.417	0.588	0.582	0.577	0.571	0.566	0.561	0.556	0.550	0.545	0.540
34	0.413	0.584	0.579	0.574	0.568	0.563	0.558	0.553	0.547	0.542	0.537
35	0.409	0.581	0.576	0.570	0.565	0.560	0.555	0.550	0.544	0.539	0.534
36	0.404	0.578	0.573	0.567	0.562	0.557	0.552	0.547	0.541	0.536	0.531
37	0.400	0.575	0.569	0.564	0.559	0.554	0.549	0.543	0.538	0.533	0.528
38	0.396	0.573	0.567	0.562	0.557	0.552	0.547	0.542	0.536	0.532	0.527
39	0.392	0.569	0.564	0.559	0.554	0.549	0.543	0.538	0.533	0.529	0.524
40	0.388	0.566	0.561	0.556	0.550	0.545	0.540	0.535	0.530	0.525	0.521

Table 2 - Multiple CCP Factor N

ICBC must determine the Multiple CCP Factor that applies to a person by reference to the number and age of chargeable claim payments, if any, in that person's claim payment record or personal claim payment record, as applicable, during the chargeable claim payment scan period, as set out below, without reference to a chargeable claim payment used in determining the Experience Factor in Table 1.

For the purpose of the above paragraph, the age of a chargeable claim payment is determined by the number of whole years between the date of the chargeable claim payment and the starting date of the chargeable claim payment scan period.

Number of CCPs Aged Less Than 2 Whole Years	Number of CCPs Aged 2 or More Whole Years					
	0	1	2	3	4	5+
0	1.000	1.312	1.723	2.261	2.967	3.894
1	1.523	1.998	2.623	3.442	4.518	5.930
2	2.318	3.043	3.993	5.241	6.879	9.028
3+	3.530	4.633	6.080	7.980	10.474	13.746