ALBERTA NON-GRID RISK SHARING POOL

MARCH 2023 OPERATIONAL REPORT

ACTUARIAL HIGHLIGHTS

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FACILITY ASSOCIATION

ACTUARIAL HIGHLIGHTS

RSP ALBERTA NON-GRID

OPERATIONAL REPORT

MARCH 2023

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1 Summary

Note to members: this is the quarterly Actuarial Highlights we will release going forward to replace the monthly Actuarial Highlights. The next report will be available for reporting month May 2023 in July 2023, in line with the valuation implementation schedule. Please contact us with any questions or concerns in regards to this matter.

1.1 Valuation Schedule (Fiscal Year 2023)

The March 2023 Operational Report incorporates the results of an updated valuation (as at December 31, 2022) – the impact of the implementation of the valuation is discussed in section 1.2. The following table summarizes the valuation implementations scheduled for fiscal year 2023.

ALBERTA NON-GRID RISK SHARING POOL FISCAL YEAR 2023 – SCHEDULE OF VALUATIONS			
Valuation Date	**Discount Rate (per annum)**	**Operational Report**	**Description of Changes**
Sep. 30, 2022 (completed)	3.56% mfad 25 bp	Oct. 2022	update valuation (roll-forward): accident year 2022 loss ratio unchanged at 94.1%; discount rate increased 39 basis points; no change to selected margins for adverse deviation
Dec. 31, 2022 (completed)	5.53% (IFRS 17 does not have explicit interest rate margin)	Mar. 2023	update valuation (roll-forward): accident year 2023 loss ratio decreased 0.5 points to 98.2%; discount rate increased 12 basis points based on the risk free rate plus illiquidity premium from FIERA Capital; no change to selected margins for adverse deviations
Mar. 31, 2023	%	May. 2023	
Jun. 30, 2023	%	Aug. 2023	
Sep. 30, 2023	%	Oct. 2023	

Under the proposed schedule for fiscal year 2023, the off-half valuation quarters ending March 31, 2023 and September 30, 2023 would not reflect a full valuation update of assumptions, but would rather roll-forward key assumptions from the previous valuation.

1.2 New Valuation

A valuation of the Alberta Non-Grid Risk Sharing Pool ("RSP") as at December 31, 2022 has been completed since last month's Operational Report and the results of that valuation have been incorporated into this month's report. The valuation was completed by the Facility Association's internal actuarial group in conjunction with, and approved by, the Appointed Actuary, under the

hybrid model for actuarial services. In general, this valuation was **favourable** to the RSP results due to:

- Updated expected loss ratio projection using the latest rate level factors derived from industry data.

The valuation implementation impact is summarized in the following two tables, where the abbreviations PAYs refers to prior accident years, CAY refers to the current accident year (2023) and FtAY refers to future accident year (2024).

Summary of Impact ($000s) of Implementing Result of Valuation as at Dec. 31, 2022[1]

RSP: Alberta Non-Grid

Summary of Impact	Total $ Impact	YTD COR Impact
LIC for Unpaid Claims	662	2.2%
Loss Component	(4,514)	(14.9%)
TOTAL	(3,852)	(12.7%)

Change in LIC for unpaid claims

	nominal [1]	apv adj. [2]	sub-total [3]	disc rate [4]	margins [5]	TOTAL [6]
PAYs	916	(74)	842	34	-	876
CAY	(223)	8	(214)	(0)	-	(214)
TOTAL	693	(66)	627	34	-	662

Change in Loss Component

	2023 (CAY)	2024 (FtAY)	TOTAL
Opening Loss Component	**44,474**	**59,760**	**104,235**
[1] Losses on onerous contracts	(1,212)	(2,223)	(3,435)
[2] Discount rate	(452)	(627)	(1,079)
[3] Reversal of losses on onerous contracts	(4,647)	66	(4,581)
TOTAL [1]+[2]+[3]	(6,311)	(2,784)	(9,095)
Ending Loss Component	**38,164**	**56,976**	**95,140**

unfav/(fav) for the month and ytd

As indicated in the preceding table, the incorporation of the new valuation had an estimated ***$3.9 million favourable impact*** on the month's net result from operations, subtracting an estimated 12.7 points to the **year-to-date Combined Operating Ratio**. The unfavourable LIC impact is primarily driven by unfavourable Bodily Injury experience as a result of LDF and a priori LR updates, partially offset by lower than expected AY2022 loss ratio and a small favourable discount rate impact (claim payment pattern and discount rate impacts are both combined in column [4]). The favourable loss component impact in Alberta Grid is driven by a decrease to accident year 2023 and 2024 expected loss ratios.

The impact of the **nominal changes** on the LIC is shown in column [1] in the above table. The change in the selected nominal ultimates was **unfavourable by $693 thousand**. This reflects the impact attributable to the changes in the selected ultimate loss ratios (i.e. for each accident year, it is the

[1]In these tables, "PAYs" refers to prior accident years, "CAY" refers to the current accident year, "FtAY" refers to future accident year, and "LIC" refers to liability for incurred claims. "Nominal" refers to changes excluding impact to discounting and risk adjustment, whereas "apv adj." refers to the impact on discounting and risk adjustment caused by change in the amount and timing of undiscounted liabilities. The columns labeled [1] and [2] reflect the impact of changes in the valuation selected ultimates (i.e. based on unchanged selection of discount rates and risk adjustment). The column "dsct rate" reflects the impact of the change in the selected discount rate and claims payment patterns, and the column "margins" reflects the impact of any changes in the selected risk adjustment.

product of life-to-date earned premium for the accident year and the change in the selected ultimate loss ratio).

The **PAYs** overall showed a **$0.9 million unfavourable** nominal variance or 0.4% of the PAYs nominal unpaid balance of $214.3 million determined at the end of last month (February 2023) due to unfavourable claim development and update to expected loss ratios for recent years.

The **CAY** LIC impact is a result of the change in the selected loss for accident year **2023 (decreased 0.5 points to 98.2%)**. This change is a result of decreased projected loss ratios in 2023 due to updating the expected loss ratios using the latest rate level factors derived from industry data.

The impacts related to actuarial present value ("apv") adjustments are split into the impact prior to any change in the selected discount rate and selected risk adjustment factors (at the level they were selected i.e. jurisdiction and coverage), the impact of then updating the discount rate, and finally the impact of any changes to the risk adjustment factors (at the level they were selected). The changes in actuarial present value adjustments are shown in the preceding summary table in columns [2], [4], and [5].

Column [2] recognizes that changing the nominal selections also changed the unpaid estimates (including changes to the relative mix by coverage). This generated a favourable change of $66 thousand in the actuarial present value adjustments, prior to any changes in the selected discount rate and/or risk adjustment.

Updated projected cash flows were reviewed against the risk-free curve plus illiquidity premium calculated monthly by the Fiera Capital Corporation[2] as at Dec. 31, 2022. It is assumed that the risk sharing pool cash flows are relatively illiquid. This means a yield curve with a higher illiquidity premium is used for the discounting calculations. Column [4] accounts for the change in the **discount rate** selected (average discount rate increased 12 basis points to **5.53%**), indicating a slight favourable impact, although this is slightly offset by an update to paid emergence selection completed annually in Q4.

Column [5] accounts for any changes to selected risk adjustment factors. The risk adjustment is based on a discounted cost of capital methodology. Capital factors are derived from MCT risk factors. Cost of Capital is determined from target return on equity and P/S ratio assumptions from pricing. Capital requirement is determined from a target MCT ratio based on industry data. Risk adjustment is calibrated annually and there is no change to the selection this quarter.

Risk Sharing Pools are onerous by design, as RSPs are designed for systematic under-pricing, which is expected to be unprofitable. We are assuming all RSPs are groups of onerous contracts. This means that the losses on these onerous contracts are recognized through a loss component upon initial recognition of the business. The change in the loss component is the sum of:

- [1] Losses on onerous contracts: This is the change in the loss component during the reporting period arising from Initial recognition and subsequent re-estimation of the loss component (due to changes in premium or loss ratio projections, for example). The table shown above

[2] https://www.fieracapital.com/en/institutional-markets/cia-ifrs-17-curves

splits out the impact of this item for the CAY and FtAY. The expected loss ratio decreased by 0.5% and 0.9% respectively which corresponds to a combined total of **favourable $3.4 million.**

- [2] Discount rate: This is the change in the loss component due to updating the yield curve. The impact of change in yield curve is **favourable $1.1 million** driven by increased yields between the current and prior valuation.
- [3]: Reversal of losses on onerous contracts: This is the change in the loss component during the reporting period arising from the portion of the opening LRC earned during the period. This item has been presented in the table above to demonstrate the gradual decline of the loss component expected every month as the losses move from the LRC into the LIC.

Consideration was given to recent legal decisions and changes in legislation / regulation as noted above and outlined in section **Error! Reference source not found.**.

1.3 Appointed Actuary and Hybrid Actuarial Services Model

The Annual General Meeting of the members of Facility Association ("FA") appointed Mr. Cosimo Pantaleo as the Appointed Actuary at its meeting on March 1, 2023.

Facility Association operates under a hybrid model in relation to the management and provision of actuarial services. Under this model, actuarial services are performed by both Facility Association's internal staff and its external actuarial consulting firm. The hybrid model approach maximizes the efficiency of resource allocation while providing access to additional expertise and capacity as needed.

1.4 Consideration of Recent Legal Decisions and Changes in Legislation / Regulation

Consideration and assessment of potential impacts of legal decisions and changes in legislation / regulation constitutes a regular part of the valuation process. Descriptions of some of the more recent (i.e. within the last five years) changes are provided below.

NEW On **January 26th, 2023**, **the Provincial government of Alberta** decided to freeze insurance rate filings for private passenger vehicles for the duration of calendar year 2023. In response to the policy decision by the government of Alberta, FA has been working to adjust projected rate levels to account for the impact of the rate pause on future premiums and working with member companies to revise estimates of projected risk sharing pool volumes in light of the potential impacts to business volume due to the policy.

In **Jackson v. Cooper, 2022 ABKB 609**, the decision, released on September 9, 2022, clarified the interest rates to be used in the calculation of pre-judgement interest awards on pecuniary damages. As described above, Bill 41 (effective December 9, 2020) amended calculation of pre-judgement interest on non-pecuniary damages in s. 585.2(2) of the Insurance Act. Up for debate was the question of whether this change applied retroactively. The court concluded it does not apply retroactively, and awarded pre-judgement interest at the old rate (4%) from the date of the accident up to the coming into force of s. 585.2(2) (December 9, 2020), and thereafter pre-judgment interest

in accordance with section 4(2) of the Judgment Interest Act.

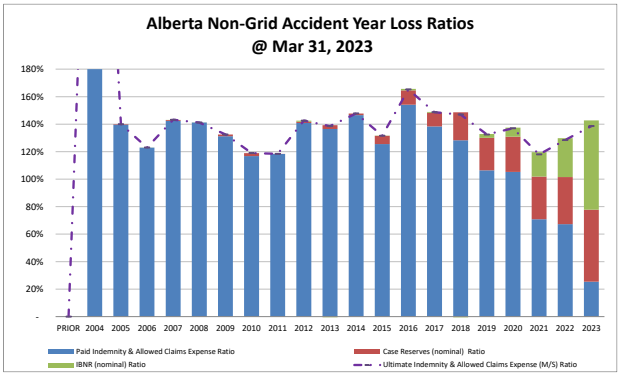
It is unclear whether the estimated impact of Bill 41 (20% reduction to loss cost for Bodily Injury claims, as described above) is affected by this decision. If the underlying assumption of that reduction was a retroactive application of the amendment to pre-judgement interest, it is possible the 20% reduction could be overstated. At this time, no changes have been made in our estimates to reflect this until we can assess whether this ruling represents a material change in the underlying Bill 41 impact assumptions.

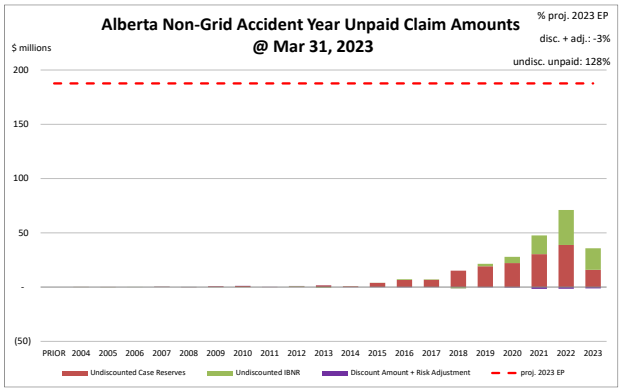
Amendments to the **Alberta Automobile Accident Insurance Benefits Regulation, Diagnostic and Treatment Protocols Regulation, and Minor Injury Regulation** came into force effective November 1, 2020, amending definitions and various benefit maximums defined in these regulations. **Alberta Bill 41** (Insurance (Enhancing Driver Affordability and Care) Amendment Act, 2020) **received royal assent on December 9, 2020**. Bill 41 amends the Insurance Act to: 1) control the use of expert witnesses in Court of Queen's Bench proceedings where damages for bodily injury or death arising from use or operation of a motor vehicle as defined in the Traffic Safety Act are claimed; 2) introduce direct compensation for property damage (DCPD) into the province; 3) amend the calculation of pre-judgment interest on damages awarded for bodily injury or death arising directly or indirectly form the use or operation of an automobile; and 4) amend provisions regarding the regulation of auto insurance rates by the Alberta Automobile Insurance Rate Board. Consideration of these changes were included in the industry trend analysis supporting the calculation of our valuation expected loss ratios. There is an estimated 20% reduction to loss costs for Bodily Injury claims in Alberta, as well as an estimated 8% increase in accident benefits loss costs, effective Jan. 1, 2021, which have been reflected in our estimates.

In the **Alberta Treasury Board and Finance Notice 04-2018** (Clarification of Minor Injury Regulation), dated **October 17, 2018**, the Alberta Superintendent of Insurance advised that clarifying amendments have been made to the definition of minor injuries under the Minor Injury Regulation (MIR). Consideration of these changes were included in the industry trend analysis supporting the calculation of our valuation expected loss ratios.

1.5 Current Provision Summary

The following charts show the current levels of claim liabilities[3] booked by accident year. The left chart displays life-to-date payments, case reserves, IBNR, and the total including actuarial present value adjustments against accident year earned premium. The right chart shows the associated dollar amounts for the components of the claim liabilities and the current projected amount of 2023 full year earned premium (the red hash-mark line) to provide some perspective.





"M/S" refers to "Member Statement" values – that is, actuarial present value adjustments at the selected discount rate.

liability for incurred claims ($000s)

	amt	%
undisc. case	163,891	69.5%
undisc. ibnr	77,221	32.8%
disc. + risk adj.	(5,331)	(2.3%)
LIC	235,781	100.0%

The current discount and risk adjustments (-$5.3 million – see the following table) represents -3% of the earned premium projected for the full year 2023 (see the upper right corner of the preceding chart on the right). If our current estimates of the nominal unpaid amounts prove to match actual claims payments, the actuarial present value adjustments will be released into the net operating result over future periods.

The table to the left breaks down Liability for Incurred Claims total into component parts, showing that the majority of the claim liabilities for this RSP is in case reserves. Approximately 67% of the IBNR balance relates to accident years 2022 and 2023 (see Exhibit B). Approximately 84% of the liabilities for incurred claims are related to accident years 2019-2023 inclusive (i.e. the most recent 5 accident years), and approximately 2% is related to accident years 2012 and prior (i.e. prior to the most recent 10 accident years).

The following tables summarize the liability for remaining coverages and insurance contract liabilities.

liability for remaining coverage ($000s)

	amt	%
LRC excl. disc. LC	52,811	35.7%
undisc. LC	143,727	97.1%
disc. amt	(48,587)	(32.8%)
LRC	147,952	100.0%

insurance contract liabilities ($000s)

	amt	%
claim	241,111	62.8%
premium	196,539	51.2%
disc. + risk adj.	(53,918)	(14.1%)
LIC + LRC	383,732	100.0%

[3]Claim liabilities refer to provision for unpaid indemnity and allowed claims expenses. Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this discussion.

2 Activity since previous valuation implementation

2.1 Recorded Premium and Claims Activity

The following table summarizes the extent to which premiums and claims amounts recorded since the prior implementation differ from the prior projection.

Alberta Non-Grid RSP Actual vs Projected Summary: Recorded Transaction Amounts ($ thousands)

AY Group	Share Year	Share Month	Actual Earned Premium (000s)	Actual minus Projected Earned Premium (000s)	Actual Paid Claims (000s)	Actual minus Projected Paid Claims (000s)	Actual Recorded Claims (000s)	Actual minus Projected Recorded Claims (000s)
PAY	2022	November	(13)	(13)	6,184	2,885	3,150	1,971
		December	(7)	(7)	4,838	655	2,668	1,524
	2023	January	(115)	(115)	9,864	2,279	8,742	5,846
		February	(103)	(103)	9,039	1,530	4,673	1,259
		March	(95)	(95)	9,809	2,333	7,945	5,252
PAY Total			**(333)**	**(333)**	**39,734**	**9,682**	**27,178**	**15,852**
CAY	2022	November	13,874	37	6,935	(357)	12,815	2,373
		December	14,652	422	7,183	(1,334)	12,431	657
	2023	January	14,891	321	442	(4,296)	5,190	(4,323)
		February	13,977	790	2,400	2,400	8,004	8,004
		March	15,644	(31)	4,897	4,897	10,523	10,523
CAY Total			**73,038**	**1,539**	**21,857**	**1,310**	**48,963**	**17,234**
Grand Total			**72,705**	**1,206**	**61,591**	**10,992**	**76,141**	**33,086**

(Recorded transaction amounts exclude IBNR & other actuarial provisions)

Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance" (i.e. random variation). Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of the variance. The variances are also reviewed as part of the quarterly valuation process, as an indicator of changes in the claims development process or potential bias in ultimate claims estimates.

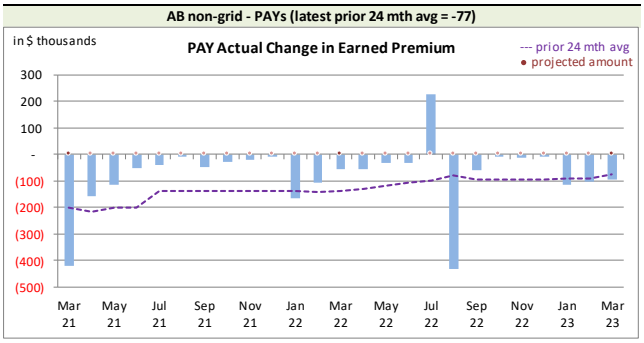
More detailed analysis and commentary on actual vs. projected for the most recent reporting months is provided below.

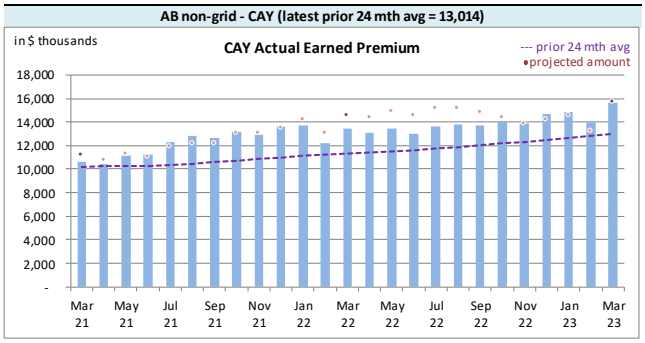
2.1.a Actual vs. Projected (AvsP): Earned Premium

The following charts show actual **earned premium**[4] activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

[4]Premium is earned on a daily basis based on the transaction term measured in days. As a result, months with 31 days earned relatively more than those with 30 days, and February earns the least.

*Alberta non-Grid RSP Actual **Earned Premium** by Calendar Month*



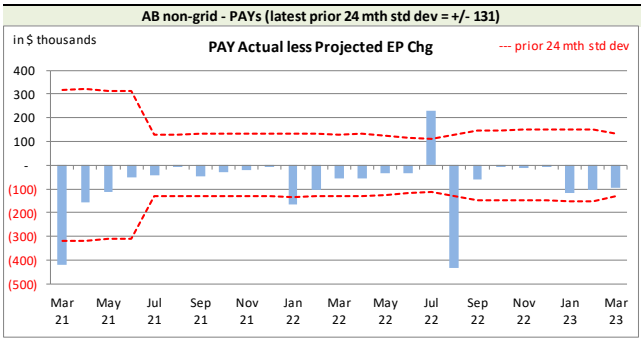


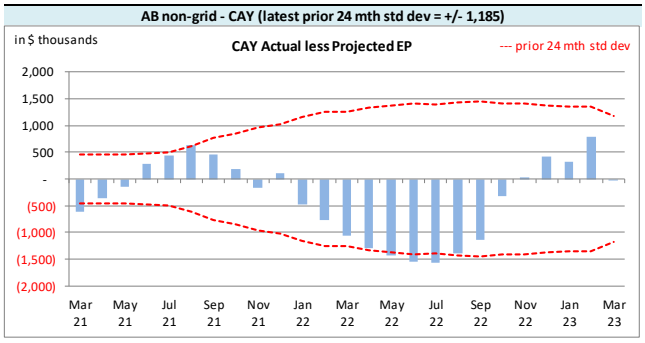
Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

On Latest $ thousands		
Earned Premium	PAYs	CAY
Mthly Avg EP Chg (prior 24 mths)	(77)	13,014
std dev	131	1,185
A-P <> std dev	4	5
% <> std dev	16.0%	20.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	better

The associated variance between the actual changes and the projections from the previous month are shown in the following charts. **Earned premium** change projections are all attributed to the current accident year as the projection upload does not accept **earned premium** changes for other accident years. We do not see this limitation as being significant for our purposes, but it does mean that the actual less projection variance will equal the actual **earned premium** change in relation to prior accident years.

*Alberta non-Grid RSP Actual vs. Projected Summary: **Earned Premium** Variances by Calendar Month*





We project **earned premium** changes from known unearned premium and projected written premium levels, but upload the total projections as current accident year (CAY). This process has generated prior accident years' (PAYs) bias[5], with actuals generally lower than projected, although the magnitude is not high relative to monthly premium. In addition to the PAYs' bias, the CAY has also shown bias[6], with actuals being generally lower than projected, and while we modified our

[5]The PAYs' variances will show bias as the projection upload forces all earned premium projections to be attributed to the CAY.

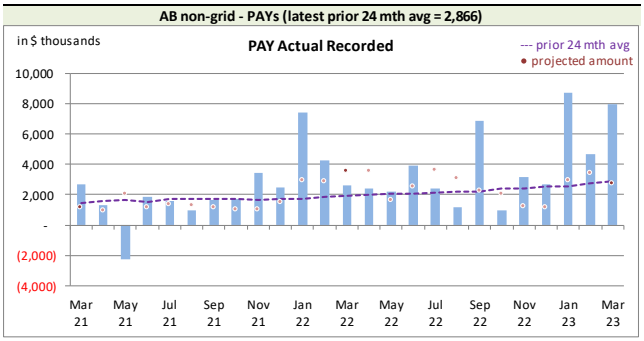
[6]We measure bias based on a 95% confidence range for a binominal distribution with trials based on the range being considered (25 in this case) and 50% probability of success. The rolling 25-month CAY variances at May 2022 had only 3 months where the actuals was higher than projected, and as the 95% confidence range is 8 to 17, bias continues to be indicated.

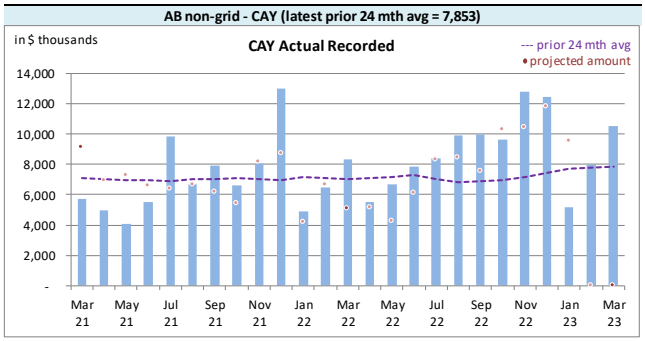
projections processes in response, bias still exists. Over time, we may consider other projection approaches to address the bias issue, but it is not currently deemed as priority.

2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

The following charts show actual **recorded** activity (**paid** and case reserve changes), in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

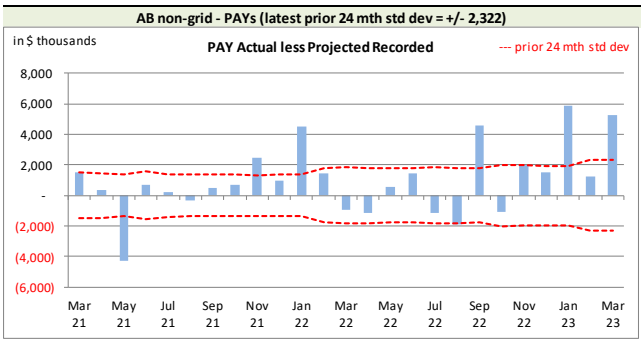
*Alberta non-Grid RSP Actual **Recorded** by Calendar Month*

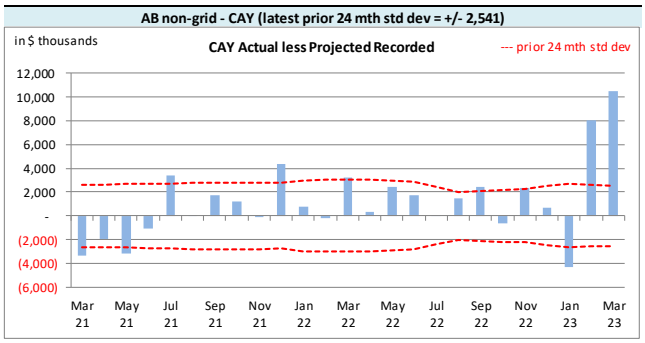




Recorded activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

*Alberta non-Grid RSP Actual vs Projected Summary: **Recorded** Variances by Calendar Month*





On Latest $ thousands		
Recorded	PAYs	CAY
Mthly Avg Recorded (prior 24 mths)	2,866	7,853
std dev	2,322	2,541
A-P <> std dev	8	10
% <> std dev	32.0%	40.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	no better	worse

With respect to **recorded** indemnity & allowed claims expense activity, 32% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **recorded** amounts (see table on left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has been indicated at a 95% confidence level on a rolling 25-month basis (18 of 25 variances are positive).

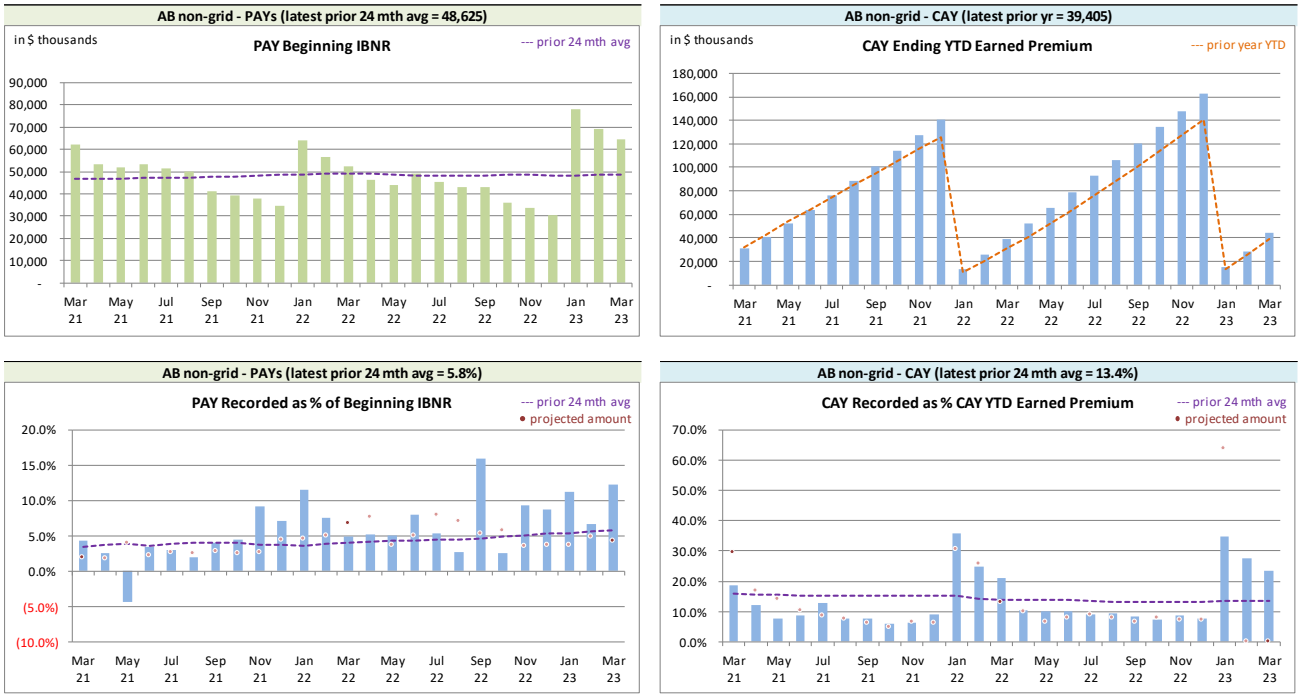
The current accident year (CAY) **recorded** variances fell outside of one standard deviation 40% of the

time over the last 25 calendar months (see the preceding table on the left), suggesting that the projection process has performed worse than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (17 of 25 variances are positive).

The method for establishing IBNR adjusts automatically for changes in **earned premium** and **recorded** claims activity level (see sections 2.2 and 3).

We have included, for reference, the following charts related to levels influencing **recorded** activity.

Alberta non-Grid RSP Levels that influence[7] ***Recorded*** *activity by Calendar Month*



We track PAY beginning IBNR as **recorded** activity comes out of IBNR. Changes in the PAY beginning IBNR (see upper left of the preceding group of charts) occur for several possible reasons:

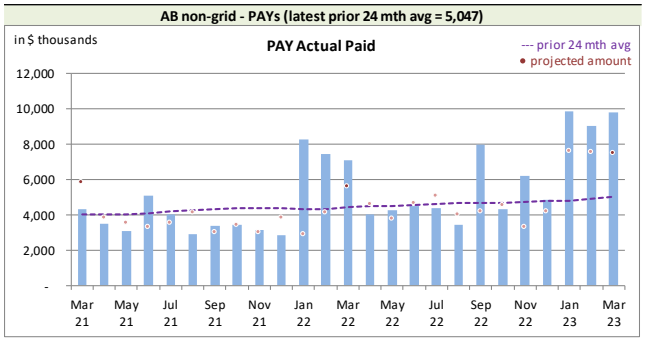
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY(occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

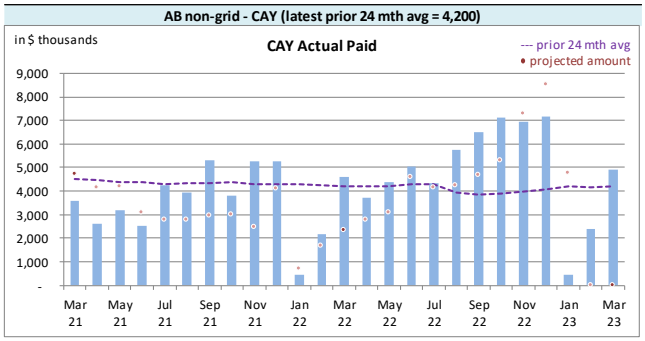
[7]Our recorded activity projections for the prior accident years are based on selected ratios of recorded activity to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date IBNR to year-to-date selected ultimate (i.e. selected LR x earned premium), deriving year-to-date recorded as selected ultimate less IBNR. In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

The following charts show actual **paid** activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

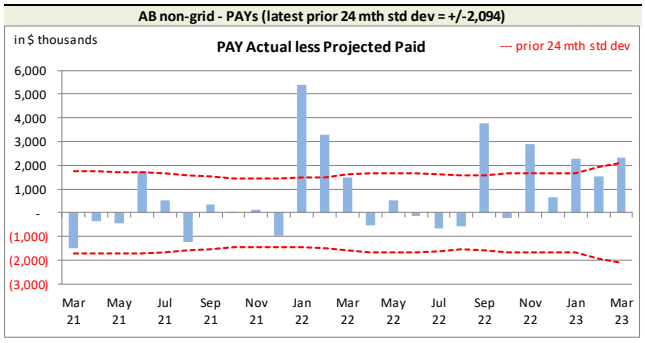
*Alberta non-Grid RSP Actual **Paid** activity by Calendar Month*

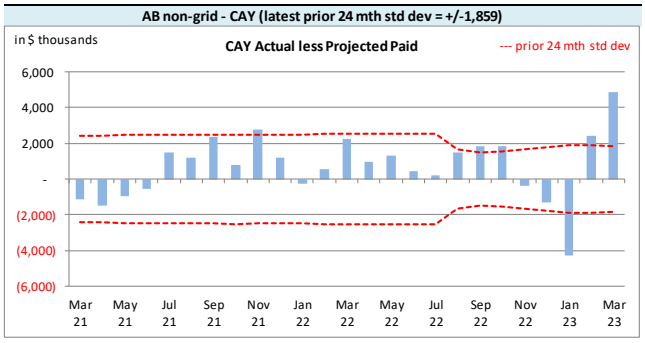




Paid activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

*Alberta non-Grid RSP Actual vs Projected Summary: **Paid** Variances by Calendar Month*





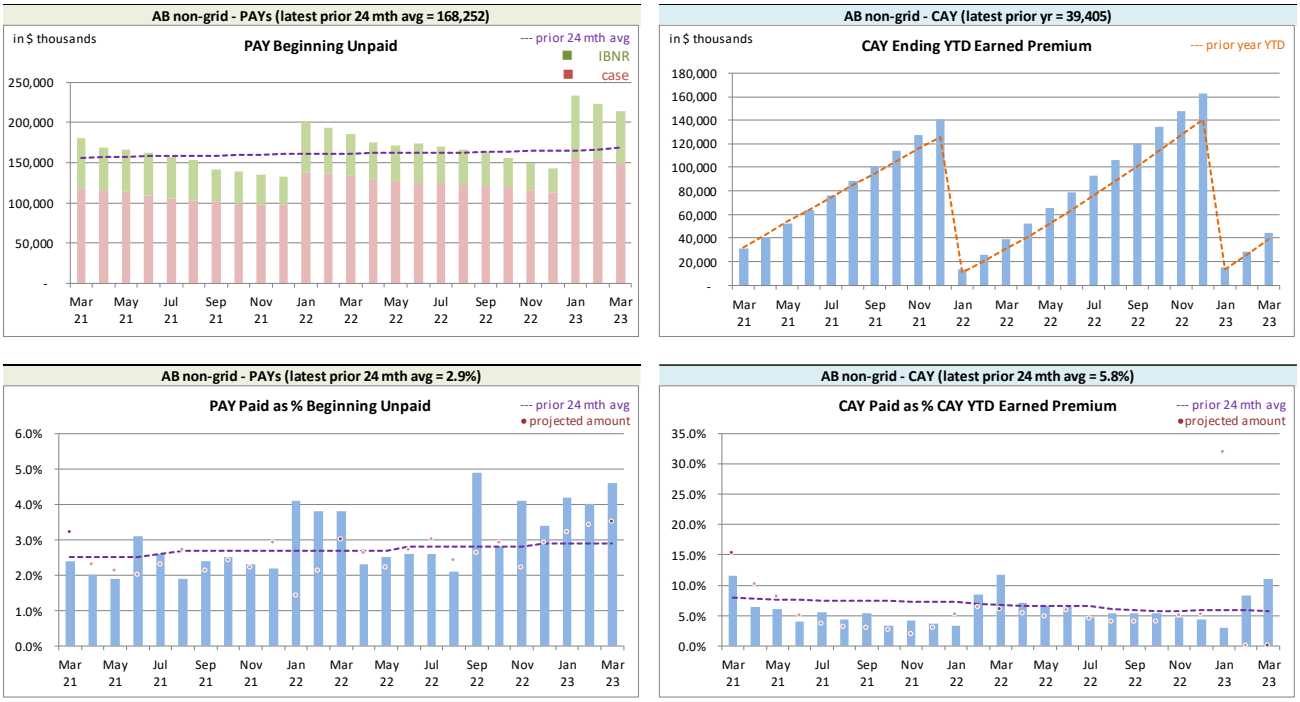
On Latest $ thousands		
Paid	PAYs	CAY
Mthly Avg Paid (prior 24 mths)	5,047	4,200
std dev	2,094	1,859
A-P <> std dev	7	6
% <> std dev	28.0%	24.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	no better	better

With respect to **paid** indemnity & allowed claims expense, 28% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **paid** amounts (see table on left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has not been indicated at a 95% confidence level on a lagging 24-month basis (15 of 25 variances are positive).

The current accident year (CAY) **paid** variances fell outside of one standard deviation 24% of the time over the last 25 calendar months (see the preceding table), suggesting the projection process has performed better than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (17 of 25 variances are positive).

We have included, for reference, the following charts related to levels influencing **paid** activity.

*Alberta non-Grid RSP Levels that influence[8] **Paid** activity by Calendar Month*



We track the PAY beginning unpaid balance (case and IBNR) as **paid** activity comes out of the unpaid balance. Changes in the PAY beginning unpaid balance (see upper left of the preceding group of charts) occur for several possible reasons:

- to offset actual **paid** activity (may reduce case or IBNR or both);
- the annual switchover as a CAY becomes a PAY (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning unpaid balance change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

2.2 Actuarial Provisions

An ultimate loss ratio matching method (described in section 3) is used to determine the month's IBNR[9], and factors are applied to the nominal unpaid claims liability (case plus IBNR) to determine the discount amount (shown as a negative value to indicate its impact of reducing the liability) and the Provisions for Adverse Deviations. The loss ratios and the factors used to determine the

[8]Our paid projections for the prior accident years are based on selected ratios of paid to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date paid to year-to-date selected ultimate indemnity (i.e. selected LR x earned premium). In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

[9]For ease of discussion, "IBNR" is used in place of "provisions for incurred but not recorded (IBNR) and development".

projections and actuals were based on the applicable valuation.

Exhibit G shows the accident year IBNR amount change from last month to this month broken down into:

(i) the change projected last month;

(ii) the additional change due to variances in earned premium (because we apply a loss ratio to earned premium in determining ultimate level) and/or recorded claims (as IBNR is calculated as ultimate less recorded) differences; and

(iii) the additional change due to valuation implementation impacts (as applicable)

3 Ultimate Loss Ratio Matching Method

An "ultimate loss ratio matching method" continues to be applied to the current month and two projected months shown in the Operational Reports, with IBNR determined by accident year as follows:

(a) Earned premium to-date
(b) Ultimate loss[10] ratio per latest valuation
(c) Estimated ultimate incurred = (a) x (b)
(d) Recorded indemnity & allowed claims expense to-date
(e) IBNR = (c) – (d)

4 Calendar Year-to-Date Results

The following table summarizes the calendar year-to-date results for indemnity & allowed claims expenses[11], including IBNR.

In calculating the amounts as percentages of earned premium, the calendar year-to-date earned premium has been used, which includes earned premium associated with the current accident year but also earned premium adjustments related to prior accident years. Specifically, the current accident year (CAY) ratio in the table is 97.7% matching the 97.7% from the valuation ultimate ratio for accident year 2023, as the calendar year-to-date earned premium includes prior accident year earned premium adjustments. (Note that the ratios in this table may differ slightly from those shown in the Alberta Non-Grid RSP Summary of Operations due to rounding.)

[10]"Loss" here refers to indemnity and allowed claims expenses, but does not include the claims expense allowance included in member company overall expense allowances ("Expense Allowance" in the Operational Report).

[11]Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this analysis.

Alberta Non-Grid RSP Calendar Year-to-Date Indemnity & Allowed Claims Expense Summary ($ thousands)

	YTD Nominal Values		YTD actuarial present value adjustment		YTD Total	
	Amount	%EP	Amount	%EP	Amount	%EP
PAYs	634	1.4%	3,336	7.5%	3,969	8.9%
CAY	43,488	97.7%	(1,238)	(2.8%)	42,250	94.9%
TOTAL	44,121	99.1%	2,098	4.7%	46,219	103.8%

("% EP" based on 2023 calendar year-to-date earned premium; ratios may not total due to rounding)

In general, prior accident years (PAYs) changes from last month are due to the release of the actuarial present value adjustments with claims payments, except when valuations are implemented. The loss ratio change year-to-date in Table 04 reflects not only changes in the prior accident year levels, but also the increase in the calendar year-to-date earned premium with an additional month's earned premium, and due the impact of valuation implementation.

For the current accident year (CAY), changes in the year-to-date total reflects the additional month's exposure and regular changes to actuarial present value adjustments as the year ages, and due the impact of valuation implementation.

5 Current Operational Report – Additional Exhibits

Section 6 provides exhibits pertaining to the actuarial provisions reflected in the current month's Operational Report.

IBNR (including actuarial present value adjustments) presented in section 6, Exhibit A, were derived on a discounted basis, and therefore reflect the time value of money and include an explicit provision for adverse deviations in accordance with accepted actuarial practice in Canada.

IBNR presented in section 6, Exhibit B, does NOT include any actuarial present value adjustments. The "Total IBNR" from this exhibit is shown in the Operational Report as "Undiscounted IBNR".

The ultimate loss ratios detailed in section 6, Exhibit B, refer to the estimates derived on the basis of various actuarial methodologies applied to the experience of the Alberta Non-Grid Risk Sharing Pool for the purposes of the most recent quarterly valuation. As discussed in section 3, IBNR reflected in the current month's Operational Report was derived as the difference between the estimated ultimate for the claims amount (i.e. earned premium x ultimate loss ratio) and the associated current recorded amounts (life-to-date payments plus current case reserves).

In addition to the exhibits printed below, we are making supplementary data files available for download from our website for members who require additional detailed data on the LRC calculation as well as the payment patterns and actual and projected premiums, risk adjustment, interest rate, loss ratios and expenses of the pools.

6 EXHIBITS

The exhibits listed below are provided on the pages that follow:

EXHIBIT A	IBNR for Member Sharing – includes Actuarial Present Value Adjustments
EXHIBIT B	IBNR
EXHIBIT C	Liability for Remaining Coverage
EXHIBIT D	Projected Year-end Policy Liabilities
EXHIBIT E	Risk Adjustment & Discount Rate
EXHIBIT F	Interest Rate Sensitivity
EXHIBIT G	Components of IBNR Change During Month

Additional exhibits available online:

LRC Calculation file

Detailed valuation results

EXHIBIT A

IBNR for Member Sharing – includes Actuarial Present Value Adjustments

EXHIBIT A - IBNR + M/S Actuarial Present Value Adjustments: RSP Alberta Non-Grid

amounts in $000s

	Accident Year	Actual Feb 2023	Actual Mar 2023	Projected Apr 2023	Projected May 2023	Projected Jun 2023	Projected Jul 2023	Projected Aug 2023	Projected Dec 2023
	prior	-	-	-	-	-	-	-	-
	2004	37	37	37	37	38	38	38	40
	2005	(1)	(1)	(0)	(0)	0	1	1	2
	2006	45	45	45	45	46	46	46	47
	2007	82	87	89	91	93	95	96	104
	2008	57	57	57	57	57	57	57	58
	2009	(524)	34	29	24	18	20	21	29
	2010	1	47	49	50	51	42	32	27
	2011	1	1	2	2	3	3	3	4
	2012	435	431	435	439	442	447	451	466
	2013	(533)	(481)	(477)	(474)	(471)	(469)	(468)	(459)
	2014	(74)	13	12	10	9	12	16	26
	2015	(176)	62	71	79	86	87	87	129
	2016	(662)	492	483	474	464	467	469	338
discount rate:	2017	306	284	304	320	333	369	403	518
5.53%	2018	590	(1,229)	(1,111)	(999)	(893)	(809)	(731)	(463)
	2019	3,623	1,984	1,952	1,914	1,871	1,801	1,727	1,544
weighted average	2020	4,682	5,274	4,947	4,614	4,274	4,061	3,841	2,970
risk adjustment factor:	2021	12,365	15,592	14,955	14,309	13,653	13,018	12,374	9,877
9.50%	2022	38,167	30,628	30,036	29,443	28,850	27,928	27,006	23,218
	2023	14,227	18,532	23,365	28,975	34,116	37,291	40,522	44,011
	TOTAL	72,646	71,890	75,280	79,412	83,038	84,504	85,992	82,486
	Change		(756)	3,390	4,132	3,627	1,466	1,488	

Please see Exhibit G, page 1 for Components of Change during Current Month

EXHIBIT B

IBNR

EXHIBIT B - Undiscounted IBNR: RSP Alberta Non-Grid

amounts in $000s

Ultimate Loss Ratio	Accident Year	Actual Feb 2023	Actual Mar 2023	Projected Apr 2023	Projected May 2023	Projected Jun 2023	Projected Jul 2023	Projected Aug 2023	Projected Dec 2023
	prior	-	-	-	-	-	-	-	-
349.3%	2004	37	37	37	37	37	37	37	37
97.4%	2005	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
87.0%	2006	45	45	45	45	45	45	45	45
101.9%	2007	54	54	54	54	54	54	54	54
101.1%	2008	56	56	56	56	56	56	56	56
95.3%	2009	(524)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
85.1%	2010	(3)	(24)	(24)	(24)	(24)	(24)	(24)	(24)
84.4%	2011	3	(0)	(0)	(0)	(0)	(0)	(0)	(0)
101.2%	2012	477	423	423	423	423	423	423	423
98.8%	2013	(463)	(508)	(508)	(508)	(508)	(508)	(508)	(508)
105.9%	2014	(16)	14	10	5	-	-	-	-
94.3%	2015	159	126	116	106	95	80	64	49
117.1%	2016	(279)	681	638	594	550	522	493	251
105.0%	2017	552	381	365	350	334	343	352	385
103.9%	2018	865	(1,169)	(1,114)	(1,060)	(1,005)	(968)	(930)	(789)
92.4%	2019	3,911	2,199	2,066	1,933	1,801	1,647	1,494	1,048
95.2%	2020	5,258	5,722	5,261	4,800	4,340	4,013	3,686	2,462
83.4%	2021	13,963	17,241	16,358	15,475	14,592	13,742	12,891	9,666
90.8%	2022	40,476	32,191	31,555	30,920	30,284	29,334	28,383	24,491
97.7%	2023	15,153	19,770	24,925	30,885	36,358	39,828	43,356	47,756
	TOTAL	79,723	77,221	80,244	84,072	87,414	88,605	89,853	85,383
	Change		(2,502)	3,023	3,828	3,341	1,191	1,249	

Please see Exhibit G, page 2 for Components of Change during Current Month

EXHIBIT C

Premium Liabilities

EXHIBIT C - Liability for Remaining Coverage: RSP Alberta Non-Grid								
amounts in $000s								
Accident Year	Actual Feb 2023	Actual Mar 2023	Projected Apr 2023	Projected May 2023	Projected Jun 2023	Projected Jul 2023	Projected Aug 2023	Projected Dec 2023
LRC excl. Loss Component								
2023	52,514	51,414	48,994	45,712	42,284	36,865	31,467	(215)
2024	339	1,398	3,601	6,738	11,041	16,760	23,493	56,191
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
Total	**52,853**	**52,811**	**52,595**	**52,450**	**53,324**	**53,625**	**54,960**	**55,976**
Undiscounted Loss Component								
2023	66,111	58,244	52,075	45,530	39,175	32,521	25,838	-
2024	87,483	85,483	85,483	85,483	85,483	85,483	85,483	85,483
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
Total	**153,594**	**143,727**	**137,558**	**131,013**	**124,658**	**118,004**	**111,321**	**85,483**
Discounted Loss Component								
2023	44,474	38,164	34,264	30,081	25,991	21,676	17,293	-
2024	59,760	56,976	57,104	57,199	57,197	57,229	57,267	57,870
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
Total	**104,235**	**95,140**	**91,368**	**87,280**	**83,188**	**78,905**	**74,561**	**57,870**
LRC incl. Loss Component								
2023	96,988	89,578	83,258	75,793	68,275	58,541	48,761	(215)
2024	60,099	58,374	60,705	63,937	68,238	73,989	80,760	114,060
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
Total	**157,088**	**147,952**	**143,963**	**139,730**	**136,513**	**132,530**	**129,521**	**113,846**

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2023, broken down by component.

Alberta Non-	Projected Balances as at Dec. 31, 2023 ($000s)											
Ending 2023	nominal values			actuarial present value adjustments (apvs)								
Accident Year	Case	IBNR	Total Unpaid	Discount Amount	Risk Adjustment	Liability for Incurred Claims (LIC)	Discounted Loss Component	Undiscounted Loss Component	Discount Amount	Liability for Remaining Coverage (LRC)	LRC excl. Loss Component	Total Insurance Contract Liabilities
prior	-	-	-	-	-	-	-	-	-	-	-	-
2004	26	37	63	3	-	66	-	-	-	-	-	66
2005	75	(1)	74	3	-	77	-	-	-	-	-	77
2006	-	45	45	2	-	47	-	-	-	-	-	47
2007	302	54	356	12	38	405	-	-	-	-	-	405
2008	(35)	56	22	1	1	23	-	-	-	-	-	23
2009	398	(18)	380	9	38	427	-	-	-	-	-	427
2010	484	(24)	460	3	48	511	-	-	-	-	-	511
2011	58	(0)	58	(2)	6	61	-	-	-	-	-	61
2012	424	423	848	(40)	83	891	-	-	-	-	-	891
2013	1,243	(508)	734	(24)	73	783	-	-	-	-	-	783
2014	655	-	655	(37)	63	681	-	-	-	-	-	681
2015	3,145	49	3,194	(216)	296	3,274	-	-	-	-	-	3,274
2016	5,715	251	5,966	(472)	559	6,053	-	-	-	-	-	6,053
2017	4,455	385	4,840	(327)	460	4,973	-	-	-	-	-	4,973
2018	9,524	(789)	8,736	(505)	831	9,061	-	-	-	-	-	9,061
2019	14,748	1,048	15,796	(1,000)	1,496	16,291	-	-	-	-	-	16,291
2020	17,842	2,462	20,303	(1,410)	1,918	20,812	-	-	-	-	-	20,812
2021	27,370	9,666	37,036	(3,017)	3,229	37,248	-	-	-	-	-	37,248
2022	33,380	24,491	57,871	(6,179)	4,906	56,598	-	-	-	-	-	56,598
PAYs subtotal	**119,809**	**37,627**	**157,436**	**(13,195)**	**14,043**	**158,284**	**-**	**-**	**-**	**-**	**-**	**158,284**
CAY (2023)	60,394	47,756	108,151	(12,795)	9,050	104,405	-	-	-	(215)	(215)	104,191
FtAY (2024)	-	-	-	-	-	-	57,870	85,483	(27,614)	114,060	56,191	114,060
Total	**180,203**	**85,383**	**265,587**	**(25,990)**	**23,093**	**262,689**	**57,870**	**85,483**	**(27,614)**	**113,846**	**55,976**	**376,535**

EXHIBIT E

Risk Adjustment & Discount Rate

The tables below present selected risk adjustment factor by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2023 from the valuation), followed by the selected discount rate.

Risk Adjustment Factors: RSP Alberta Non-Grid

Coverage	Government Line	Alberta Non-Grid
Bodily Injury	Third Party Liability	10.26%
Property Damage	Third Party Liability	3.09%
AccBen (indivis)	Accident Benefits	6.00%
Underinsured Motorist	Other Coverages	10.68%
Collision w AP	Other Coverages	0.15%
Comprehensive w SP	Other Coverages	2.58%
Total	Total	9.50%

discount rate:	5.53%

EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2023 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2023, and are based on more up-to-date information). We have included the most recent valuation selection (5.53%), the prior valuation assumption (3.56%) and the prior fiscal year end valuation assumption (1.05%) for comparative purposes. A 25 basis point margin for investment return adverse deviation is used in all scenarios presented.

	Actuarial Present Value of Provisions at Various Discount Rates - Dec. 31, 2023 projected Unpaid							
AY	4.53%	5.03%	5.53%	6.03%	6.53%	7.03%	3.56%	3.56%
2005 & prior	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-
2009	60	60	59	59	59	59	61	61
2010	419	419	418	417	417	416	420	420
2011	36	35	35	35	35	35	36	36
2012	1,030	1,025	1,021	1,017	1,013	1,008	1,038	1,038
2013	716	711	705	700	694	689	728	728
2014	534	530	527	524	521	517	540	540
2015	3,092	3,067	3,043	3,019	2,995	2,972	3,142	3,142
2016	5,667	5,610	5,553	5,498	5,443	5,390	5,783	5,783
2017	4,557	4,503	4,450	4,398	4,348	4,298	4,665	4,665
2018	8,816	8,727	8,640	8,555	8,473	8,392	8,995	8,995
2019	15,694	15,557	15,423	15,292	15,164	15,039	15,970	15,970
2020	22,643	22,434	22,231	22,032	21,838	21,648	23,061	23,061
2021	35,937	35,571	35,214	34,866	34,525	34,193	36,671	36,671
2022	58,780	58,136	57,507	56,894	56,295	55,711	60,076	60,076
Total	244,432	241,759	239,152	236,608	234,125	231,700	249,811	249,811
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

	Dollar Impact Relative to Valuation Assumption							
AY	4.53%	5.03%	5.53%	6.03%	6.53%	7.03%	3.56%	3.56%
Total	5,279	2,607	-	(2,544)	(5,028)	(7,452)	10,659	10,659
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

	Percentage Impact Relative to Valuation Assumption							
AY	4.53%	5.03%	5.53%	6.03%	6.53%	7.03%	3.56%	3.56%
2005 & prior	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.9%	0.5%	0.0%	-0.5%	-0.9%	-1.4%	1.9%	1.9%
2010	0.3%	0.2%	0.0%	-0.2%	-0.3%	-0.5%	0.6%	0.6%
2011	0.6%	0.3%	0.0%	-0.3%	-0.6%	-0.9%	1.3%	1.3%
2012	0.9%	0.4%	0.0%	-0.4%	-0.8%	-1.2%	1.7%	1.7%
2013	1.6%	0.8%	0.0%	-0.8%	-1.6%	-2.3%	3.2%	3.2%
2014	1.3%	0.6%	0.0%	-0.6%	-1.2%	-1.8%	2.5%	2.5%
2015	1.6%	0.8%	0.0%	-0.8%	-1.6%	-2.3%	3.3%	3.3%
2016	2.1%	1.0%	0.0%	-1.0%	-2.0%	-2.9%	4.1%	4.1%
2017	2.4%	1.2%	0.0%	-1.2%	-2.3%	-3.4%	4.8%	4.8%
2018	2.0%	1.0%	0.0%	-1.0%	-1.9%	-2.9%	4.1%	4.1%
2019	1.8%	0.9%	0.0%	-0.8%	-1.7%	-2.5%	3.6%	3.6%
2020	1.9%	0.9%	0.0%	-0.9%	-1.8%	-2.6%	3.7%	3.7%
2021	2.1%	1.0%	0.0%	-1.0%	-2.0%	-2.9%	4.1%	4.1%
2022	2.2%	1.1%	0.0%	-1.1%	-2.1%	-3.1%	4.5%	4.5%
2023	2.5%	1.2%	0.0%	-1.2%	-2.4%	-3.5%	5.1%	5.1%
Total	2.2%	1.1%	0.0%	-1.1%	-2.1%	-3.1%	4.5%	4.5%
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

EXHIBIT G

Components of Member Statement IBNR (i.e. "Discounted") Change

EXHIBIT G - Components of Change in M/S IBNR (i.e. IBNR + Discount Amount + Risk Adjustment): RSP Alberta Non-Grid
10/31/2022 to 3/31/2023

amounts in $000s

Accident Year	Prior Implementation Month	Projected Change	Change Due to AvsP Variances	Change Due to Valuation Implementation	Total Change	% of Total Change	Current Month Final Amount
prior	-	-	-	-	-	-	-
2004	37	4	(4)	-	-	-	37
2005	(1)	8	(8)	-	-	-	(1)
2006	45	2	(2)	-	-	-	45
2007	81	(89)	67	29	6	7.5%	87
2008	56	(10)	12	(1)	1	1.2%	57
2009	(0)	15	(539)	558	34	(75,155.6%)	34
2010	4	55	(82)	71	44	1,207.8%	47
2011	(1)	4	(0)	(1)	3	(193.9%)	1
2012	(53)	97	358	29	484	(907.6%)	431
2013	(133)	537	(840)	(44)	(348)	262.4%	(481)
2014	(49)	(216)	250	28	63	(127.3%)	13
2015	(200)	934	(589)	(83)	262	(130.8%)	62
2016	(668)	675	(163)	648	1,159	(173.6%)	492
2017	439	115	55	(325)	(155)	(35.3%)	284
2018	1,319	(235)	(2,449)	136	(2,548)	(193.1%)	(1,229)
2019	4,738	(956)	(690)	(1,108)	(2,753)	(58.1%)	1,984
2020	7,697	(1,941)	(1,527)	1,045	(2,423)	(31.5%)	5,274
2021	16,266	(3,060)	(948)	3,334	(674)	(4.1%)	15,592
2022	45,536	(924)	(8,125)	(5,859)	(14,908)	(32.7%)	30,628
2023	-	31,760	(12,494)	(734)	18,532	-	18,532
TOTAL	**75,113**	**26,773**	**(27,718)**	**(2,279)**	**(3,223)**	**(4.3%)**	**71,890**

EXHIBIT G

Components of IBNR (i.e. "Undiscounted") Change

EXHIBIT G - Components of Change in Undiscounted IBNR: RSP Alberta Non-Grid
10/31/2022 to 3/31/2023

amounts in $000s

Accident Year	Prior Implementation Month	Projected Change	Change Due to AvsP Variances	Change Due to Valuation Implementation	Total Change	% of Total Change	Current Month Final Amount
prior	-	-	-	-	-	-	-
2004	36	(2)	3	-	1	2.5%	37
2005	5	-	(6)	-	(6)	(116.2%)	(1)
2006	76	(4)	(27)	-	(31)	(40.9%)	45
2007	65	(3)	(8)	(0)	(11)	(17.0%)	54
2008	70	(3)	(10)	(0)	(14)	(19.4%)	56
2009	(28)	12	(508)	506	10	(35.6%)	(18)
2010	29	(2)	(51)	0	(53)	(182.8%)	(24)
2011	(34)	2	35	(3)	34	(100.0%)	(0)
2012	(11)	-	427	7	434	(3,949.9%)	423
2013	9	426	(898)	(45)	(517)	(5,748.8%)	(508)
2014	21	(266)	229	31	(7)	(31.1%)	14
2015	116	748	(706)	(32)	10	8.4%	126
2016	(257)	80	11	848	938	(365.1%)	681
2017	706	(31)	(46)	(249)	(325)	(46.0%)	381
2018	1,632	(175)	(2,848)	222	(2,801)	(171.6%)	(1,169)
2019	5,047	(1,247)	(669)	(932)	(2,848)	(56.4%)	2,199
2020	8,350	(2,541)	(1,491)	1,404	(2,628)	(31.5%)	5,722
2021	17,965	(3,314)	(1,931)	4,521	(724)	(4.0%)	17,241
2022	48,519	(811)	(10,156)	(5,361)	(16,328)	(33.7%)	32,191
2023	-	33,137	(13,144)	(223)	19,770	-	19,770
TOTAL	**82,316**	**26,006**	**(31,794)**	**693**	**(5,095)**	**(6.2%)**	**77,221**