ALBERTA NON-GRID RISK SHARING POOL

MAY 2022 OPERATIONAL REPORT

ACTUARIAL HIGHLIGHTS

Related Bulletin: F2022-040_AB_RSP_May_2022_Operational_Report

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FACILITY ASSOCIATION

ACTUARIAL HIGHLIGHTS

RSP ALBERTA NON-GRID

OPERATIONAL REPORT

MAY 2022

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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 2022 in July 2022, 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 2022)

The May 2022 Operational Report incorporates the results of an updated valuation (as at December 31, 2021) – 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 2021.

ALBERTA NON-GRID RISK SHARING POOL FISCAL YEAR 2021 – SCHEDULE OF VALUATIONS			
Valuation Date	**Discount Rate (per annum)**	**Operational Report**	**Description of Changes**
Sep 30, 2021 (completed)	0.81% mfad[1] 25 bp	Oct. 2021	update valuation (roll-forward): accident year 2021 loss ratio decreased 0.8 points to 80.9%; discount rate increased 8 basis points; no change to selected margins for adverse deviation
Dec. 31, 2021 (completed)	1.05% mfad 25 bp	Mar. 2022	update valuation:): accident year 2021 loss ratio decreased 2.2 points to 78.7% and accident year 2022 loss ratio increased 1.8 points to 100.2%; discount rate increased 24 basis points; no change to selected margins for adverse deviations
Mar. 31, 2022 (completed)	2.23 % mfad 25 bp	May. 2022	update valuation (roll-forward): accident year 2022 loss ratio decreased 11 points to 99.1%; discount rate increased 118 basis points; no change to selected margins for adverse deviation
Jun. 30, 2022	% mfad - bp	Aug. 2022	update valuation:
Sep. 30, 2022	% mfad -- bp	Oct. 2022	update valuation (roll-forward):

Under the proposed schedule for fiscal year 2022, the off-half valuation quarters ending March 31, 2022 and September 30, 2022 would not reflect a full valuation update of assumptions, but would rather roll-forward key assumptions from the previous valuation.

[1] The selected interest rate margin is limited to reducing the selected discount rate to 0%; the approach is that if the net impact is negative, the discount rate will be capped at 0%.

1.2 New Valuation

A valuation of the Alberta Non-Grid Risk Sharing Pool ("RSP") as at March 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.

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 (2022), and "Prem Def" refers to premium deficiency / deferred acquisition costs impacts.

Summary of Impact ($000s) of Implementing Result of Valuation as at Mar. 31, 2022[2]

AB Non-Grid	unfav / (fav) for the month and ytd					
	IMPACT in $000s from changes in:					
	ults & payout patterns			dsct rate	margins	
	Nominal [1]	apv adj. [2]	sub-tot [3]	apv adj. [4]	apv adj. [5]	TOTAL [6]
PAYs	7,461	697	8,158	(5,506)	-	2,652
CAY	(725)	(99)	(824)	(1,606)	-	(2,430)
Prem Def	(686)	(237)	(923)	(1,714)	-	(2,637)
TOTAL	6,050	361	6,411	(8,826)	-	(2,415)

As indicated in the preceding table, the incorporation of the new valuation had an estimated ***$2.4 million favourable impact*** on the month's net result from operations, subtracting an estimated 1.7 points (see following table) to the **year-to-date Combined Operating Ratio** to end at **120.2%**. The favourable valuation impact is driven by the increase in discounting, partially offset by increases in the prior year nominal ultimate losses.

Summary of Impact (% YTD EP) of Implementing Result of Valuation as at Mar. 31, 2022

AB Non-Grid	ytd EP 141,111 (actual)					
	IMPACT unfav / (fav) as % ytd EP from changes in:					
	ults & payout patterns			dsct rate	margins	
	Nominal [1]	apv adj. [2]	sub-tot [3]	apv adj. [4]	apv adj. [5]	TOTAL [6]
PAYs	5.3%	0.5%	5.8%	(3.9%)	-	1.9%
CAY	(0.5%)	(0.1%)	(0.6%)	(1.1%)	-	(1.7%)
Prem Def	(0.5%)	(0.2%)	(0.7%)	(1.2%)	-	(1.9%)
TOTAL	4.3%	0.3%	4.5%	(6.3%)	-	(1.7%)

[2]In these tables, "PAYs" refers to prior accident years, "CAY" refers to the current accident year, and "Prem Def" refers to the provision for premium deficiency or the deferred policy acquisition asset (as applicable). "Nominal" refers to changes excluding any actuarial present value adjustments, whereas "apv adj." refers to actuarial present value adjustments.

The columns under the heading "ults & payout patterns" reflect the impact of changes in the valuation selected ultimates and claims payment patterns (i.e. based on unchanged selection of discount rates and margins for adverse deviation). The column "dsct rate" reflects the impact of the change in the selected discount rate and the column "margins" reflects the impact of any changes in selected margins for adverse deviations.

The impact of the **nominal changes** is shown in column [1] of the two preceding summary tables. The change in the selected nominal ultimates was **unfavourable by $6.1 million** overall. This reflects the impact attributable to the changes in the selected ultimate loss ratios (i.e. for each accident year, it is the product of life-to-date earned premium for the accident year and the change in the selected ultimate loss ratio). As this quarter is a roll-forward valuation, the impacts are mainly driven by claims development on short-tailed lines of business and on older accident years.

The **PAYs** overall showed a **$7.5 million unfavourable** nominal variance or 4.4% of the PAYs nominal unpaid balance of $171.0 million determined at the end of last month (April 2022). The change is primarily due to unfavourable development of 2021 collision claims and 2018 bodily injury large losses.

The CAY and premium deficiency impacts are a result of the change in the selected loss ratio for accident year **2022** (decreased 1.1 points to 99.1%). This change is a result of the valuation expected loss ratio update, which incorporates updated loss and premium trends and updated prior year ultimate loss ratios.

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 margins for adverse deviations or "MfADs" (at the level they were selected i.e. coverage and accident half-year), the impact of then updating the discount rate, and finally the impact of any changes to the MfADs (at the level they were selected). The changes in actuarial present value adjustments are shown in the preceding summary tables 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 government line, which had an impact on the weighted-average MfADs). It also reflects the fact that we updated the projected emergence of claims payments, resulting in a change in the projected cash flows. These changes generated a favourable change of $0.4 million in the actuarial present value adjustments, prior to any changes in the selected discount rate and/or MfADs.

Updated projected cash flows were reviewed against the selected risk-free yield curve, derived from Government of Canada benchmark bond yields monthly series using values for March 2022. Column [4] accounts for the change in the **discount rate** selected (Increased 118 basis points to **2.23%**), indicating a favourable impact of $8.8 million. The impact related only to claims liability (i.e. PAYs plus CAY) was $7.1 million at May 2022 – this compares to the $7.6 million change one would estimate as the impact by interpolation using the interest rate sensitivity table provided last quarter's actuarial Highlights.

Column [5] accounts for any changes to selected MfADs. The selected **investment rate MfAD** was **left unchanged at 25 basis points** and the selected **claims development MfADs** at the coverage and accident year level were also left unchanged (as per our usual practice, development margins are reviewed with the June 30 valuation).

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 4, 2021.

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

There have been no changes in these descriptions since last Highlights, other than updated references to reflect the new valuation.

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.

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.

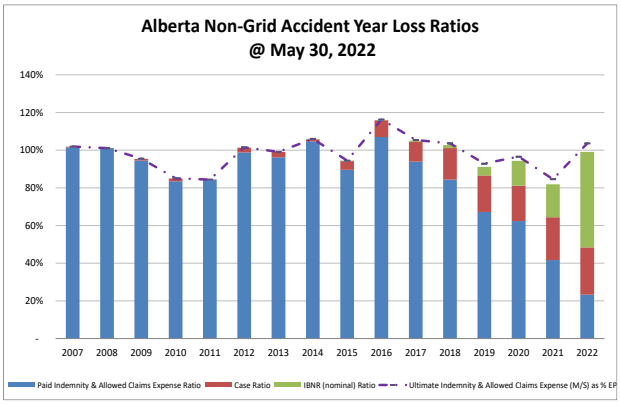
Amendments to the **Alberta Automobile Accident Insurance Benefits Regulation, Diagnostic and Treatment Protocols Regulation, and Minor Injury Regulation** came into force effective November 1, 2020, amending definitions and various benefit maximums defined in these regulations. **Alberta Bill 41** (Insurance (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.

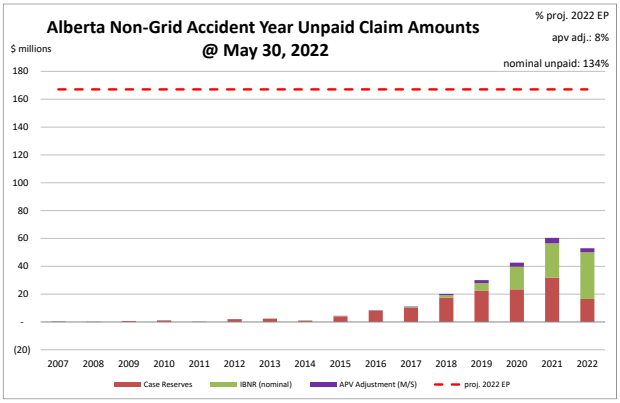
1.5 Current Provision Summary

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

[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.

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 2021 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.

The current actuarial present value adjustments balance ($13.8 million – see the following table) represents 8% of the earned premium projected for the full year 2022 (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.

claim liabilities ($000s)

	amt	%
case	141,472	59.4%
ibnr	82,737	34.8%
M/S apv adjust.	13,818	5.8%
M/S total	238,027	100.0%

The table to the left breaks down the Member Statement (M/S) claim liabilities total into component parts, showing that the majority of the claim liabilities for this RSP is in case reserves. Approximately 61% of the IBNR balance relates to accident years 2021 and 2022 (see Exhibit B). Approximately 85% of the M/S total claim liabilities are related to accident years 2018-2022 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 premium liabilities and the total policy liabilities.

premium liabilities ($000s)

	amt	%
unearned prem	75,451	94.7%
prem def/(dpac)	383	0.5%
M/S apv adjust.	3,835	4.8%
M/S total	79,669	100.0%

policy liabilities ($000s)

	amt	%
claim	224,209	70.6%
premium	75,834	23.9%
M/S apv adjust.	17,653	5.6%
M/S total	317,696	100.0%

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**	April	(57)	(57)	4,042	(546)	2,414	(1,130)
		May	(32)	(32)	4,263	527	2,184	554
PAY Total			**(89)**	**(89)**	**8,305**	**(19)**	**4,598**	**(576)**
CAY	**2022**	April	13,078	(1,284)	3,733	958	5,534	370
		May	13,485	(1,438)	4,377	1,307	6,694	2,452
CAY Total			**26,563**	**(2,722)**	**8,110**	**2,265**	**12,228**	**2,822**
Grand Total			**26,474**	**(2,811)**	**16,415**	**2,246**	**16,826**	**2,246**

(Recorded transaction amounts exclude IBNR & other actuarial provisions)

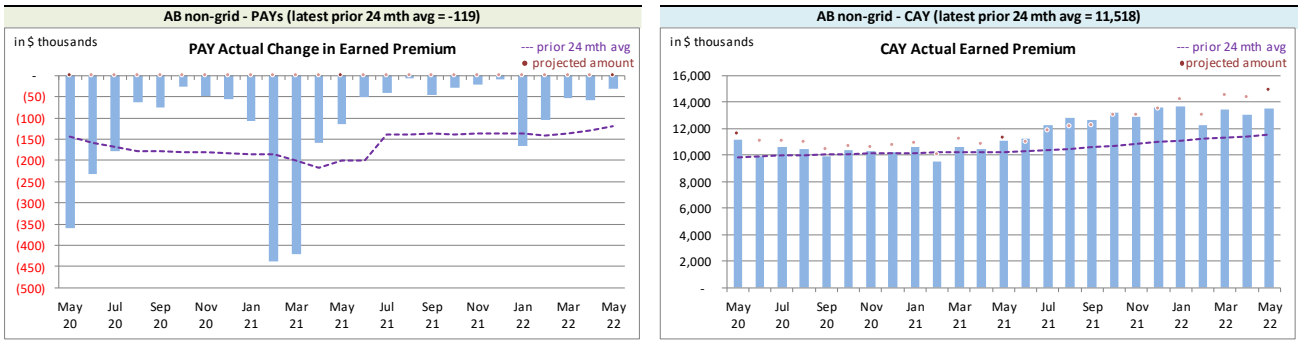
Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance" (i.e. random variation). Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of 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.

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



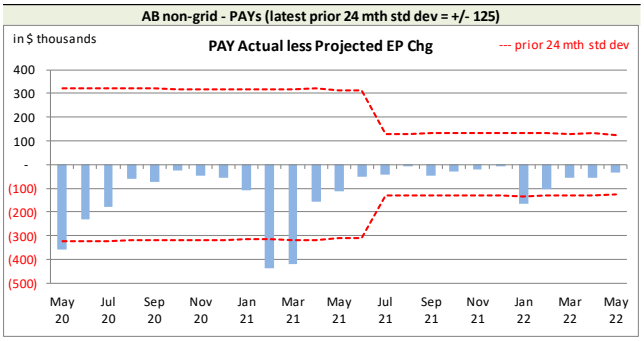
Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

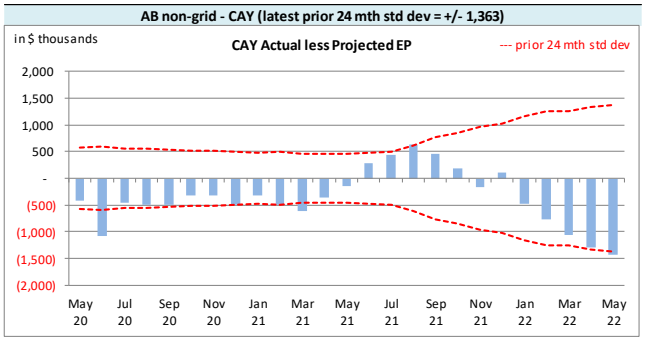
The associated variance between the actual changes and the projections from the previous month are shown in the following charts. **Earned premium** change projections are all attributed to the current accident year as the projection upload does not accept **earned premium** changes for other

[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.

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*





On Latest	$ thousands	
Earned Premium	PAYs	CAY
Mthly Avg EP Chg (prior 24 mths)	(119)	11,518
std dev	125	1,363
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

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 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.

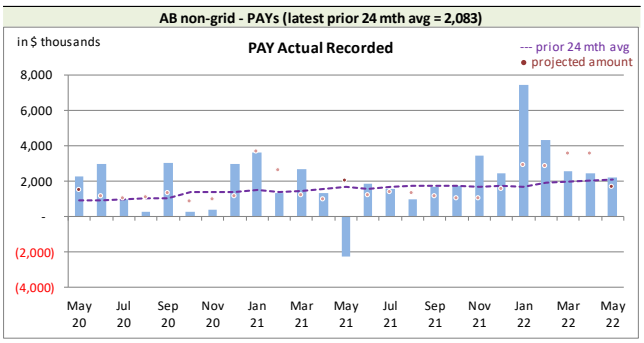
2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

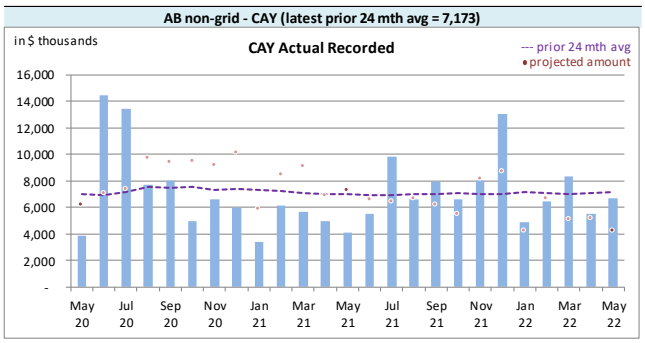
The following charts show actual **recorded** activity (**paid** and case reserve changes), in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

[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.

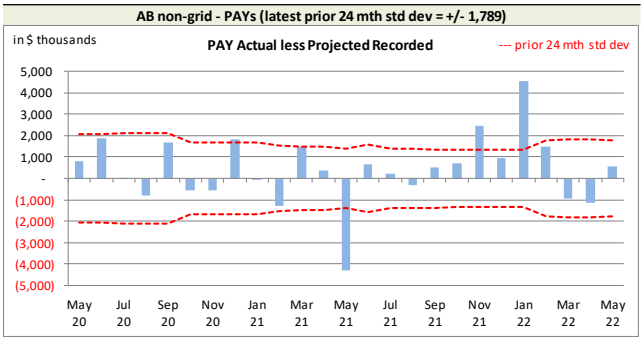
*Alberta non-Grid RSP Actual **Recorded** by Calendar Month*

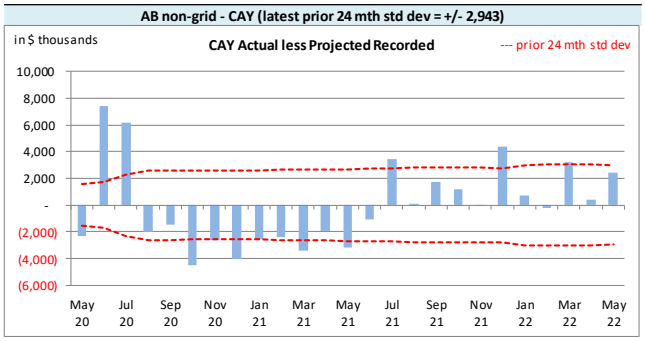




Recorded activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

*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)	2,083	7,173
std dev	1,789	2,943
A-P <> std dev	5	11
% <> std dev	20.0%	44.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	worse

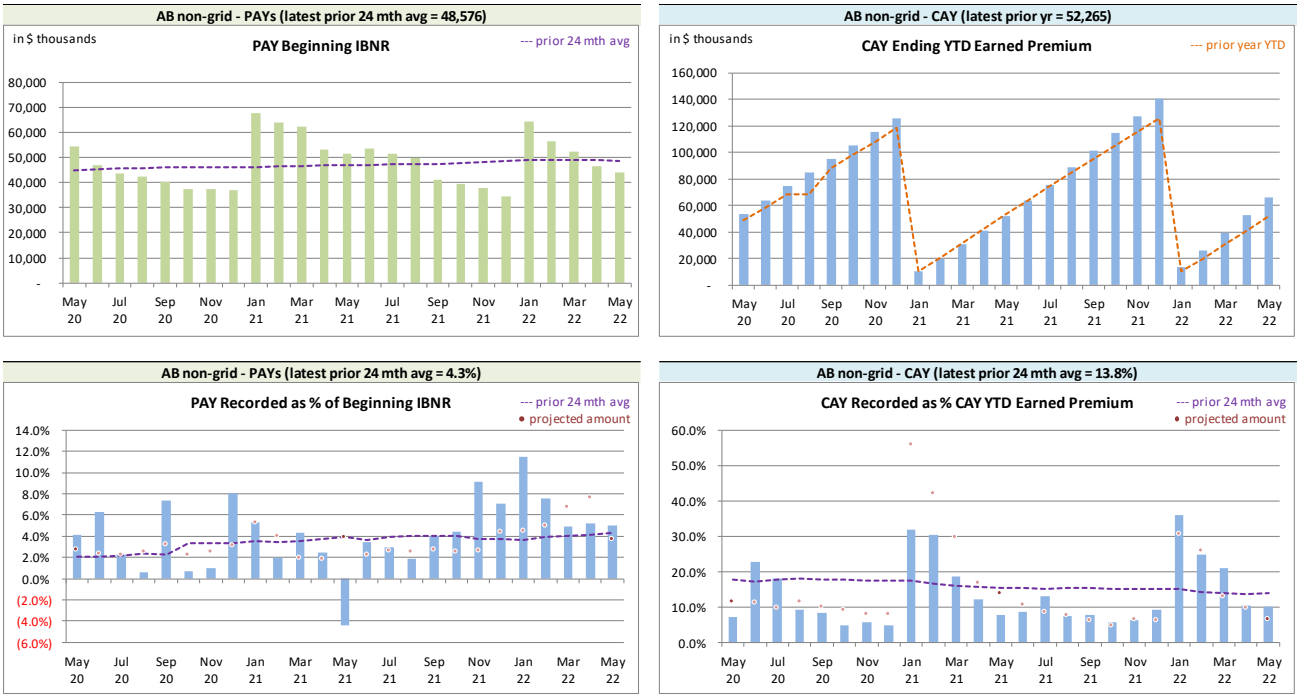
With respect to **recorded** indemnity & allowed claims expense activity, 20% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **recorded** amounts (see table on left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (15 of 25 variances are positive).

The current accident year (CAY) **recorded** variances fell outside of one standard deviation 44% 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 (9 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:

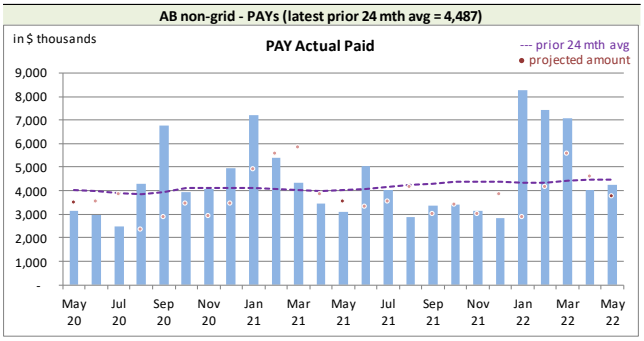
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY(occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one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

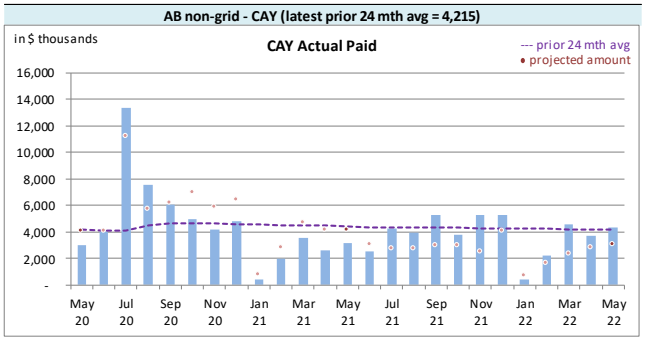
2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

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.

[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.

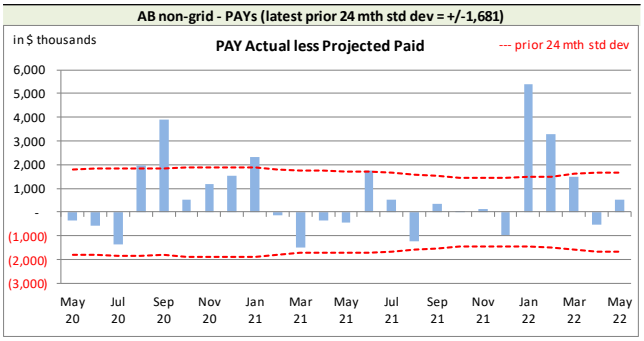
*Alberta non-Grid RSP Actual **Paid** activity by Calendar Month*

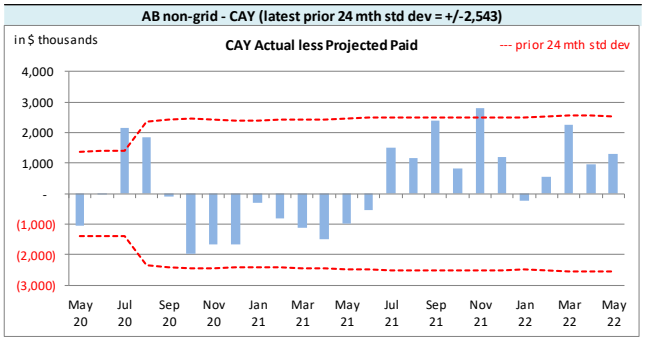




Paid activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

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





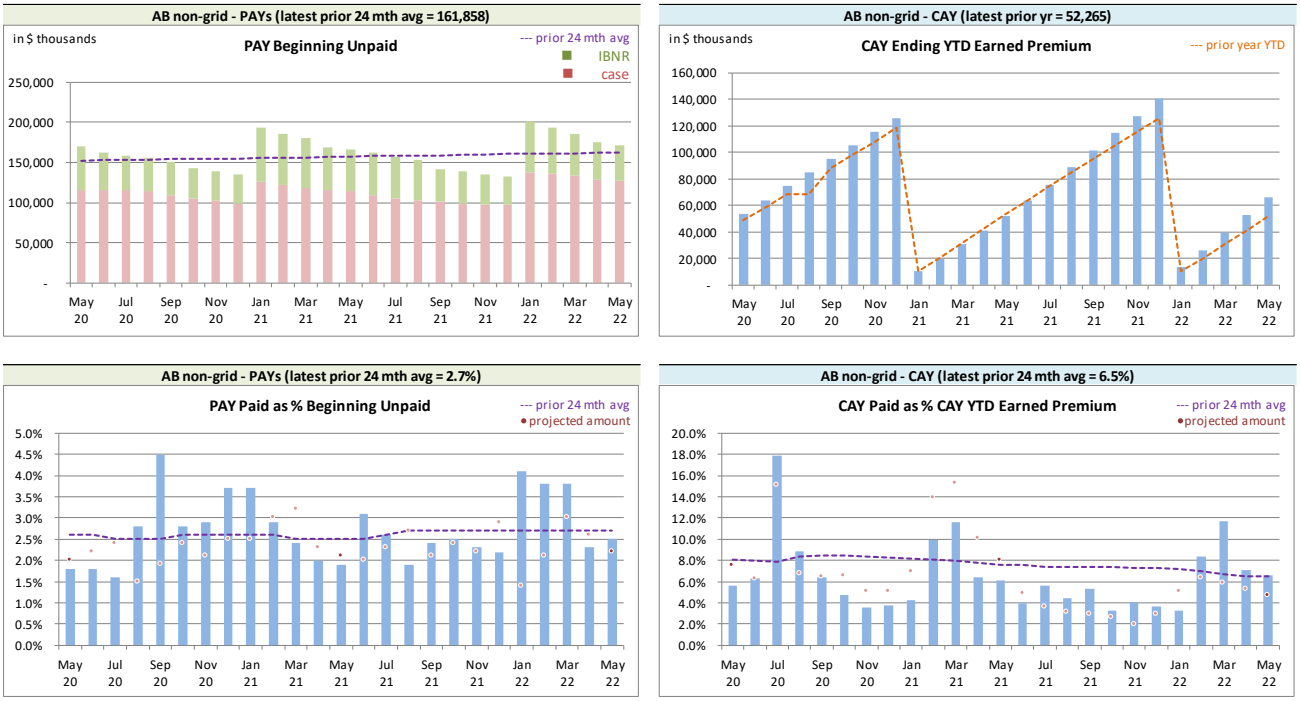
On Latest $ thousands		
Paid	PAYs	CAY
Mthly Avg Paid (prior 24 mths)	4,487	4,215
std dev	1,681	2,543
A-P <> std dev	6	2
% <> std dev	24.0%	8.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	better

With respect to **paid** indemnity & allowed claims expense, 24% 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 8% 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 (11 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 projections and actuals were based on the applicable valuation.

[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".

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 99.7% rather than 99.1% (the valuation ultimate ratio for accident year 2022), 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.)

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

Table 04	YTD Nominal Values		YTD actuarial present value adjustment		YTD Total		Change from Prior Month YTD	
	Amount	% EP	Amount	% EP	Amount	% EP	Amount	LR pts
PAYs	3,927	6.0%	(8,548)	(13.0%)	(4,621)	(7.0%)	2,227	6.1%
CAY	65,375	99.7%	2,945	4.5%	68,320	104.2%	11,917	(4.1%)
TOTAL	69,301	105.7%	(5,603)	(8.5%)	63,698	97.2%	14,144	2.1%

("% EP" based on 2021 calendar year-to-date earned premium; ratios may not total 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.

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).

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	Premium Liabilities
EXHIBIT D	Projected Year-end Policy Liabilities
EXHIBIT E	Discount Rate & Margins for Adverse Deviations
EXHIBIT F	Interest Rate Sensitivity
EXHIBIT G	Components of IBNR Change During Month

EXHIBIT A

IBNR for Member Sharing – includes Actuarial Present Value Adjustments

TABLE EXHIBIT A

IBNR + M/S actuarial present value adjustments

discount rate 2.23%

interest rate margin 25 basis pts

Accident Year	Actual Apr. 2022	Actual May. 2022	Projected Jun. 2022	Projected Jul. 2022	Projected Aug. 2022	Projected Sep. 2022	Projected Oct. 2022	Projected Dec. 2022
	Amounts in $000s							
2006	83	83	75	71	70	62	61	53
2007	101	100	93	88	86	78	76	66
2008	72	74	66	62	61	54	53	46
2009	36	27	28	29	27	28	26	25
2010	80	59	58	56	54	54	53	48
2011	(33)	(33)	(30)	(28)	(26)	(22)	(22)	(18)
2012	104	101	97	95	93	90	86	78
2013	400	141	133	128	124	116	115	102
2014	287	241	220	206	201	179	176	150
2015	313	310	285	269	264	237	232	204
2016	501	377	361	348	339	324	313	286
2017	1,849	985	918	874	854	784	766	679
2018	346	2,597	2,416	2,306	2,259	2,062	2,023	1,799
2019	9,230	7,388	7,137	6,835	6,669	6,295	5,443	5,088
2020	20,597	19,190	18,150	17,607	16,681	15,783	15,160	13,402
2021	26,071	28,440	27,303	25,974	25,705	25,319	24,914	23,489
2022	31,196	36,420	45,347	53,834	58,913	63,266	67,512	74,214
TOTAL	91,288	96,555	102,709	108,804	112,422	114,752	117,029	119,748
Change		5,267	6,154	6,095	3,618	2,330	2,277	

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

EXHIBIT B

IBNR

TABLE EXHIBIT B — Amounts in $000s

IBNR

Ultimate Loss Ratio	Accident Year	Actual Apr. 2022	Actual May. 2022	Projected Jun. 2022	Projected Jul. 2022	Projected Aug. 2022	Projected Sep. 2022	Projected Oct. 2022	Projected Dec. 2022
87.0%	2006	75	75	68	64	63	55	54	47
101.9%	2007	65	65	59	55	54	47	46	39
101.1%	2008	69	70	63	59	58	51	50	43
95.4%	2009	(22)	(22)	(20)	(19)	(19)	(17)	(17)	(15)
85.0%	2010	(10)	(7)	(6)	(6)	(6)	(5)	(5)	(5)
84.4%	2011	(35)	(34)	(31)	(29)	(28)	(24)	(24)	(20)
101.4%	2012	(45)	12	11	10	10	9	9	7
99.0%	2013	221	60	54	51	50	44	44	37
106.0%	2014	216	217	196	184	180	157	155	132
94.4%	2015	55	242	219	206	201	176	174	149
116.0%	2016	(74)	90	81	76	74	65	64	55
105.0%	2017	1,024	572	517	485	474	414	409	349
102.7%	2018	(977)	1,689	1,527	1,434	1,401	1,224	1,211	1,033
91.1%	2019	6,256	5,276	5,065	4,812	4,672	4,345	3,550	3,303
94.3%	2020	16,510	16,302	15,308	14,833	13,943	13,106	12,542	10,918
81.9%	2021	20,637	24,614	23,629	22,448	22,224	21,891	21,541	20,222
99.1%	2022	27,382	33,475	41,823	49,757	54,133	57,769	61,249	66,396
	TOTAL	71,388	82,737	88,601	94,456	97,519	99,337	101,082	102,716
	Change		11,349	5,864	5,855	3,063	1,818	1,745	

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

EXHIBIT C

Premium Liabilities

TABLE EXHIBIT C

Amounts in $000s

Premium Liabilities	Actual Apr. 2022	Actual May. 2022	Projected Jun. 2022	Projected Jul. 2022	Projected Aug. 2022	Projected Sep. 2022	Projected Oct. 2022	Projected Dec. 2022
(1) unearned premium (UP)	74,200	75,451	81,643	89,023	96,617	103,906	107,951	107,619
FOR MEMBER SHARING								
(2) expected future costs ratio {% of (1)}	108.8%	105.6%	106.2%	106.9%	107.5%	108.1%	108.8%	110.2%
(3) expected future costs {(1) x (2)}	80,702	79,669	86,741	95,127	103,859	112,351	117,432	118,592
(4) premium deficiency / (deferred policy acquisition cost)	6,502	4,218	5,098	6,104	7,242	8,445	9,481	10,973
Excluding Actuarial Present Value Adjustments								
(5) expected future costs ratio {% of (1)}	101.1%	100.5%	101.1%	101.7%	102.3%	102.9%	103.5%	104.9%
(6) expected future costs {(1) x (5)}	75,027	75,834	82,566	90,548	98,858	106,942	111,777	112,881
(7) premium deficiency / (deferred policy acquisition cost)	827	383	923	1,525	2,241	3,036	3,826	5,262

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2022, broken down by component.

Alberta non-Grid	Projected Balances as at Dec. 31, 2022 ($000s)									
ending 2022	nominal values			actuarial present value adjustments (apvs)						
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL
2006	14	47	61	-	-	6	-	6	6	67
2007	255	39	294	(2)	-	29	-	29	27	321
2008	(15)	43	28	-	-	3	-	3	3	31
2009	531	(15)	516	(12)	1	52	(1)	51	40	556
2010	855	(5)	850	(32)	3	85	(3)	82	53	903
2011	47	(20)	27	(1)	-	3	-	3	2	29
2012	1,584	7	1,591	(88)	9	159	(9)	150	71	1,662
2013	1,813	37	1,850	(121)	13	185	(12)	173	65	1,915
2014	723	132	855	(67)	7	85	(7)	78	18	873
2015	3,333	149	3,482	(295)	31	348	(29)	319	55	3,537
2016	6,469	55	6,524	(422)	44	651	(42)	609	231	6,755
2017	8,194	349	8,543	(526)	55	854	(53)	801	330	8,873
2018	15,218	1,033	16,251	(863)	90	1,625	(86)	1,539	766	17,017
2019	20,294	3,303	23,597	(1,111)	117	2,916	(137)	2,779	1,785	25,382
2020	23,225	10,918	34,143	(1,750)	185	4,268	(219)	4,049	2,484	36,627
2021	28,030	20,222	48,252	(2,713)	287	6,032	(339)	5,693	3,267	51,519
PAYs (sub-total):	110,658	36,320	146,978	(8,003)	842	17,312	(937)	16,375	9,214	156,192
CAY (2022)	66,397	66,396	132,793	(7,370)	778	15,257	(847)	14,410	7,818	140,611
claims liabilities:	177,055	102,716	279,771	(15,373)	1,620	32,569	(1,784)	30,785	17,032	296,803
	Unearned Premium	Premium Deficiency / (DPAC)	Total Provision	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL*
premium liabilities:	107,619	5,262	112,881	(4,502)	476	10,143	(406)	9,737	5,711	118,592
										*Total may not be sum of parts, as apvs apply to future costs within UPR
policy liabilities:			**392,652**	**(19,875)**	**2,096**	**42,712**	**(2,190)**	**40,522**	**22,743**	**415,395**

EXHIBIT E

Discount Rate & Margins for Adverse Deviations

The tables below present selected margins for adverse development by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2022 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Selected Claims Development MfADs

Accident Year	Third Party Liability	Accident Benefits	Other Coverages	Total
	Margins	Margins	Margins	Margins
2005	10.0%	10.0%	10.0%	10.0%
2006	10.0%	10.0%	10.0%	10.0%
2007	10.0%	10.0%	10.0%	10.0%
2008	10.0%	10.0%	10.0%	10.0%
2009	10.0%	10.0%	10.0%	10.0%
2010	10.0%	10.0%	10.0%	10.0%
2011	10.0%	10.0%	10.0%	10.0%
2012	10.0%	10.0%	10.0%	10.0%
2013	10.0%	10.0%	10.0%	10.0%
2014	10.0%	10.0%	5.0%	10.0%
2015	10.0%	10.0%	9.9%	10.0%
2016	10.0%	10.0%	9.4%	10.0%
2017	10.0%	10.0%	9.9%	10.0%
2018	10.0%	10.0%	10.0%	10.0%
2019	12.5%	10.0%	7.9%	12.4%
2020	12.5%	10.0%	12.5%	12.5%
2021	12.4%	10.0%	12.5%	12.5%
2022	12.1%	10.0%	6.5%	11.5%
2023	11.8%	10.0%	5.1%	9.0%
prem liab	11.8%	10.0%	5.1%	9.0%

discount rate:	2.23%
margin (basis points):	25

*prem liabilities as at 2022m03

EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2022 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2022, and are based on more up-to-date information). We have included the most recent valuation selection (1.09%), the prior valuation assumption (0.81%) and the prior fiscal year end valuation assumption (0.22%) 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, 2022 projected Unpaid							
AY	1.23%	1.73%	2.23%	2.73%	3.23%	3.73%	1.05%	0.22%
2005 & prior	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
2007	132	132	132	132	131	131	132	132
2008	-	-	-	-	-	-	-	-
2009	538	535	532	529	527	524	539	544
2010	953	945	937	929	921	914	956	970
2011	63	62	61	61	60	59	63	64
2012	1,861	1,837	1,814	1,792	1,770	1,748	1,870	1,909
2013	2,232	2,199	2,166	2,135	2,104	2,073	2,245	2,301
2014	1,045	1,026	1,008	990	973	956	1,052	1,083
2015	3,082	3,021	2,963	2,907	2,852	2,799	3,104	3,206
2016	6,664	6,565	6,470	6,377	6,288	6,202	6,700	6,868
2017	7,992	7,880	7,771	7,666	7,564	7,466	8,033	8,224
2018	14,736	14,558	14,386	14,220	14,058	13,902	14,802	15,104
2019	23,968	23,712	23,463	23,222	22,988	22,761	24,062	24,496
2020	34,480	34,078	33,688	33,310	32,942	32,584	34,628	35,307
2021	47,753	47,142	46,549	45,973	45,414	44,870	47,978	49,010
2022	105,276	103,934	102,631	101,367	100,139	98,945	105,769	108,037
Total	250,776	247,628	244,574	241,609	238,730	235,934	251,933	257,256
	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	1.23%	1.73%	2.23%	2.73%	3.23%	3.73%	1.05%	0.22%
Total	6,202	3,054	-	(2,965)	(5,843)	(8,640)	7,359	12,682
	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	1.23%	1.73%	2.23%	2.73%	3.23%	3.73%	1.05%	0.22%
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	0.2%	0.1%	0.0%	-0.1%	-0.2%	-0.4%	0.3%	0.5%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	1.1%	0.5%	0.0%	-0.5%	-1.1%	-1.6%	1.3%	2.2%
2010	1.7%	0.9%	0.0%	-0.8%	-1.7%	-2.5%	2.0%	3.5%
2011	2.2%	1.1%	0.0%	-1.1%	-2.1%	-3.2%	2.6%	4.5%
2012	2.6%	1.3%	0.0%	-1.2%	-2.5%	-3.6%	3.0%	5.2%
2013	3.0%	1.5%	0.0%	-1.5%	-2.9%	-4.3%	3.6%	6.2%
2014	3.7%	1.8%	0.0%	-1.8%	-3.5%	-5.1%	4.4%	7.5%
2015	4.0%	2.0%	0.0%	-1.9%	-3.8%	-5.6%	4.8%	8.2%
2016	3.0%	1.5%	0.0%	-1.4%	-2.8%	-4.1%	3.6%	6.2%
2017	2.8%	1.4%	0.0%	-1.4%	-2.7%	-3.9%	3.4%	5.8%
2018	2.4%	1.2%	0.0%	-1.2%	-2.3%	-3.4%	2.9%	5.0%
2019	2.2%	1.1%	0.0%	-1.0%	-2.0%	-3.0%	2.6%	4.4%
2020	2.4%	1.2%	0.0%	-1.1%	-2.2%	-3.3%	2.8%	4.8%
2021	2.6%	1.3%	0.0%	-1.2%	-2.4%	-3.6%	3.1%	5.3%
2022	2.6%	1.3%	0.0%	-1.2%	-2.4%	-3.6%	3.1%	5.3%
Total	2.5%	1.2%	0.0%	-1.2%	-2.4%	-3.5%	3.0%	5.2%
	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

(April 2022 to May 2022)

RSP **Alberta Non-Grid**
AccountCode Desc **IBNR - Discounted**

M/S IBNR - in $000s

AccYear	Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
prior	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-
2004	42	(4)	4	-	-	-	42
2005	13	-	-	-	-	-	13
2006	83	(11)	11	-	-	-	83
2007	101	(10)	10	(1)	(1)	(1.0%)	100
2008	72	(9)	11	-	2	2.8%	74
2009	36	-	-	(9)	(9)	(25.0%)	27
2010	79	(8)	12	(24)	(20)	(25.3%)	59
2011	(33)	4	(3)	(1)	-	-	(33)
2012	96	(2)	(13)	20	5	5.2%	101
2013	397	(37)	42	(261)	(256)	(64.5%)	141
2014	272	(27)	44	(48)	(31)	(11.4%)	241
2015	345	(22)	(92)	79	(35)	(10.1%)	310
2016	829	(37)	(311)	(104)	(452)	(54.5%)	377
2017	2,187	(180)	(342)	(680)	(1,202)	(55.0%)	985
2018	777	37	(586)	2,369	1,820	234.2%	2,597
2019	9,938	(968)	(431)	(1,151)	(2,550)	(25.7%)	7,388
2020	21,182	(2,447)	1,096	(641)	(1,992)	(9.4%)	19,190
2021	26,516	(2,221)	1,041	3,104	1,924	7.3%	28,440
2022	22,765	22,090	(6,005)	(2,430)	13,655	60.0%	36,420
Grand Total	**85,697**	**16,148**	**(5,512)**	**222**	**10,858**	**12.7%**	**96,555**

EXHIBIT G

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

(April 2022 to May 2022)

RSP **Alberta Non-Grid**
AccountCode Desc **IBNR - Undiscounted**

IBNR - in $000s

AccYear	Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
prior	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-
2004	36	(4)	4	-	-	-	36
2005	5	-	-	-	-	-	5
2006	75	(9)	9	-	-	-	75
2007	65	(7)	7	-	-	-	65
2008	69	(9)	10	-	1	1.4%	70
2009	(22)	3	(3)	-	-	-	(22)
2010	(11)	1	3	-	4	(36.4%)	(7)
2011	(35)	4	(3)	-	1	(2.9%)	(34)
2012	(52)	6	(19)	77	64	(123.1%)	12
2013	217	(26)	32	(163)	(157)	(72.4%)	60
2014	201	(24)	40	-	16	8.0%	217
2015	85	(7)	(105)	269	157	184.7%	242
2016	253	(3)	(340)	180	(163)	(64.4%)	90
2017	1,306	(130)	(316)	(288)	(734)	(56.2%)	572
2018	(596)	100	(553)	2,738	2,285	(383.4%)	1,689
2019	6,948	(871)	(451)	(350)	(1,672)	(24.1%)	5,276
2020	17,035	(2,321)	1,090	498	(733)	(4.3%)	16,302
2021	20,891	(1,877)	1,100	4,500	3,723	17.8%	24,614
2022	19,812	19,938	(5,550)	(725)	13,663	69.0%	33,475
Grand Total	**66,282**	**14,764**	**(5,045)**	**6,736**	**16,455**	**24.8%**	**82,737**