ALBERTA NON-GRID RISK SHARING POOL

AUGUST 2021 OPERATIONAL REPORT

ACTUARIAL HIGHLIGHTS

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FACILITY ASSOCIATION

ACTUARIAL HIGHLIGHTS

RSP ALBERTA NON-GRID

OPERATIONAL REPORT

AUGUST 2021

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1 Summary

1) Recorded activities since last valuation implementation were significantly lower than projected, primarily driven by the activity in the month of August; this activity was reviewed and attributed to the reserving methodology change of one member company group.

2) 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 October 2021 in November 2021, 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 2021)

The August 2021 Operational Report incorporates the results of an updated valuation (as at March 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, 2020 (completed)	0.22% mfad[1] 25 bp	Oct. 2020	update valuation (roll-forward): accident year 2020 loss ratio decreased 1.7 points to 98.1%; discount rate decreased 4 basis points; no change to selected margins for adverse deviations
Dec. 31, 2020 (completed)	0.25% mfad 25 bp	Mar. 2021	update valuation:): accident year 2020 loss ratio decreased 2.6 points to 95.5% and accident year 2021 loss ratio decreased 8.2 points to 89.3%; discount rate increased 3 basis points; no change to selected margins for adverse deviations
Mar. 31, 2021 (completed)	0.73% mfad 25 bp	May. 2021	update valuation (roll-forward): accident year 2021 loss ratio decreased 1.2 points to 88.1%; discount rate increased 48 basis points; no change to selected margins for adverse deviations
Jun. 30, 2021 (completed)	0.73% mfad 25 bp	Aug. 2021	update valuation: accident year 2021 loss ratio decreased 6.5 points to 81.6%; no change to discount rate; selected margins for adverse deviation were updated
Sep. 30, 2021	% mfad -- bp	Oct. 2021	update valuation (roll-forward):

[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%.

Under the proposed schedule for fiscal year 2021, the off-half valuation quarters ending March 31, 2021 and September 30, 2021 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 June 30, 2021 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 (2021), and "Prem Def" refers to premium deficiency / deferred acquisition costs impacts.

Summary of Impact ($000s) of Implementing Result of Valuation as at Jun. 31, 2021[2]

AB Non-Grid	unfav / (fav) for the month and ytd					
	IMPACT in $000s from changes in:					
	ults & payout patterns			dsct rate	margins	
	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL
	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	(8,037)	(925)	(8,962)	-	(576)	(9,538)
CAY	(5,760)	(587)	(6,347)	-	-	(6,347)
Prem Def	(1,809)	(219)	(2,028)	-	-	(2,028)
TOTAL	(15,606)	(1,731)	(17,337)	-	(576)	(17,913)

As indicated in the preceding table, the incorporation of the new valuation had an estimated ***$17.9 million favourable impact*** on the month's net result from operations, subtracting an estimated 26.6 points (see following table) to the **year-to-date Combined Operating Ratio** to end at **93.6%**.

[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.

Summary of Impact (% YTD EP) of Implementing Result of Valuation as at Jun. 31, 2021

AB Non-Grid	ytd EP	67,286	(actual)			
	IMPACT unfav / (fav) as % ytd EP from changes in:					
	ults & payout patterns			dsct rate	margins	
	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL
	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	(11.9%)	(1.4%)	(13.3%)	-	(0.9%)	(14.2%)
CAY	(8.6%)	(0.9%)	(9.4%)	-	-	(9.4%)
Prem Def	(2.7%)	(0.3%)	(3.0%)	-	-	(3.0%)
TOTAL	(23.2%)	(2.6%)	(25.8%)	-	(0.9%)	(26.6%)

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 **favourable by $15.6 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).

The **PAYs** overall showed a **$8.0 million favourable** nominal variance or 5.3% of the PAYs nominal unpaid balance of $152.9 million determined at the end of last month (July 2021), driven by the reduced expected loss ratios due to COVID-19 assumption update, favourable claims development, and favourable impact of a member's case reserve change.

The CAY and premium deficiency impacts are a result of the change in the selected loss ratio for accident year **2021** (decreased 6.5 points to 81.6%). This change is driven by the reduced expected loss ratios due to COVID-19 assumption update, as well as lower than expected claims costs year to date, as claims frequency continues to be reduced as a result of the ongoing COVID-19 pandemic.

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 $1.7 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 June 2021. Column [4] accounts for the change in the **discount rate** selected (remained unchanged at **0.73%**), indicating no impact.

Column [5] accounts for any changes to selected MfADs. The selected **investment rate MfAD** was **left unchanged at 25 basis points.** The selected **claims development MfADs** at the coverage and

accident year level were updated. As per our usual practice, development margins are reviewed with the June 30 valuation, and MfADs have been rolled forward to apply lower MfADs to older years as they become more stable. The claims development MfAD update has a favourable impact of $1.1 million on PAYs.

Consideration was given to recent legal decisions and changes in legislation / regulation as noted above and outlined in section 1.4.

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.

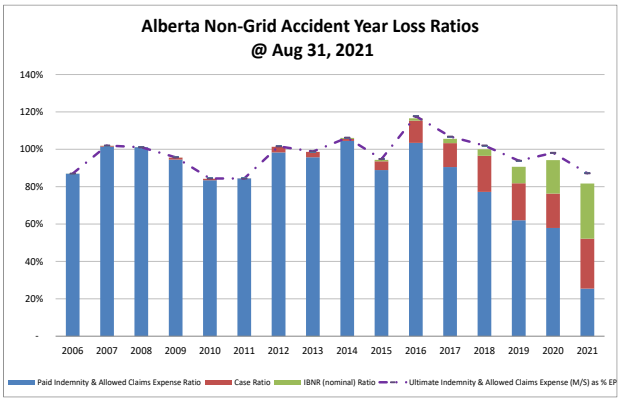
In the **Alberta Treasury Board and Finance Notice 04-2018** (Clarification of Minor Injury Regulation), dated **August 17, 2018**, the Alberta Superintendent of Insurance advised that clarifying amendments have been made to the definition of minor injuries under the Minor Injury Regulation (MIR). With the **most recent** valuation March 31, 2021), consideration of changes in the definition of minor injuries under the MIR, were included with the updated industry trend analysis (completed using industry data as at June 30, 2020).

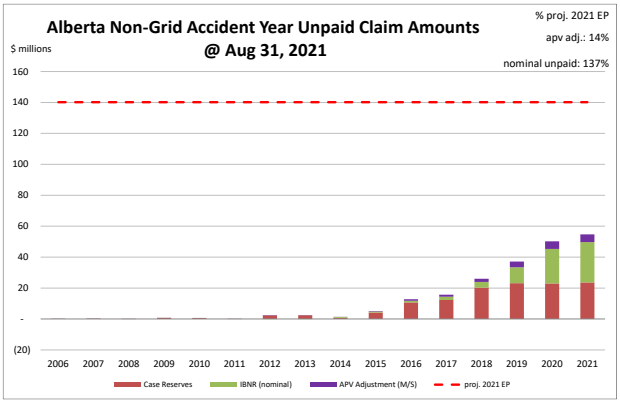
Amendments to the **Alberta Automobile Accident Insurance Benefits Regulation, Diagnostic and Treatment Protocols Regulation, and Minor Injury Regulation** came into force effective November 1, 2020, amending definitions and various benefit maximums defined in these regulations. **Alberta Bill 41** (Insurance (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 With the **most recent** valuation (March 31, 2021), consideration of changes were included with the updated industry trend analysis

(completed using industry data as at June 30, 2020). 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 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 ($19.0 million – see the following table) represents 15% of the earned premium projected for the full year 2021 (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	124,607	59.2%
ibnr	67,058	31.8%
M/S apv adjust.	18,959	9.0%
M/S total	210,624	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 72% of the IBNR balance relates to accident years 2020 and 2021 (see Exhibit B). Approximately 87% of the M/S total claim liabilities are related to accident years 2017-2021 inclusive (i.e. the most recent 5 accident years), and approximately 1% is related to accident years 2011 and prior (i.e. prior to the most recent 10 accident years).

The following tables summarize the premium liabilities and the total policy liabilities.

[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.

premium liabilities ($000s)

	amt	%
unearned prem	83,598	102.4%
prem def/(dpac)	(8,182)	(10.0%)
M/S apv adjust.	6,193	7.6%
M/S total	81,609	100.0%

policy liabilities ($000s)

	amt	%
claim	191,665	65.6%
premium	75,416	25.8%
M/S apv adjust.	25,152	8.6%
M/S total	292,233	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	**2021**	April	(158)	(158)	3,466	(359)	1,320	372
		May	(114)	(114)	3,083	(431)	(2,285)	(4,295)
PAY Total			**(272)**	**(272)**	**6,549**	**(790)**	**(965)**	**(3,923)**
CAY	**2021**	April	10,423	(363)	2,639	(1,502)	4,965	(1,923)
		May	11,110	(145)	3,193	(974)	4,083	(3,160)
CAY Total			**21,533**	**(508)**	**5,832**	**(2,476)**	**9,048**	**(5,083)**
Grand Total			**21,261**	**(780)**	**12,381**	**(3,266)**	**8,083**	**(9,006)**

(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.

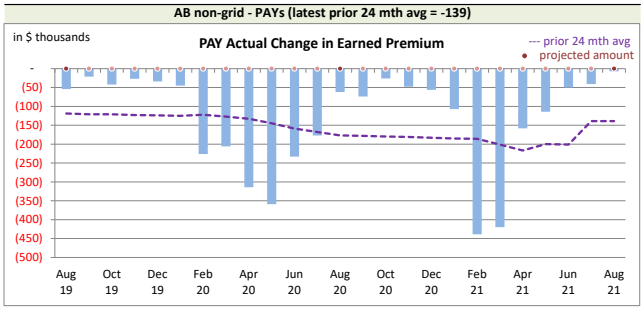
More detailed analysis and commentary on actual vs. projected for the most recent reporting months is provided below.

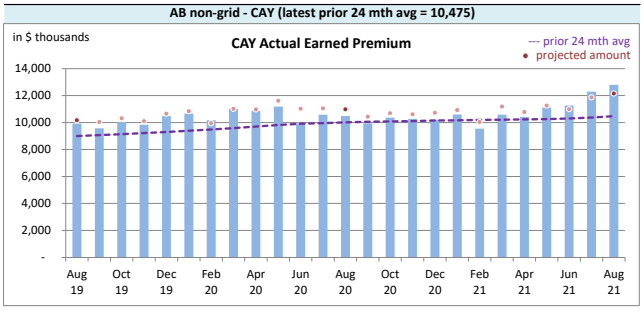
2.1.a Actual vs. Projected (AvsP): Earned Premium

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*



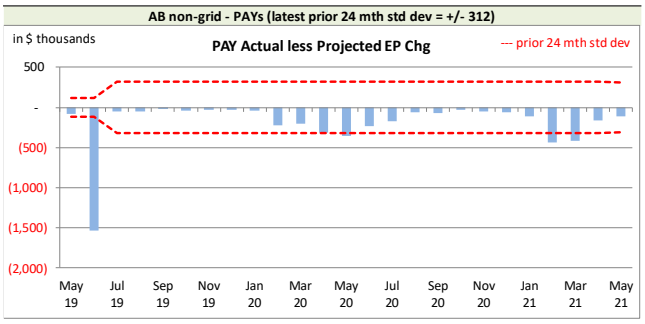


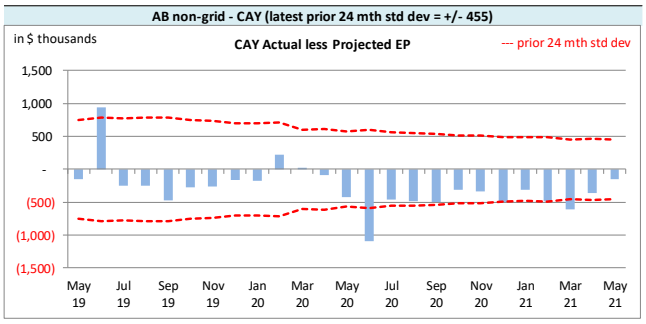
Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

On Latest	$ thousands	
Earned Premium	PAYs	CAY
Mthly Avg EP Chg (prior 24 mths)	(139)	10,475
std dev	130	617
A-P <> std dev	3	4
% <> std dev	12.0%	16.0%
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 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.

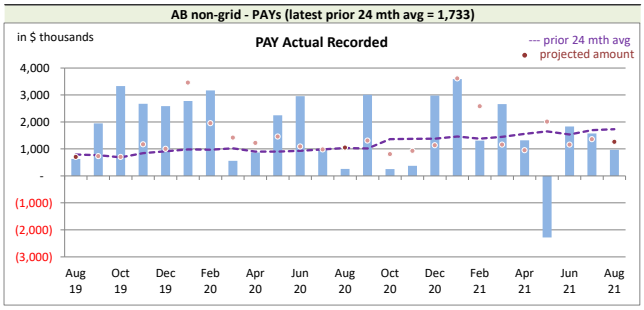
[5]The PAYs' variances will show bias as the projection upload forces all earned premium projections to be attributed to the CAY.

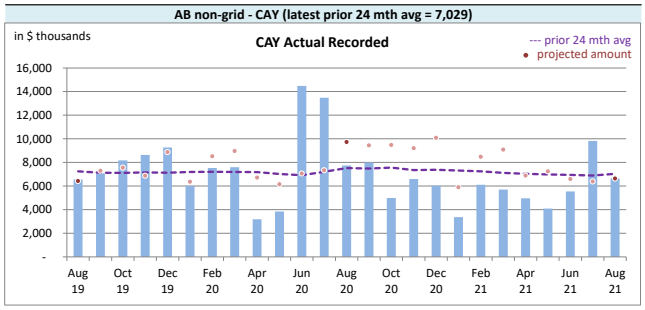
[6]We measure bias based on a 95% confidence range for a binominal distribution with trials based on the range being considered (25 in this case) and 50% probability of success. The rolling 25-month CAY variances at August 2021 had only 3 months where the actuals was higher than projected, and as the 95% confidence range is 8 to 17, bias continues to be indicated.

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.

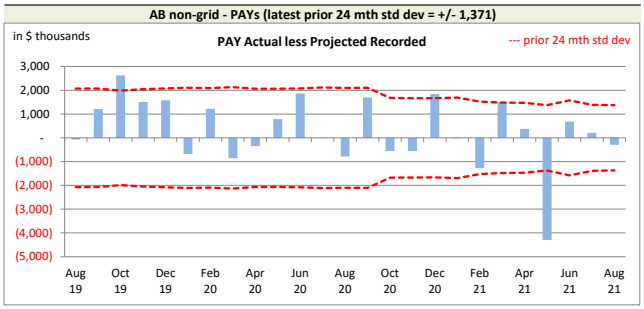
*Alberta non-Grid RSP Actual **Recorded** by Calendar Month*

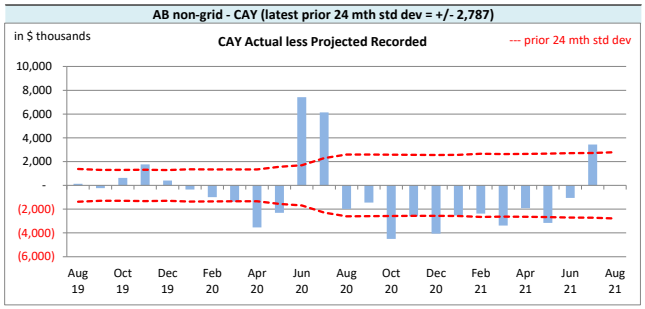




Recorded activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

*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)	1,733	7,029
std dev	1,371	2,787
A-P <> std dev	4	12
% <> std dev	16.0%	48.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	worse

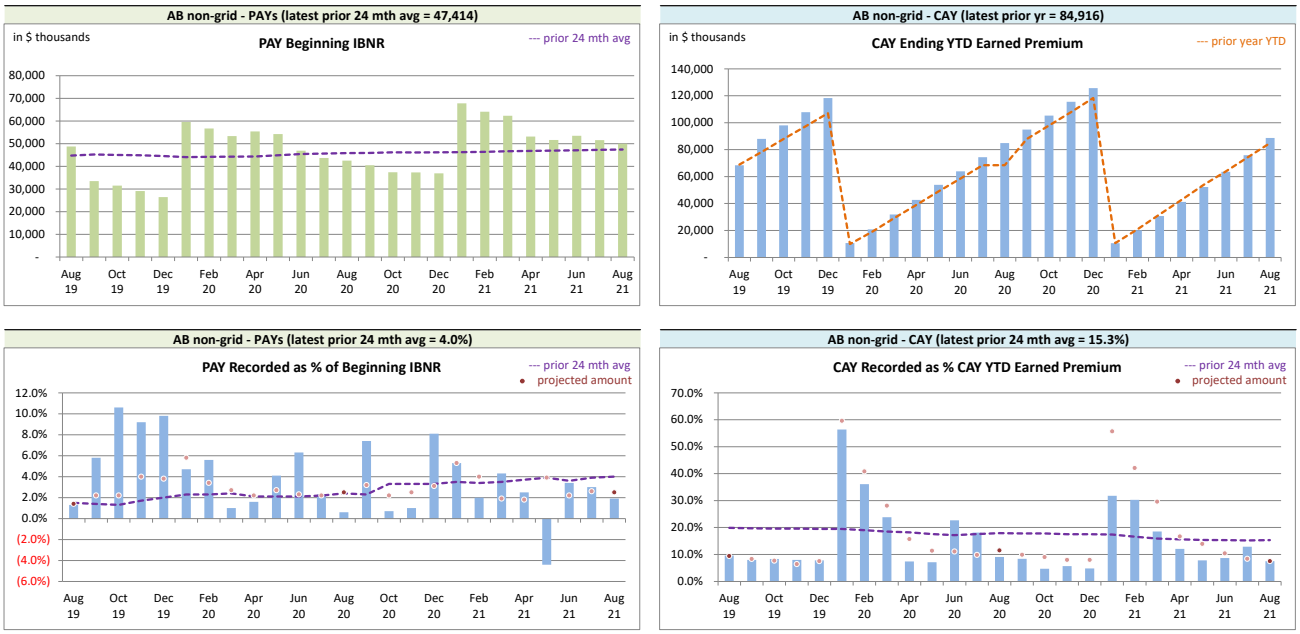
With respect to **recorded** indemnity & allowed claims expense activity, 16% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **recorded** amounts (see table on left), suggesting the projection process has performed 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 (14 of 25 variances are positive).

The current accident year (CAY) **recorded** variances fell outside of one standard deviation 48% 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 (8 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:

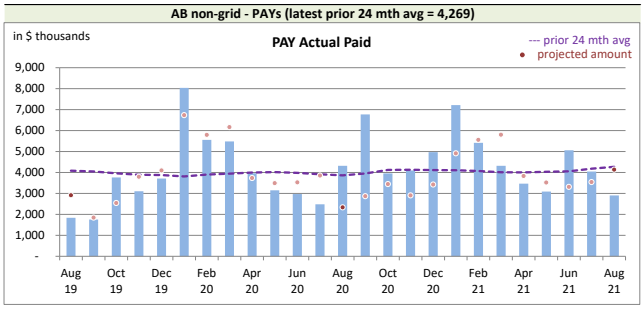
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY(occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one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

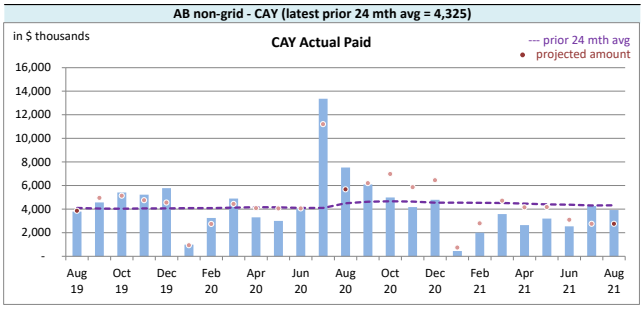
2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

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.

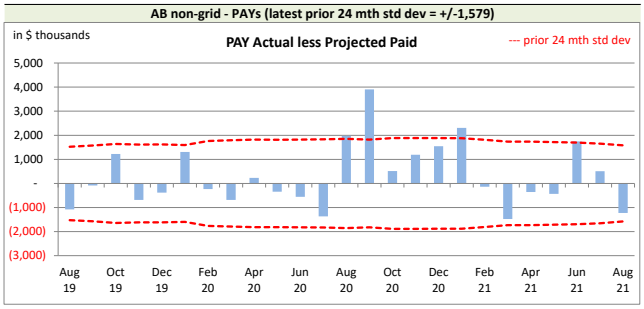
*Alberta non-Grid RSP Actual **Paid** activity by Calendar Month*

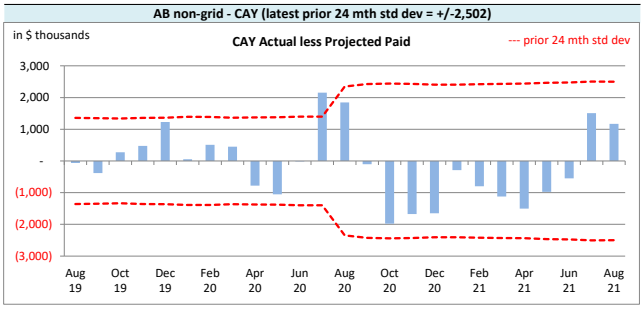




Paid activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

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





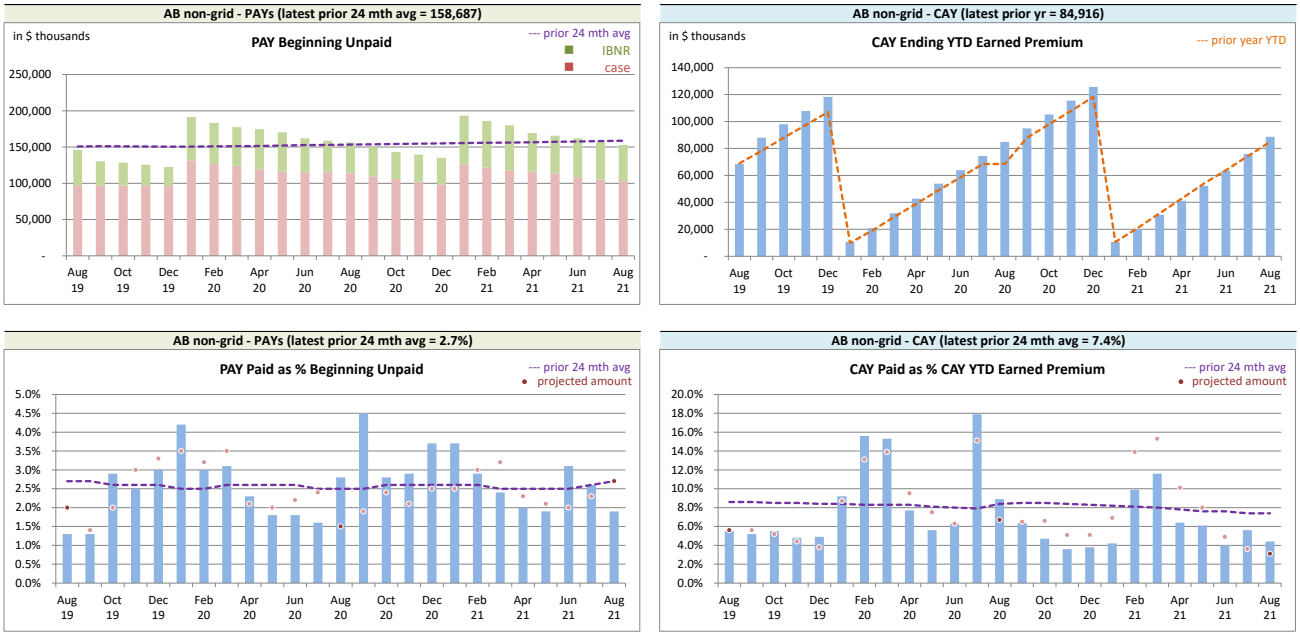
On Latest $ thousands		
Paid	PAYs	CAY
Mthly Avg Paid (prior 24 mths)	4,269	4,325
std dev	1,579	2,502
A-P <> std dev	4	1
% <> std dev	16.0%	4.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	better

With respect to **paid** indemnity & allowed claims expense, 16% 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 (11 of 25 variances are positive).

The current accident year (CAY) **paid** variances fell outside of one standard deviation 4% 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 (10 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.

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

[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".

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 82.8% rather than 81.6% (the valuation ultimate ratio for accident year 2021), 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	(15,864)	(18.2%)	(8,047)	(9.2%)	(23,911)	(27.4%)	(9,839)	(8.5%)
CAY	72,317	82.8%	4,954	5.7%	77,271	88.5%	5,657	(7.6%)
TOTAL	56,453	64.7%	(3,093)	(3.5%)	53,360	61.1%	(4,182)	(16.1%)

("% EP" based on 2021 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

[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.

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 0.73%

interest rate margin 25 basis pts

Amounts in $000s

Accident Year	Actual Jul. 2021	Actual Aug. 2021	Projected Sep. 2021	Projected Oct. 2021	Projected Nov. 2021	Projected Dec. 2021	Projected Jan. 2022	Projected Dec. 2021
2005	13	13	13	12	12	12	12	12
2006	83	83	79	78	74	72	69	72
2007	99	100	97	94	90	87	84	87
2008	71	71	69	68	65	63	61	63
2009	138	139	135	132	127	121	124	121
2010	71	78	75	74	70	67	67	67
2011	(37)	(36)	(35)	(34)	(32)	(31)	(30)	(31)
2012	347	171	167	160	156	149	151	149
2013	612	133	131	125	121	116	112	116
2014	847	659	637	623	595	574	560	574
2015	1,044	1,039	1,007	981	939	906	897	906
2016	2,753	2,108	2,043	1,988	1,907	1,837	1,811	1,837
2017	3,786	3,423	3,371	3,305	3,181	3,075	2,957	3,075
2018	8,624	5,772	5,685	5,443	5,223	5,020	4,889	5,020
2019	16,829	13,980	13,322	12,826	12,536	11,872	11,430	11,872
2020	30,446	27,188	26,709	26,369	25,951	25,063	24,620	25,063
2021	32,043	31,054	35,512	41,265	38,012	35,016	32,913	35,016
TOTAL	97,811	86,017	89,058	93,549	89,065	84,055	88,696	84,055
Change		(11,794)	3,041	4,491	(4,484)	(5,010)	4,641	

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

EXHIBIT B

IBNR

TABLE EXHIBIT B

IBNR

Amounts in $000s

Ultimate Loss Ratio	Accident Year	Actual Jul. 2021	Actual Aug. 2021	Projected Sep. 2021	Projected Oct. 2021	Projected Nov. 2021	Projected Dec. 2021	Projected Jan. 2022	Projected Dec. 2021
97.4%	2005	5	5	5	5	5	5	5	5
87.0%	2006	75	75	72	71	67	65	63	65
101.9%	2007	64	64	62	61	58	56	54	56
101.1%	2008	68	68	66	65	62	60	58	60
95.6%	2009	67	67	65	64	61	59	57	59
84.3%	2010	(5)	20	19	19	18	17	17	17
84.4%	2011	(39)	(39)	(38)	(37)	(35)	(34)	(33)	(34)
101.3%	2012	131	(31)	(30)	(29)	(28)	(27)	(26)	(27)
98.5%	2013	385	(72)	(69)	(68)	(65)	(63)	(61)	(63)
106.1%	2014	714	541	522	513	487	472	458	472
94.3%	2015	629	633	610	599	569	552	536	552
116.6%	2016	1,717	1,126	1,085	1,065	1,012	982	954	982
105.5%	2017	2,407	2,176	2,154	2,124	2,018	1,957	1,900	1,957
100.0%	2018	5,744	3,701	3,664	3,481	3,307	3,171	3,070	3,171
90.7%	2019	12,855	10,301	9,724	9,306	9,111	8,537	8,136	8,537
94.2%	2020	25,115	22,287	21,886	21,623	21,277	20,468	20,018	20,468
81.6%	2021	27,235	26,100	29,861	34,708	30,532	26,565	24,971	26,565
	TOTAL	77,203	67,058	69,693	73,604	68,488	62,873	66,808	62,873
	Change		(10,145)	2,635	3,911	(5,116)	(5,615)	3,935	

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 Jul. 2021	Actual Aug. 2021	Projected Sep. 2021	Projected Oct. 2021	Projected Nov. 2021	Projected Dec. 2021	Projected Jan. 2022	Projected Dec. 2021
(1) unearned premium (UP)	80,109	83,598	87,567	90,069	92,147	90,246	90,008	90,246
FOR MEMBER SHARING								
(2) expected future costs ratio {% of (1)}	99.1%	97.6%	99.7%	101.9%	104.3%	107.0%	107.0%	107.0%
(3) expected future costs {(1) x (2)}	79,427	81,609	87,275	91,815	96,155	96,594	96,349	96,594
(4) premium deficiency / (deferred policy acquisition cost)	(682)	(1,989)	(292)	1,746	4,008	6,348	6,341	6,348
Excluding Actuarial Present Value Adjustments								
(5) expected future costs ratio {% of (1)}	91.6%	90.2%	92.1%	94.2%	96.4%	98.9%	98.9%	98.9%
(6) expected future costs {(1) x (5)}	73,341	75,416	80,651	84,849	88,857	89,262	89,034	89,262
(7) premium deficiency / (deferred policy acquisition cost)	(6,768)	(8,182)	(6,916)	(5,220)	(3,290)	(984)	(974)	(984)

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2021, broken down by component.

Alberta non-Grid	Projected Balances as at Dec. 31, 2021 ($000s)									
ending 2021	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
2005	65	5	70	-	-	7	-	7	7	77
2006	1	65	66	-	-	7	-	7	7	73
2007	262	56	318	(2)	1	32	-	32	31	349
2008	(31)	60	29	-	-	3	-	3	3	32
2009	625	59	684	(8)	3	68	(1)	67	62	746
2010	538	17	555	(7)	2	56	(1)	55	50	605
2011	64	(34)	30	-	-	3	-	3	3	33
2012	2,038	(27)	2,011	(33)	11	201	(3)	198	176	2,187
2013	2,074	(63)	2,011	(29)	10	201	(3)	198	179	2,190
2014	699	472	1,171	(19)	6	117	(2)	115	102	1,273
2015	3,645	552	4,197	(86)	29	420	(9)	411	354	4,551
2016	9,333	982	10,315	(231)	78	1,031	(23)	1,008	855	11,170
2017	10,991	1,957	12,948	(232)	78	1,295	(23)	1,272	1,118	14,066
2018	18,273	3,171	21,444	(386)	130	2,144	(39)	2,105	1,849	23,293
2019	21,789	8,537	30,326	(544)	184	3,763	(68)	3,695	3,335	33,661
2020	22,003	20,468	42,471	(848)	286	5,262	(105)	5,157	4,595	47,066
PAYs (sub-total):	92,392	36,308	128,700	(2,425)	818	14,615	(277)	14,338	12,731	141,431
CAY (2021)	58,327	26,565	84,892	(1,579)	533	9,677	(180)	9,497	8,451	93,343
claims liabilities:	150,719	62,873	213,592	(4,004)	1,351	24,292	(457)	23,835	21,182	234,774

	Unearned Premium	Premium Deficiency / (DPAC)	Total Provision	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL*
premium liabilities:	90,246	(984)	89,262	(1,396)	471	8,389	(132)	8,257	7,332	96,594

*Total may not be sum of parts, as apvs apply to future costs within UPR

policy liabilities:			**302,854**	**(5,400)**	**1,822**	**32,681**	**(589)**	**32,092**	**28,514**	**331,368**

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, 2021 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Accident Year	Selected Claims Development MfADs			
	Third Party Liability	Accident Benefits	Other Coverages	Total
	Margins	Margins	Margins	Margins
2004	10.0%	10.0%	10.0%	10.0%
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%	10.0%	10.0%
2015	10.0%	10.0%	10.0%	10.0%
2016	10.0%	10.0%	10.0%	10.0%
2017	10.0%	10.0%	10.0%	10.0%
2018	10.0%	10.0%	10.0%	10.0%
2019	12.5%	10.0%	11.2%	12.4%
2020	12.5%	10.0%	12.5%	12.4%
2021	12.1%	10.0%	7.1%	11.4%
2022	12.0%	10.0%	5.1%	9.4%
prem liab	12.0%	10.0%	5.1%	9.4%

discount rate:	0.73%
margin (basis points):	25

*prem liabilities as at 2021m06

EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2021 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2021, and are based on more up-to-date information). We have included the most recent valuation selection (0.73%), the prior valuation assumption (0.73%) 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, 2021 projected Unpaid							
AY	0.00%	0.23%	0.73%	1.23%	1.73%	2.23%	0.73%	0.22%
2004 & prior	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	0	0	0	0	0	0	0	0
2007	247	247	247	246	245	244	247	247
2008	-	-	-	-	-	-	-	-
2009	714	714	708	703	697	692	708	714
2010	676	676	670	664	659	654	670	676
2011	70	70	69	69	68	67	69	70
2012	2,072	2,071	2,048	2,025	2,002	1,980	2,048	2,071
2013	2,007	2,006	1,987	1,967	1,948	1,929	1,987	2,006
2014	1,342	1,342	1,327	1,313	1,298	1,284	1,327	1,342
2015	5,320	5,317	5,245	5,171	5,100	5,030	5,245	5,317
2016	10,852	10,845	10,684	10,522	10,364	10,210	10,684	10,846
2017	14,458	14,450	14,278	14,105	13,936	13,773	14,278	14,450
2018	21,384	21,373	21,117	20,860	20,610	20,368	21,117	21,373
2019	33,966	33,944	33,539	33,131	32,735	32,351	33,539	33,945
2020	47,158	47,125	46,499	45,869	45,257	44,663	46,499	47,126
2021	71,468	71,421	70,530	69,634	68,765	67,922	70,530	71,423
Total	211,734	211,600	208,948	206,278	203,685	201,167	208,948	211,606
	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	0.00%	0.23%	0.73%	1.23%	1.73%	2.23%	0.73%	0.22%
Total	2,786	2,652	-	(2,671)	(5,263)	(7,781)	-	2,658
	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	0.00%	0.23%	0.73%	1.23%	1.73%	2.23%	0.73%	0.22%
2004 & 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	0.1%	0.1%	0.0%	-0.1%	-0.3%	-0.4%	0.0%	0.1%
2007	0.4%	0.4%	0.0%	-0.4%	-0.7%	-1.1%	0.0%	0.4%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.8%	0.8%	0.0%	-0.8%	-1.5%	-2.3%	0.0%	0.8%
2010	0.9%	0.8%	0.0%	-0.8%	-1.7%	-2.5%	0.0%	0.8%
2011	1.0%	0.9%	0.0%	-0.9%	-1.8%	-2.7%	0.0%	0.9%
2012	1.2%	1.1%	0.0%	-1.1%	-2.2%	-3.3%	0.0%	1.1%
2013	1.0%	1.0%	0.0%	-1.0%	-2.0%	-2.9%	0.0%	1.0%
2014	1.1%	1.1%	0.0%	-1.1%	-2.2%	-3.3%	0.0%	1.1%
2015	1.4%	1.4%	0.0%	-1.4%	-2.8%	-4.1%	0.0%	1.4%
2016	1.6%	1.5%	0.0%	-1.5%	-3.0%	-4.4%	0.0%	1.5%
2017	1.3%	1.2%	0.0%	-1.2%	-2.4%	-3.5%	0.0%	1.2%
2018	1.3%	1.2%	0.0%	-1.2%	-2.4%	-3.5%	0.0%	1.2%
2019	1.3%	1.2%	0.0%	-1.2%	-2.4%	-3.5%	0.0%	1.2%
2020	1.4%	1.3%	0.0%	-1.4%	-2.7%	-3.9%	0.0%	1.3%
2021	1.3%	1.3%	0.0%	-1.3%	-2.5%	-3.7%	0.0%	1.3%
Total	1.3%	1.3%	0.0%	-1.3%	-2.5%	-3.7%	0.0%	1.3%
	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

(June 2021 to August 2021)

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	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-
2004	42	(3)	3	-	-	-	42
2005	13	-	-	-	-	-	13
2006	83	(9)	9	-	-	-	83
2007	98	(10)	11	1	2	2.0%	100
2008	71	(6)	6	-	-	-	71
2009	49	(4)	93	1	90	183.7%	139
2010	76	(6)	8	-	2	2.6%	78
2011	(5)	3	(35)	1	(31)	620.0%	(36)
2012	383	(30)	(15)	(167)	(212)	(55.4%)	171
2013	692	(59)	(236)	(264)	(559)	(80.8%)	133
2014	869	(75)	48	(183)	(210)	(24.2%)	659
2015	929	(81)	287	(96)	110	11.8%	1,039
2016	2,917	(241)	(83)	(485)	(809)	(27.7%)	2,108
2017	4,575	(402)	187	(937)	(1,152)	(25.2%)	3,423
2018	9,490	(816)	(561)	(2,341)	(3,718)	(39.2%)	5,772
2019	18,503	(1,384)	(1,037)	(2,102)	(4,523)	(24.4%)	13,980
2020	31,390	(1,786)	550	(2,966)	(4,202)	(13.4%)	27,188
2021	25,239	13,454	(1,292)	(6,347)	5,815	23.0%	31,054
Grand Total	**95,414**	**8,545**	**(2,057)**	**(15,885)**	**(9,397)**	**(9.8%)**	**86,017**

EXHIBIT G

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

(June 2021 to August 2021)

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	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-
2004	36	(3)	3	-	-	-	36
2005	5	-	-	-	-	-	5
2006	75	(6)	6	-	-	-	75
2007	63	(6)	7	-	1	1.6%	64
2008	68	(6)	6	-	-	-	68
2009	(22)	(1)	90	-	89	(404.5%)	67
2010	(1)	-	21	-	21	(2,100.0%)	20
2011	(34)	3	(8)	-	(5)	14.7%	(39)
2012	161	(13)	(25)	(154)	(192)	(119.3%)	(31)
2013	465	(38)	(256)	(243)	(537)	(115.5%)	(72)
2014	714	(62)	57	(168)	(173)	(24.2%)	541
2015	469	(44)	298	(90)	164	35.0%	633
2016	1,778	(151)	(52)	(449)	(652)	(36.7%)	1,126
2017	3,076	(320)	285	(865)	(900)	(29.3%)	2,176
2018	6,515	(657)	(577)	(1,580)	(2,814)	(43.2%)	3,701
2019	14,244	(1,167)	(908)	(1,868)	(3,943)	(27.7%)	10,301
2020	25,848	(1,305)	364	(2,620)	(3,561)	(13.8%)	22,287
2021	21,826	11,233	(1,199)	(5,760)	4,274	19.6%	26,100
Grand Total	**75,286**	**7,457**	**(1,888)**	**(13,797)**	**(8,228)**	**(10.9%)**	**67,058**