New Brunswick Insurance Board

DECISION

IN THE MATTER:
Of a rate revision application for the **AVIVA INSURANCE COMPANY OF CANADA**
With respect to automobile insurance rates for
Private Passenger Vehicles

Written Hearing Held:

May 20, 2020

Saint John, New Brunswick

PANEL:	Ms. Marie-Claude Doucet, LL.B.	Chair
	Ms. Francine Kanhai	Member
	Ms. Heather Stephen	Member
Applicant:	**Aviva Insurance Company of Canada**	
Intervenors:	**Office of the Attorney General**	Michael L. Hynes
	Consumer Advocate for Insurance	Michèle Pelletier

Decision Rendered: July 2, 2020

Summary

[1] The Applicant, Aviva Insurance Company of Canada, (the "Applicant" or "Aviva") filed a rate revision application (the “Filing”), requesting approval for a proposed average rate increase of +9.31%, based on an indicated rate increase of +12.09% for automobile insurance rates for Private Passenger (PPV) in New Brunswick.

[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 to conduct a written hearing (the “Hearing”) on May 20, 2020.

[3] In compliance with subsection 19.71(4) of the *Act*, the Office of the Attorney General (“OAG”) intervened, questioned the Applicant by way of written interrogatories and presented written submissions along with an expert actuarial report from Oliver Wyman. The Office of the Consumer Advocate for Insurance (“CAI”) intervened as well, supported the position of the OAG, and presented a written submission.

[4] On May 22, 2020, following the Hearing, the Panel ordered the Applicant to provide three sets of revised provincial indications with the following adjustments:

1) Bodily Injury Frequency Trend:

   a. Use the frequency trend model with start date 2006-01 using Time, Seasonality and Minor Injury Regulation (MIR) as shown in Aviva’s final submission on page 29. This frequency trend model will be used in conjunction with each of the severity trend models requested below;

2) Bodily Injury Severity Trend:

   a. Use a severity trend model with start date 2006-01 without seasonality and MIR variables;
   b. Use a severity trend model with start date 2006-02 without seasonality and MIR variables; and
   c. Use a severity trend model with start date 2007-01 without seasonality and MIR variables.

[5] These changes, submitted on May 27, 2020 resulted in a decrease to the Applicant's overall rate indication from +12.09% to +10.62%, +10.70% and +10.72%, respectively.

[6] On June 2, 2020, the Panel required revised indications as follows:

1) Removal of the legislative adjustment included to reflect the indexation of the MIR cap for Bodily Injury and Uninsured Automobile;
2) Change in the Bodily Injury to:
   a. Use a severity trend model with start date 2006-02 without seasonality and MIR variables; and
   b. Use the frequency trend model with start date 2006-01 using Time, Seasonality and MIR,
3) Amend the SEF 44 trend to reflect the change in the Bodily Injury trend.

[7] As a result of the revisions contained in the response dated June 5, 2020, the indication was decreased from +12.09% to +10.63%.

[8] On June 11, 2020, the Panel required further revised indications to amend the Accident Benefits loss trend to use a past and future severity trend of 0.0% in conjunction with the past and future frequency trend of 0.0%, resulting in a loss cost trend rate of 0.0% per annum.

[9] Aviva responded to the request for further revisions on June 12, 2020. The new indicated rate, taking into account all of the revisions was +10.31%.

[10] The Panel, after examining the evidence and submissions made by all parties, determines that the indication proposed by the Applicant must be modified.

[11] The Applicant is ordered to incorporate changes to the rate application as noted in the Response to the Request for Revision dated June 12, 2020 and is **approved to adopt the proposed average rate change of +9.31%.**

[12] The approved rates will be effective on November 1, 2020 for new business and for renewal business.

Exhibits

[13] For the purpose of the Hearing the Panel accepted the following exhibits as part of the Record:

EXHIBIT	DESCRIPTION	DATE
1	Original Filing	July 25, 2019
2	Round 1 Questions from NBIB	Oct 2, 2019
3	Round 1 Questions from Eckler	Oct 9, 2019
4	Round 1 Response to NBIB	Oct 11, 2019
5	Round 1 Response to Eckler	Oct 16, 2019
6	Round 2 Questions from Eckler	Oct 28, 2019
7	Round 2 Questions from NBIB	Oct 29, 2019
8	Round 2 Response to Eckler	Nov 1, 2019
9	Round 2 Response to NBIB	Nov 1, 2019
10	Round 3 Questions from Eckler	Dec 3, 2019
11	Round 3 Response to Eckler	Dec 9, 2019
12	Eckler Actuarial Review Summary	Jan 9, 2020
13	Round 3 Questions from NBIB	Feb 4, 2020
14	Round 3 Response to NBIB	Feb 10, 2020
15	Round 1 Questions from OAG	Mar 6, 2020
16	Round 1 Response to OAG	Mar 13, 2020
17	Round 2 Questions from OAG	Mar 20, 2020
18	Amendment of Algorithm	Mar 26, 2020
19	Round 2 Response to OAG	Mar 27, 2020
20	Amendment of Algorithm (additional correction)	Mar 30, 2020
21	Preliminary Intervenor Report	Apr 17, 2020
22	Final written submission from CAI	May 7, 2020

23	Final written submission from OAG	May 8,2020
24	Final written submission from Aviva	May 8, 2020

1. Introduction

[14] 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. When the Board requires it to do so.

Procedural History

[15] The Applicant submitted the Filing for the PPV category on July 25, 2019. The original overall indication of the rate filing was +12.16% and the Applicant proposed an overall average rate increase of +9.31%.

[16] Following questions from Eckler Ltd. (Eckler), the Board's consulting actuaries, the Applicant amended the Filing, resulting in a decrease of its rate indication to +12.09%; the proposed overall rate change of +9.31% remained the same.

[17] The Board issued a Notice of Hearing on February 5, 2020 and convened a Panel of the Board to conduct an oral hearing on the matter. The OAG and the CAI both provided notice of their respective intentions to intervene in the Hearing. The format of the Hearing was however converted to a written hearing as a result of the COVID-19 pandemic.

[18] Prior to the Hearing, the OAG, through its consulting actuaries Oliver Wyman, submitted two sets of interrogatories to the Applicant, to which answers were provided. Oliver Wyman prepared a preliminary Intervenor Report on behalf of the OAG. Thereafter, pre-hearing written final submissions were provided by the Applicant, the CAI and the OAG for the Panel's consideration.

2. Evidence and Positions of the Parties

Aviva Insurance Company of Canada

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

[20] Aviva presented its Filing to the Board with an overall original indication of +12.16% and proposed to select an average rate change of +9.31%. The subsequent amendments decreased the overall rate indication to +12.09%, though the average rate change selection of +9.31% remained the same.

[21] The following sets out Aviva's amended indicated and proposed average rate changes to the existing rates by coverage:

Coverage	Indicated	Proposed
Bodily Injury Tort (BI)	+11.83%	+10.84%
Property Damage Tort (PD)	+0.82%	-0.06%
Property Damage – Direct Compensation (DCPD)	+27.31%	+22.78%
Accident Benefits (AB)	+5.51%	+3.15%
Uninsured Auto (UA)	-1.42%	-2.74%

Health Service Levy (HSL)	+22.98%	+10.00%
Collision	+12.65%	+9.22%
Comprehensive	+5.26%	+3.62%
Specified Perils (SP)	+1.36%	-0.01%
All Perils (AP)	+1.08%	+5.37%
Underinsured Motorist (UM) – SEF44	+4.30%	+0.00%
Total	**+12.09%**	**+9.31%**

[22] The rates contained in the Filing were estimated assuming a target return on equity (ROE) of 12.00 %, a pre-tax investment rate on cash flow (ROI) of 2.5%, an investment rate on capital of 2.5% and a 2:1 premium to surplus ratio. Proposed average rates would increase from the current average of approximately $1,019 to approximately $1,108, after capping.

[23] In its Final Submission made to the Panel, Aviva provided the following reasoning for its proposed rate increase:

> […] Aviva will defend three main assumptions that were critiqued loss trend, expense assumptions, underwriting profit.
>
> • Loss Trend: Trends are subject to judgement, but the trends selected by Oliver Wyman for the coverages they question (bodily injury, property damage, and accident benefits) do not fall in a reasonable range. Oliver Wyman's trend selections are far from the industry average and are overly dependent on statistics to justify unreasonable trends. Aviva's trends are superior as they are statistically supported and are far more reasonable.
>
> • Expense: Commissions are questioned given the inclusion of CPC and Override Provisions in our commission. These expenses are included as they are part of our business operation. Aviva maintains that these two items should be included in commissions and our loading for these two amounts are not excessive.
>
> • Profit Provision: Oliver Wyman questions the size of our profit provision due to the indicated Return on Premium number. Aviva is not in agreement with this observation given that several of our assumptions that fall into this calculation are from previous guidance of the Board. In addition, Aviva's Return on Premium is much lower than what is indicated given our proposal is less than the indication.

> We maintain that the assumptions we selected in our indication are reasonable and supported by accepted actuarial practices [….]
>
> […]
>
> We have demonstrated that the industry results in New Brunswick have been deteriorating and there is need for rate action.
>
> [Record of Hearing, pp. 687 and 711]

[24] The Applicant submitted that the Filing was prepared in accordance with the Board's Filing Guidelines, utilizing sound actuarial methods and practices and that the assumptions contained therein are reasonable.

Office of the Attorney General

[25] The OAG was provided with the Filing and all related documents and chose to intervene in the Hearing. As such, the OAG was also given the opportunity to further query the Applicant through a written interrogatory process, which provided for two rounds of interrogatory questions and answers. At the conclusion of the interrogatory process, and prior to the Hearing, the OAG filed a preliminary actuarial report and thereafter made a final written submission to the Panel.

[26] In its final submission, the OAG summarized its findings and conclusions as follows:

> Oliver Wyman has reviewed the Aviva rate filing and identifies several areas where the Aviva rate indication is overstated. That results in a rate level that we submit is not "just and reasonable."
>
> [Record of Hearing, p. 644]

Consumer Advocate for Insurance

[27] The CAI adopted the position of the OAG in relation to the Filing and submitted to the Panel that the rate increase requested by the Applicant is neither just nor reasonable.

[28] In her submission, the CAI argued that the insurance rates in New Brunswick have to be just and reasonable and questioned whether Aviva's selection of the ROE and ROI are fair to the consumers of New Brunswick and reasonable. The CAI summarized as follows in her closing statement:

> The CAI reiterated to the Board that automobile insurance is mandatory in New Brunswick and therefore rates should be reasonable, affordable and fair.
>
> We submit that the proposed increases are high. This increase requested by Aviva is neither just nor reasonable. A second increase in a 12 months period is not justify. (sic)
>
> [Record of Hearing, p. 640]

3. Analysis and Reasons

[29] The Panel has reviewed all of the written evidence before it along with the submissions of the parties.

[30] In the present matter, the Panel determined that Aviva must further amend some of the assumptions, calculations and methodology set out in its amended Filing. The Applicant was consequently ordered to provide the Board with the calculations resulting from those amendments on June 2, 2020 and revised indications were provided by Aviva on June 5, 2020. A further request for revision was made by the Panel on June 11, 2020 and revised indications were provided by Aviva on June 12, 2020.

[31] As part of its review of the evidence and in its deliberations, the Panel identified several areas of note, the most substantial and impactful of which will be addressed individually below.

1) Treatment of Facility Association Experience

[32] The loss cost trend rates proposed by Aviva were prepared by fitting a curve to actual historical industry data, excluding the Facility Association (FA) experience. Ultimate frequency, severity

and loss costs excluding FA results were fitted for all coverages. In doing so, Aviva relied upon the Board's Filing Guidelines, which states in part:

> 'Where industry-wide statistics are used, Facility Association Residual Risks results should be excluded.'

[33] The OAG raised concerns with Aviva's approach in excluding the FA data and suggested that the changes in the percentage of risks in the FA portfolio over time would distort the measurement of Aviva's loss trend rate.

[34] The market share held by FA in New Brunswick has been quite stable and relatively small. The impact of the exclusion of FA data is not material to the indicated rates. The Panel does not share the OAG's concern for the potential distortion, rather the Panel is of the view that Aviva's exclusion of FA experience from the data is appropriate and in compliance with the Board's Filing Guidelines.

[35] The OAG also questioned the accuracy of Aviva's methodology to exclude the FA data as Oliver Wyman were not able to match the experience. This led to the OAG questioning the credibility of Aviva's calculations. The Panel has reviewed the evidence and accepts the response of Aviva to this concern - specifically the difference in results arises not because of error, but rather because Aviva excluded Trailers and Fleets from the industry trend analysis. In the Panel's view, Aviva's methodology is reasonable and has remained consistent since the previous filing.

2) R-Squared Statistics

[36] As is typical before the Board, Aviva's Filing reports the R-squared values in its trend analyses in order to provide a measure of how well each model explains the data. In general, the higher the R-squared value, the better the fit.

[37] During the pre-Hearing processes, the OAG discovered an error in the calculation of the adjusted R-squared values found in Aviva's Filing.

[38] Aviva, upon review of the OAG's concern, agreed with the OAG that the calculations were incorrect and revised their trend selections with the corrected adjusted R-squared values appended to their final submission. While the errors were present in their Filing, they argued, they were minimal and did not, in any event, affect Aviva's selection of the model or trend.

[39] The Panel accepts Aviva's acknowledgement of the calculation error and agrees that the overall shift in adjusted R-squared value resulting from the corrected calculations did not materially impact the reasonableness of the selection of trends.

3) Trend – Minor Injury Regulation – Adjustment for Indexation of Cap

[40] Aviva's Filing includes an adjustment to reflect the indexation of the cap on damages prescribed by the Regulation 2003-20 (Minor Injury Regulation) to the *Insurance Act*, RSNB 1973, c I-12. The provisions of that Regulation provide that the cap is indexed annually to reflect inflation; the change in this increasing amount is then included as an adjustment to Bodily Injury and Uninsured Automobile losses in Aviva's indications.

[41] The OAG argues that the indexation adjustment is the equivalent to 'double counting' the impact of those reforms, as the annual change in the cap is already reflected in the loss costs and severity data that has been used to determine the loss trends.

[42] Eckler, the Board's consulting actuaries, flagged the same concern, that the adjustment was redundant and requested a calculation of the impact of removing that adjustment from the indicated rates. At the request of Eckler, Aviva prepared an alternative indication with this adjustment removed. The result was a slight decrease to the overall indication of only 0.08%. In its final submission, Aviva agreed with the claim by both Eckler and the OAG that the adjustment was inappropriate and agreed that it should be removed.

[43] The Panel confirms its agreement with the Parties that the adjustment for indexation was redundant, duplicating the measurement of inflation. The Panel ordered that Aviva make the appropriate adjustment, albeit minimal, to the indicated rates.

4) Bodily Injury Trend Selection

[44] Bodily Injury coverage trends are a significant driver of the Applicant's overall indicated average rate level changes. A number of issues were raised with the Applicant's methodologies in arriving at the selected trend.

[45] In developing its Bodily Injury selected trends, Aviva used a loss cost trend model, rather than separating the analyses of frequency and severity. Aviva's justification for its approach included the argument that fitting a trend on a period which includes both pre- and post-reform experience required an adjustment so that numbers are on the same basis. They also stated that, given the correlation between frequency and severity in regard to the reform, it is reasonable to use a loss cost model for BI trend. Using a period 2010-02 to 2018-02, the final loss cost selected trend was +4.4%.

[46] The OAG argued that Aviva's methodology resulted in an increased implied loss cost trend rate and a decreased MIR coefficient. The OAG suggested instead that the trend should be based on separate frequency and severity models.

[47] In terms of the experience period for the BI trend, Aviva limited its modelling to the post 2005 experience. The OAG believes that Aviva's model does a poor job of fitting observations outside of the experience period, possibly indicating that too many parameters had been included in the model compared to the number of data points being fit. The OAG suggested that a longer- term period should have been used in order to capture the real MIR effect. The model proposed by the OAG included scalar parameters at 2003-02 and 2013-02 (2015-02 for severity) and fit accident half years for the period 1999-01 to 2018-01.

[48] Aviva explains that since it is purposely modelling recent history and applying trends to recent data, the older time periods are irrelevant for this coverage.

[49] Aviva also responded to the OAG's concern regarding this trend by arguing that the OAG's proposed model had parameters that were not meaningful for predicting the current trend. As a result, this contributed to overfitting in order to fit the longer term. In the view of Aviva, data from 2003 "has little relevance to the trend today and is a way of manipulating their model to have better statistics…" [Record of Hearing, p. 695].

[50] As noted by the OAG, Aviva calculated the impact of the MIR reform of July 1, 2013 using a scalar parameter in a loss cost regression model. The cliff (or scalar) parameter was inserted in the trending model at 2013-02 to model the impact of the reform. In the view of the OAG, the MIR reform should not have been modelled using a loss cost trend, but rather by analyzing frequency and severity separately. This conclusion arises from the OAG's submission that the impact of the MIR on frequency occurred at a different time than it did for severity.

[51] The OAG takes the position that the impact of the MIR reform on severity did not occur immediately with the legislated changes of July 1, 2013, but rather went through a phased in approach. As a result, the OAG suggests that the scalar for severity ought to be applied at 2015-02, as it was not feasible to measure an incremental lift over each and every accident half – year since the reforms were introduced. The OAG's analysis is based upon the observation of a material shift upward in severity at 2015-02 that is statistically significant.

[52] Aviva argued against the use of a 2015-02 scalar, noting that there was no evidence to support the assertion that the reform would impact severity two (2) years after the implementation of the reform.

[53] The OAG also suggested that the effect of selecting a loss cost trend with a one-time adjustment for MIR, as opposed to a separate impact of MIR on frequency and severity, produces an implied MIR impact on severity of -13%, an illogical result. The OAG argued that the separation of loss costs into frequency and severity is necessary to correctly capture the true effect of the MIR.

[54] Aviva disagreed with the position of the OAG and argued that it has selected its trend based on the loss cost method which results in an estimated MIR impact of +20%. Aviva defended

its loss cost model stating that it is reasonable to use this approach to consider the correlation between frequency and severity regarding MIR.

[55] Aviva's selected loss cost model resulted in a positive trend of +4.4% while the model proposed by the OAG would suggest a loss cost trend of -1.6%. The statistical measurements tied to Aviva's selected model are indicators of a relatively good fit, with an adjusted R-squared value of 0.84 and p-values less than 0.05. The Panel proceeded cautiously in considering frequency and severity models with additional parameters to improve fit, noting that a reasonable approach adopts a balance to avoid overfitting.

[56] The Panel has reviewed the underlying rationale for Aviva's model and carefully considered the arguments from the OAG. The Panel agrees with Aviva that data from 1999 may not be particularly reflective of the current environment of auto insurance. While acceptable modelling may use this longer-term approach, the Panel recognized the need to balance responsiveness and stability in the selection of trend and is persuaded by the Applicant's arguments for judgmentally selecting the data set commencing in 2006 in the derivation of the BI loss trend.

[57] However, Aviva's arguments supporting the use of a loss cost model instead of separating the frequency and severity analyses were not robust and did not persuade the Panel. The Panel sought to explore the results of revising this methodology.

[58] Aviva responded to the Panel's request for information on May 27, 2020, with revised indications for three (3) different scenarios in the range of +10.62% to +10.72%.

[59] The Panel accepts the arguments of the OAG that the most reasonable and consistent analysis for the Applicant's calculation of the BI trend is to separate the severity and frequency calculations. Of the alternatives presented, based on the statistical measurements and the commonsense application to the circumstances of this filing, the Panel considered the most reasonable trend to be derived from the following prescribed assumptions:

a) a severity trend model with start date 2006-02 without seasonality and MIR variables; and

b) a frequency trend model with start date 2006-01 using Time, Seasonality and MIR as shown in Aviva's final submission on page 29.

5) Property Damage Tort Trend Selection

[60] Unlike Bodily Injury, Property Damage Tort (PD) is a short tail coverage. Aviva's approach to trend analysis was to use more recent data instead of considering longer term trends and to analyze frequency and severity trends separately.

[61] For frequency, Aviva's selected trend was -3.4%. While the OAG did not agree with Aviva's methodology in the determination of this trend, they did agree that the end result was reasonable. Similarly, the Panel does not take issue with the selected frequency trend of -3.4%.

[62] In relation to severity, Aviva chose a trend period of 2012-01 to 2018-02. The final severity trend selection was +6.3%.

[63] Aviva excluded the 2014-02 data point for both frequency and severity because, in Aviva's view, that data point differed significantly from other observations. As a result of their analysis, Aviva is of the view that the data point should not reasonably be included within the data set for the purposes of modelling.

[64] The OAG argued that Aviva's model does a poor job of fitting data outside of the experience period and suggests a different methodology. The OAG's suggested model introduces a cliff parameter in 2014-02 for severity. There is, however, little justification offered to support such a cliff, other than visual observation. The OAG also suggests that Aviva's selected model does not fit well the observations outside the limited experience period.

[65] The Panel accepts Aviva's PD modelling as being reasonable. Though there are fewer data points than suggested by the OAG, the coverage is short tail and the model reasonably fits well to the recent data. The exclusion of the 2014-02 data point as an outlier was reasonable, as its inclusion would likely unduly affect the resulting loss cost trend. While the adjusted R-squared values resulting from Aviva's models are not very high, the alternative suggested by the OAG produced fitted loss costs that don't appear to be in line with the observed loss costs over the experience period. The Panel accepts the result of the modelling and the overall loss cost trend selection of +2.6% for the purposes of this Filing.

6) Accident Benefit Trend Selection

[66] For the Accident Benefits trend selection, Aviva first performed separate analyses for frequency and severity, then judgmentally selected a loss cost trend of +1.5% based upon the trend mandated by a previous panel of the Board at a prior hearing.

[67] For the frequency analysis, Aviva judgmentally selected 0.0% as the statistical fit for time was poor. The OAG does not agree with the approach or methodology used by Aviva to determine the frequency trend rate of 0.0% but agrees with the end result.

[68] For the severity analysis, Aviva performed some modelling and found that the fit with the highest statistical measurement results in a positive severity trend of +5.23% with a significant p-value. Nevertheless, it judgmentally selected +1.5% for severity leading to an overall loss cost trend of +1.5%.

[69] In the pre-hearing processes, certain calculation errors were pointed out by the OAG, and those were then corrected by Aviva. The corrected calculations did not affect the selected trend rate.

[70] The OAG considered severity trend by utilizing a stepwise regression from which the only significant parameter was the intercept which implies a 0% severity trend rate. The OAG disagreed with Aviva's judgmental selection of trends for this coverage and argued that the methodology is inconsistent with the Board's Filing Guidelines:

> "Loss trends are (sic) should be based on a review of the most recent available New Brunswick industry-wide experience for each class of insurance and coverage to the extent possible. To the extent credible, loss trends based on the insurer's own experience may also be useful to reflect the dynamics of the insurer's business. Loss trend selections that do not follow the indicated loss trends must be rationalized and explained."

[71] The Panel agrees with the OAG that Aviva's judgmental selection of +1.5%, based on a prior decision of a Panel of the Board, considering different evidence, is not a reasonable approach in these circumstances. While actuarial judgment is an essential and recognized element of the trending and ratemaking processes, judgment must be based upon the relevant data. The Panel has reviewed the prior decision and notes that this conclusion was based on evidence, modelling and arguments that are not before this Panel. The adoption of a prior panel's conclusion in these circumstances was not an acceptable exercise of judgment.

[72] The Panel is not persuaded that Aviva has provided sufficient evidence of a positive severity trend for this coverage. Similarly, the Panel finds that the OAG's methodology is not sufficiently supported and the Panel therefore requires the Applicant to adopt a 0.0% severity trend (therefore resulting in a 0.0% loss cost trend) to reflect that the Panel was not persuaded of any trend.

7) Expense Provision - Commission

[73] Aviva's expense provision includes a load of 14.72% for commissions. This includes a 1.13% Contingent Profit Commission and 1.09% for broker overrides. In support of this approach, Aviva argues that commissions are a relevant component of rates, as defined in the actuarial standards of practice. Further, Aviva argues that the inclusion is compliant with the Board's Filing Guidelines:

> "Rates are to include all provisions reflecting surcharges/ discounts for applicable risk exposures. Rates are to be inclusive of commissions and other expense provisions used by the insurer are to be considered prior to the granting of policyholder dividends."

[74] The Panel agrees with Aviva that Broker contingent profit and override commissions are legitimate expenses paid to independent brokers and are part of Aviva's cost of doing business. The inclusion of these types of commissions in the derivation of rate level indications is appropriate.

8) Profit Provision – Return on Equity

[75] Aviva adopts a 12% after-tax target ROE for the purposes of its indicated rates, arguing that it is in keeping with prior decisions of Board panels. Its premium to surplus ration is 2:1 and ROI is 2.5%. Aviva's ROI of 2.5% is based upon the company's own investment strategy, which includes holding 60% of their investments in highly liquid government debt with the remainder primarily investment grade public corporate debt.

[76] In its Final Submission, Aviva argued that although its shareholders require a 15% after-tax ROE, it deferred to the prior panel decisions by adopting a 12% target after-tax ROE.

[77] In its Final Submission, the OAG argued that Aviva has not provided any support or evidence to support the reasonableness of an after-tax ROE of 12% and return on premium (ROP) of 7.2%.

[78] The CAI also raises the issue of the ROE, questioning whether an after-tax return of 12% is just and reasonable in the current market, particularly where insurers in other provinces are not receiving that level of return.

[79] Neither Intervenor provided evidence, beyond argument and identification of different treatment in different jurisdictions, that challenged the reasonableness of a 12% after-tax ROE. While other regulators may arrive at a different conclusion in the specific circumstances of their jurisdictions, this Panel is satisfied that a target after-tax ROE of 12% is reasonable in the circumstances.

[80] While the indicated rate change would have led to a 7.2% ROP, Aviva is not seeking the full indicated rate increase. With the proposed rate increase of +9.31%, the implied ROP is 4.8 %, and the implied ROE is approximately 8.65%, a level which this Panel is satisfied is reasonable.

9) Reasonableness

[81] In its Final Submission, the OAG argued that it is inappropriate for the Board to accept a wide range of loss trend rates as reasonable using the same industry data or to find a certain trend rate reasonable in one filing and not in another.

[82] As the OAG goes on to acknowledge at page 644 of the Record of Hearing, there may be various trend models that are considered reasonable, depending on circumstances and methodologies.

[83] The legislation underpinning the Board's 'just and reasonable' mandate provides no guidance for the Board respecting the factors that should inform the analysis and determination of a 'just and reasonable' rate. An indicated rate is an estimate of the expected value of future costs (including losses, expenses and a provision for underwriting profit) for a particular insurer. It takes into account many factors including data, the insurer's book of business, assumptions and actuarial judgment.

[84] Reasonable outcomes, in the administrative law context, are varyingly described as 'legal', 'rational', 'fair', 'transparent', 'intelligible' and 'justified'. Board members are entrusted to draw from their personal experience, review and consider the particulars of the Record of Evidence, and carefully weigh the arguments placed before them at a hearing, whether oral, electronic or written.

[85] In proposing rates that are reasonable to meet the Board's legislated threshold, an applicant bears the onus of satisfying the Panel on the evidence at the hearing, that the rates it proposes to charge are just and reasonable. Some insurers meet this challenge more readily

than others, even when their foundational data is the same or similar. A panel reviewing a filing brings to bear distinct experiences and skills when the members seek to understand and weigh the methodologies employed by insurers, including alternative models and trends, and the rationale for choosing one model over another. There are varied acceptable methodologies to measure trend, each of which may be considered reasonable, and each panel will review the insurer's methodology, superimposed on the particular Record of evidence and submissions before it, to determine whether the applicant has satisfied the evidentiary burden of proving reasonableness of a proposed rate. Where a prior panel faced with different evidence accepts that a given trend is 'reasonable', this Panel is neither bound to blindly accept that finding nor give it substantial weight, as circumstances and context is different for each filing.

[86] The Panel has reviewed and made determinations of the reasonableness of the trends and evidence contained in this filing and this decision reflects the evidence before the Panel and the context currently existing.

10) COVID-19

[87] This decision is a fulsome consideration of the Applicant's filing, dated 25 July 2019. It bears repeating that, in addition to the consideration of applications for rate increases, the Board is mandated with the general supervision over auto insurance rates in the Province of New Brunswick. As a result of the world-wide Covid-19 pandemic, many insurers, including the Applicant, have introduced temporary measures to support their customers during this uncertain time, and recognizing changing insurance risks. Considering the absence of available data related to the impact of Covid-19 on this industry at this time, this Panel's decision does not integrate considerations related to the impact of Covid-19; nevertheless, the Board continues to monitor the ever changing circumstances and the temporary measures put in place by each insurer to ensure rates are as just and reasonable as possible.

4. Decision

[88] For the reasons set out above, the Panel finds the rates resulting from the Applicant's Filing are not just and reasonable in their entirety and therefore orders the following changes to be made:

1) Removal of the legislative adjustment included to reflect the indexation of the MIR cap for Bodily Injury and Uninsured Automobile;

2) Change in the Bodily Injury to:
   a. Use a severity trend model with start date 2006-02 without seasonality and MIR variables; and
   b. Use the frequency trend model with start date 2006-01 using Time, Seasonality and MIR.

3) Amend the SEF 44 trend to reflect the change in the Bodily Injury trend.

4) Change the Accident Benefits Loss (and Uninsured Automobile) Trend to:
   a. Use a past and future severity trend of 0.0% in conjunction with the past and future frequency trend of 0.0%, resulting in a loss cost trend rate of 0.0% per annum.

[89] The impact of these changes was calculated at the Panel's request, decreasing the Applicant's rate indications from an average of +12.09% to an average increase of +10.31%.

[90] The Applicant is ordered to incorporate changes to the Filing as set out in paragraph 88 above and to adopt the following amendments:

1) Reduce its Bodily Injury proposed average rate level change from +10.84% to +5.78%;

2) Reduce its Accident Benefits proposed average rate level change from +3.15% to +2.86%;

3) Modify the proposed average rate level changes for other coverages in order to produce an overall proposed average rate level change of +9.31%. In doing so, the revised proposed average rate level changes must not exceed the revised indicated average rate level changes with the exception of Uninsured Automobile (where a proposed average rate level change between -2.76% and 0% would be acceptable) and AP (which is dependent on Collision and Comprehensive). The Board gives Aviva discretion regarding the coverages for which the proposed average rate level changes will be revised; and

4) Modify the proposed average rate level changes by territory to reflect the revised proposed changes in 3) above.

[91] The Applicant is **approved to adopt the proposed overall average rate level change of +9.31%.**

[92] The approved rates will be effective on November 1, 2020 for new business and for renewal business.

Dated at Saint John, New Brunswick, on July 2, 2020.

Marie-Claude Doucet, Panel Chair
Chair, New Brunswick Insurance Board

WE CONCUR:

Francine Kanhai, Board Member

Heather Stephen, Board Member