New Brunswick Insurance Board

DECISION

IN THE MATTER:
Of a rate revision application for the Co-operators General Insurance Company
With respect to automobile insurance rates for
Private Passenger

Hearing Dates: July 7, 2021
Written Hearing

PANEL:	Ms. Marie-Claude Doucet, LL. B.	Chair
	Ms. Ferne Ashford, LL. B.	Member
	Ms. Francine Kanhai	Member

Applicant: **Co-operators General Insurance Company**

Decision Rendered: August 13, 2021

NBIB Reference 2020-294

Summary

[1] Co-operators General Insurance Company (the "Applicant" or "CGIC") filed a Rate Revision Application (the "Filing" or the "Application") with respect to automobile insurance rates for Private Passenger Vehicles (PPV) in New Brunswick requesting approval for a proposed capped average rate increase of +6.51% uncapped (+6.68% capped) based on an indicated average rate increase of 8.88%.

[2] Pursuant to subsection 267.5(1) of the *Insurance Act,* R.S.N.B., 1973 c. I-12 (the "*Act*"), the New Brunswick Insurance Board (the "Board") convened a Panel of the Board (the "Panel") to conduct a Written Hearing (the "Hearing") on July 7, 2021 by video conference.

[3] In compliance with subsection 19.71(3) of the *Act,* the Board provided to the Office of the Attorney General ("OAG") all documents relevant to the Hearing. This documentation was also provided to the Consumer Advocate for Insurance ("CAI"). The CAI (on June 1, 2021) and OAG (on June 11, 2021) advised the Board of their intent to intervene in this matter.

[4] On June 23, 2021, the Applicant advised the Board it was amending its proposed rate change to +2.94% uncapped (+3.35% capped).

[5] On June 24, 2021, the OAG and the CAI both informed the Board of the discontinuance of their intervention in this matter.

[6] Further to the hearing, having examined the evidence, the Panel determines that the average rate change proposed by the Applicant is just and reasonable in these circumstances.

[7] The approved rates will be effective on November 17, 2021 for new business and December 17, 2021 for renewals.

Exhibits

[8] As part of the Hearing process, the Panel accepted the following Exhibits as part of the Record:

EXHIBIT	DESCRIPTION	DATE
1	Original Filing	Nov 13, 2020
2	Round 1 Questions from KPMG	Feb 12, 2021
3	Round 1 Extension Request	Feb 17, 2021
4	Round 1 Extension Granted	Feb 17, 2021
5	Round 1 Questions from NBIB	Feb 25, 2021
6	Round 1 Response to KPMG	Feb 26, 2021
7	Round 1 Response to NBIB	Mar 10, 2021
8	Round 2 Questions from KPMG	Mar 11, 2021
9	Round 2 Response to KPMG	Mar 17, 2021
10	Round 2 Questions from NBIB	Mar 23, 2021
11	Round 2 Response to NBIB	Mar 26, 2021
12	CGIC PPV RFG-1 Storyboard	Apr 19, 2021
13	Round 3 Questions from NBIB	Apr 29, 2021
14	Round 3 Response to NBIB	May 3, 2021
15	Amendment from CGIC	May 19, 2021
16	Round 4 Questions from NBIB	May 26, 2021
17	Round 4 Response to NBIB	May 26, 2021
18	CGIC PPV RFG-1 Storyboard (revised)	May 26, 2021
19	Amendment from CGIC	June 30, 2021
20	Round 3 Questions from KPMG	July 5, 2021
21	Round 3 Response to KPMG	July 5, 2021
22	CGIC PPV RFG-1 Storyboard (revised)	July 5, 2021

1. Introduction

[9] The Board is mandated by the Legislature with the general supervision of automobile insurance rates in the Province of New Brunswick. In order to fulfill that mandate, the Board exercises the

powers prescribed by the *Act*. One key responsibility for the Board is to ensure that rates charged or proposed to be charged are just and reasonable. Under the *Act*, each insurer carrying on the business of automobile insurance in the province must file with the Board the rates it proposes to charge at least once every 12 months from the date of its last filing. An insurer must appear before the Board when:

a. The Insurer files for a rate change more than twice in a 12-month period, or

b. The Insurer files rates where the average rate increase is more than 3% greater than the rates charged by it within the 12 months prior to the date on which it proposes to begin to charge the rates, or

c. The Board requires it to do so.

Procedural History

[10] The Applicant filed this Application for the PPV category on November 13, 2020. The original overall rate change indication of the Filing was +8.88% and the Applicant proposed an overall average rate increase of +8.51% uncapped (+8.61% capped).

[11] Following questions from the Board's consulting actuaries and Board staff, the Applicant submitted a final Amended Filing on June 30, 2021 decreasing its proposed rate change selection to +2.94% uncapped (+3.35% capped), but with no changes to the indicated rate change of 8.88%.

[12] The Board issued a Notice of Hearing on May 27, 2021 and convened a Panel of the Board to conduct a Hearing to consider the Application. The OAG and CAI initially intervened. However, after the Company advised their intention to lower the proposed rate change to +2.94% uncapped (+3.35% capped), both the OAG and CAI informed the Board they were discontinuing their intervention in the matter.

[13] Prior to the Hearing, three (3) rounds of questions were asked by the Board's consulting actuaries and answered by the Applicant.

[14] Finally, the virtual written Hearing in this matter was held on July 7, 2021.

2. Evidence and Positions of the Parties

Co-operators General Insurance Company

[15] The Applicant's Filing forms the main portion of its submission and of the evidence before the Panel.

[16] CGIC initially presented its Filing to the Board with an overall original rate change indication of +8.88% and proposed an overall average capped rate increase of +8.51% uncapped (+8.61% capped). The Applicant finally amended its rate application on June 30, 2021 reaching an overall selected rate change of +2.94% uncapped (+3.35% capped), maintaining its indication.

[17] The following sets out the amended indicated and the proposed changes to the existing rates by coverage:

Coverage	**Indicated**	**Uncapped Proposed**
Bodily Injury (BI)	-0.59%	-0.01%
Property Damage (PD)	-1.76%	-1.51%
Property Damage - Direct Compensation (DCPD)	+14.25%	+4.49%
Accident Benefits (AB)	+8.88%	+3.00%
Uninsured Auto (UA)	+0.94%	+0.36%
Collision	+14.10%	+4.49%
Comprehensive	+12.28%	+3.99%

Specified Perils (SP)	+12.28%	+2.61%
Underinsured Motorist (UM) – SEF44	-6.99%	0.00%
Total	+8.88%	+2.94%*

*+3.35% after capping

[18] The rate indication calculations detailed in the amended Filing incorporate various assumptions, including a target return on equity (ROE) of 12%, an implied ROE of 4.72%, a pre-tax investment rate on cash flow (ROI) of 2.00%, an investment rate on capital of 2.00% and a 2.05:1 premium to surplus ratio. If the Applicant's proposed average rate changes are approved, average rates would increase from the current average of approximately $1,003.00 to approximately $1,032.00.

[19] The Applicant submitted that the Filing was prepared utilizing sound actuarial methods and practices, that the assumptions contained therein are reasonable and that the Filing has been completed in accordance with the Filing Guidelines issued by the Board.

3. Analysis and Reasons

[20] The Panel has reviewed all of the written evidence in the Record, including the Applicant's responses to the Board analyst's and Board's consulting actuaries' queries.

[21] The Filing raised a number of issues for the Panel to consider and determine during the written Hearing. Each of those issues is discussed individually below.

1) Loss Trend Selections

[22] The selection of loss trends requires the analysis of past data and the application of professional judgment in order to select trend rates that represent past experience and future expected results for each coverage.

[23] In its Filing, the Applicant's methodology was based on the selection of factors for frequency and severity trends, then combined to determine selected loss cost trends. The Panel reviewed the loss trends selected by the Applicant in detail.

[24] As indicated above, the Applicant's provincial indication for rate change is +8.88%. Underlying this indication are important assumptions related to trends. These were reviewed by the Panel and were found to be reasonable overall. The Panel specifically considered the trend selection for the following coverages:

a. BI
b. PD
c. Collision; and
d. Comprehensive

[25] For BI frequency and severity trends, the Applicant used six years of industry data (2014 to 2019), relying only on the period post Minor Injury Regulation reform (MIR). For past and future BI frequency, the Applicant selected a trend of -6.2%. As for severity, the Applicant selected a trend rate of 6% for the past and 3% for future, resulting in a loss cost trends of -0.5% for past and -3.3% for future.

[26] The Applicant explained that, in selecting the model, it relied solely on post-reform experience to reflect recent market conditions of that period which showed a marked shift in severity trend. Consequently, the Applicant selected a past severity trend of +6% for BI based on an average of the last five- and six-years regressions. Further to the short-term analysis, CGIC applied judgement in cutting the future severity trend in half to +3% to account for the recent slow down in trend, supported by a visual inspection of the most recent data points.

[27] The Applicant found the frequency and severity models for BI to provide a good fit. While residual plots are only one way to assess goodness of fit, the statistical results obtained, such as the adjusted R-squared and p-values were also reviewed and found to also demonstrate a

good fit. For sensitivity purposes, the Board's consulting actuaries requested alternative trends, using the same trend rate for past and future severity. The alternative model produced severity trend yielding equally satisfactory goodness-of-fit statistics, and the BI indicated rate change would have increased to +3.10%. As a result, the Panel found the Applicant to have provided sufficient justifications to support the reasonableness of its selected trends in these circumstances.

[28] For the TPL-PD coverage, the Applicant used 10 years of data (2010 to 2019) for both frequency and severity, yielding trends of -4.10% and +4.10% respectively, for a past and future loss cost trend of -0.2%. While the selected severity model resulted in marginal statistical results, the Applicant applied judgement to make its selection further to a visual inspection of the sparse and volatile data. Further to the Board's consulting actuaries' request, sensitivity testing was performed using the most current six years of data as alternative PD frequency and severity trends, which would result in a rate indication decrease by 7.04% point for this coverage. The alternative models however produced poorer statistical results than the Applicant's selected models.

[29] The Applicant justified its use of 10 years of experience, in comparison to a shorter period, by the low volume of claims. The Applicant explained that using a longer trend period allows the detection of signal. The Applicant performed additional validation tests by looking at a pure premium model, which indicates a loss cost trend of 0.0%. The Applicant concluded that the result of the pure premium model is in line with the selected -0.2% combined loss cost trend. The Panel finds the TPL-PD trend selections to be reasonable in light of the rationale provided by the Applicant.

[30] In terms of the Collision coverage, the Applicant used five years of data (2015 to 2019) for frequency and 10 years of data (2010 to 2019) for severity, yielding trends of +1.0% and +3.00% respectively, for a loss cost trend of +4.0%. A low R-squared (30%) which resulted from the Applicant's frequency trend selection, indicates that the hypothesis of 0% frequency trend could not be rejected. Sensitivity testing pursuant to an alternative frequency trend of 0% was

therefore requested by the Board's consulting actuaries, which would result in a decrease in the Collision rate indication by 3.4% point. It is understood that there are multiple models that provide equally valid trend indications. The combined lost cost trend as selected by the Applicant is found to be plausible and reasonable. Additionally, the Board notes the consistency in the approach and trend results with the Applicant's previous filing.

[31] With regard to the Comprehensive and Specified Perils coverage, the Applicant selected a model using eight years (2012 to 2019) for frequency and 10 years (2010 to 2019) for severity, yielding trend rates of 0.5% and 7.0% respectively. With respect to the flattening of the severity trend observed from 2018 to 2019, the Applicant explained it did not recognize that change and added that it attempted to avoid selecting trends on short-term tendency reversals. The Applicant pointed to a similar change in the trend that occurred between 2013 and 2015, to revert in 2016. It submitted that the same pattern could occur after 2019. The Applicant added that the main trend detected was increasing so it preferred having a stable confirmation of the changing trend over a long period before reflecting it in future trend selection. Furthermore, the Applicant pointed that the industry experience does not exhibit similar flattening in the trend and rather shows an increasing severity trend in 2018-2019.

[32] Sensitivity analysis requested by the Board's actuaries using half of the past severity trend (7%) for the future at 3.5% resulted in a Comprehensive and Specified Perils decrease in indication by 7.7% point. The Applicant commented that a 3.5% future trend for this coverage would be acceptable in a situation where the trend could be confirmed over a longer and more stable period. Additionally, it argued that a change in the internal claim handling practices or new reform affecting the nature of the coverage could also justify the use of more recent experience. The Board is satisfied with the justification provided by the Applicant for its trend selection for Comprehensive and Specified Perils and find these to be reasonable.

[33] All other trend selections have been reviewed by the Board and were also found to be reasonable.

2) Expenses - Health Service Levy

[34] Pursuant to Bulletin 2018-001 issued by the Board effective January 01, 2018, Insurers are directed to use as the health service levy (hereinafter referred to as the “HSL”) the factor published by The General Insurance Statistical Agency (GISA) in exhibit AUTO 1003 - Automobile Exhibit Introduction and Actual Loss Ratio Exhibit for Atlantic Provinces.

[35] In its previous Filings, the Applicant relied on the most recent GISA AUTO 1003 exhibit to determine the health levy rate as directed by the Board. However, at the time of the production of the present filing, the 2019 GISA AUTO 1003 exhibit had not yet been published. As a result, the Applicant used the rate from the most recent notice of assessment from the New Brunswick Department of Health which had established the levy at 11.37% (based on total earned premiums for Third Party Liability and Accident Benefits) at the time.

[36] While the Panel is concerned that the HSL calculated by the Applicant based on another source than the one directed, the Panel recognizes the difference in the health levy using the adopted methodology has a negligible impact on the overall indicated rate change and the overall proposed rate change. As a result, the Panel will not require the Applicant to rely on the 2019 GISA AUTO 1003 exhibit for the purpose of the present filing. That said, adherence to Information Bulletins issued by the Board is expected and compliance to Information Bulletin 2018-001 will be monitored in future filings.

4) Profit Provision – Investment Yield

[37] In its previous year’s filing, the Applicant had used an investment yield for capital that differed from the one applied to insurance operation (policyholder funds). However, in the Filing before the Panel, the Applicant used the same investment yield for both capital and insurance operation. CGIC provided the following rational for the change in approach:

> Capital being owned by the company and not the insured, expected returns from equity investments were excluded in the ratemaking exercise. This leads to the same investment rate of return on premium and capital which is reflective of our return on fixed income investments only. This way, the expected rate of return used to recognize the time value of money in our analysis is more aligned with the expected return that would be acquired with the net cash flows resulting from the revenue at the indicated rate.
>
> While in practice, the actual investments are not segregated between policyholder supplied funds and surplus, conceptually, policyholder funds get deposited in the bonds/short term/mortgage type assets while the capital (or surplus) are invested in the equity market.

[Exhibit 9, page 1155 of the Record]

[38] Further to a sensitivity analysis requested by the Board's consulting actuaries, it was found that that to use the different investment yield (for capital/shareholder funds and policyholder funds) would decrease the overall rate indication by 2.4% points.

[39] The Panel recognizes that the methodology previously adopted by the Applicant and the methodology currently used in the present Filing stem from divergent schools of thoughts that are both reasonable in the circumstances. That being said, it is expected that the approach on investment yield employed by the Applicant would remain stable from year-to-year, unless provided with adequate rationale for the change. In the present case, the Panel accepts the rationale provided by the Applicant to use the same yield for capital and policyholder funds as being reasonable, and the Board will continue to monitor for changes in the future.

5) <u>Insurance Score as a Rating Variable</u>

[40] CGIC proposed to introduce a new rating variable with a discount structure based on an insured's individual credit information obtained with the policyholder's consent. The Applicant proposes to have the credit information refreshed on policy renewal. The credit score information would apply to the BI, PD, DCPD, Collision, Comprehensive/Specified Perils and AB

coverages. The Applicant used credit score from its home policy database to evaluate the effect of the variable in its PPV GLM analysis.

[41] The Applicant provided the following rationale to justify the fairness and reasonableness of this new rating variable:

> Personal credit score has been used for the purpose of insurance rating for the past decades and many studies have shown its statistical correlation with insurance losses and that such relationship exists even after many other variables have been taken in consideration. The use of personal credit score as a rating variable is widely used in Canada in both unregulated (Province of Quebec Auto as well as in Property outside of Newfoundland and Labrador) and regulated markets (Alberta Auto for non-mandatory coverages, Nova Scotia Auto). It is used as well in most states in the USA. On December 22, 2020, the use of personal credit score has also been recently approved in New Brunswick for one of our competitors (Intact Insurance Company). In addition to its strong correlation with insurance losses, the personal credit score variable is also considered objective and impartial. As stated in CAS principles #3, "A rate provides for the costs associated with individual risk transfer" which implies that one client does not subsidize the insurance losses of another.
>
> […]
>
> Also, per Actuarial Standard of Practice on Risk Classification (ASOP-12), "it is not necessary for the actuary to establish a cause and effect relationship between the risk characteristic and expected outcome in order to use a specific risk characteristic."
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> […]
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> As per ASOP 12, "A relationship between a risk characteristic and an expected outcome, such as cost, is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience correlates to the risk characteristic."
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> Several studies have shown that there is a correlation between the credit score and the expected costs associated with the risk. Put differently, for an identical group of insureds in every other way, insureds with favorable credit score are more likely to have better loss experience than insureds with unfavorable insurance scores. Based on this, credit score is reliable for segmenting risks into different groups with different expected cost levels. You

> can refer to the exhibit provided to question 2.i.3 of Section D for graphs showing the actual loss cost relation to the credit band in our GLM data.
>
> [Exhibit 07, page 1123 of the Record]

[42] The Panel engaged in a thorough discussion of this proposed new rating variable, and ultimately decided that the manner in which the Applicant seeks to implement this rating variable is just and reasonable for the following reasons.

[43] First, the Panel must ensure that the proposed rating variable using credit score, is not prohibited by legislation in New Brunswick, as it is in some other Canadian provinces. Despite some public discussion several years ago by legislators in this regard, no legislation was ever enacted which prohibited this approach, and the current applicable legislation and regulation do not prohibit the use of credit score as a rating variable.

[44] Secondly, the Panel considered whether the Applicant demonstrated that the approach in introducing credit score is predictive and actuarially sound. Further to a review of the comparative analysis including and excluding credit information, the Panel finds CGIC provided sufficient evidence to demonstrate that its approach is justified and reasonable from both an actuarial and statistical standpoint and accepts the Applicant's approach.

[45] The Panel recognized that the use of credit score as a rating variable in this specific case raises certain issues/concerns, including, but not limited to; causal effect and link to risk. Based on the circumstances of this Filing, and the evidence contained in the Record, the Panel concludes that the Applicant's proposed use of credit score as a rating variable is predictive in terms of loss experience, fairly applied and not prohibited by legislation.

[46] For future filings, it is expected that the Applicant would update the Board regarding the impact of the implementation of the credit score variable and confirm that the actual dislocation does not deviate significantly from that which was anticipated in this Filing.

6) COVID-19

[47] In its analysis, the Applicant relies on data pre COVID-19 pandemic historical experience. CGIC's current Filing includes historical data which ends on December 31, 2019 which has not been affected by the pandemic, and therefore did not require adjustment. As for the future effect, the Applicant indicates that the information regarding the effect of COVID-19 is too sparse to make any adjustment for the projected period at this time, and that the impact of COVID-19 is uncertain. The Applicant made the assumption that the post-COVID-19 experience will be similar to the pre-COVID-19 experience. CGIC provided the following explanation:

> Using an internal data source, data from the 4 Atlantic provinces was combined to draw comparisons between the pre-COVID-19 period and the COVID-19 period. For the injury coverages in particular, this increased our data credibility, compared to if we had analyzed 1 Atlantic province (ie. New Brunswick) on its own. We believe combining the Atlantic data is a reasonable approach for considering COVID-19 impacts, in addition to data credibility, given the similarities between these 4 provinces including the COVID-19 "Atlantic bubble."
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> While lower collision frequency has been observed between the pre-COVID-19 period and the COVID-19 period, it is certainly less dramatic in the Atlantic provinces when compared to the rest of the country. For this reason, combined with the ongoing vaccination roll-out, our expectation that the province won't face additional lockdowns after September 2021 and other factors, our view is that for the period that rates will be in effect, consumer and driver behaviours will be similar to the pre-COVID-19 period. Therefore, the expected experience in the period for which the rates will be effective will be similar to the pre-COVID-19 period. We acknowledge that more New Brunswickers may choose to work virtually post-COVID-19, which likely means less cars on the road and fewer accidents on its own. However, we are also mindful of de-urbanization and the fact that more Canadians are moving to the Atlantic provinces, which may counter the shift to virtual work.
>
> We believe there are still a lot of uncertainties regarding the post-COVID-19 period but, considering all of the factors and what is known today, we stand by our assumption that the pre-COVID-19 period will be similar to the post-COVID-19 period.
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> [Exhibit 6, page 1085 of the Record]

[48] As a result of COVID-19, the Applicant provided temporary relief measures to its policyholders in the form of refunds. However, this measure did not bear any impact on the on-level calculation and premium trends in the present Filing given the premiums for 2020 were not part of the Applicant's analysis.

[49] Ultimately, the Panel finds the approach adopted by the Applicant to be reasonable at this time and notes that the Board will continue to monitor the ever-changing circumstances to ensure reasonableness of the rates.

4. Decision

[50] For the reasons set out above, the Panel finds the Applicant's Filing is just and reasonable and the Applicant is **approved to adopt the proposed average rate change of +2.94 uncapped (+3.35% Capped).**

[51] The approved rates will be effective on November 17, 2021 for new and on December 17, 2021 for renewal business.

Dated at Saint John, New Brunswick, on August 13, 2021.

Marie-Claude Doucet, Panel Chair
New Brunswick Insurance Board

WE CONCUR:

Ferne Ashford, Board Member

Francine Kanhai, Board Member