# ALBERTA GRID RISK SHARING POOL

# AUGUST 2021 OPERATIONAL REPORT

# ACTUARIAL HIGHLIGHTS

Related Bulletin: F2021-076_AB_RSP_August_2021_Operational_Report

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FACILITY ASSOCIATION

# ACTUARIAL HIGHLIGHTS
# RSP ALBERTA 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 GRID RISK SHARING POOL<br>FISCAL YEAR 2021 – SCHEDULE OF VALUATIONS | | | |
|---|---|---|---|
| **Valuation Date** | **Discount Rate (per annum)** | **Operational Report** | **Description of Changes** |
| Sep. 30, 2020 (completed) | 0.20%<br>mfad[1] 25 bp | Oct. 2020 | update valuation (roll-forward): accident year 2020 loss ratio decreased 6.3 points to 70.6%; discount rate decreased 4 basis points; no change to selected margins for adverse deviations |
| Dec. 31, 2020 (completed) | 0.24%<br>mfad 25 bp | Mar. 2021 | update valuation: accident year 2020 loss ratio decreased 0.7 points to 69.9% and accident year 2021 loss ratio decreased 7.0 points to 71.2%; discount rate increased 4 basis points; no change to selected margins for adverse deviations |
| Mar. 31, 2021 (completed) | 0.71%<br>mfad 25 bp | May. 2021 | update valuation (roll-forward): accident year 2021 loss ratio decreased 0.4 points to 70.8%; discount rate increased 47 basis points; no change to selected margins for adverse deviations |
| Jun. 30, 2021 | 0.72%<br>mfad 25 bp | Aug. 2021 | update valuation: accident year 2021 loss ratio decreased 4.5 points to 66.3%; discount rate increased 1 basis point; selected margins for adverse deviation were updated |
| Sep. 30, 2021 | %<br>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 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 June. 30, 2021*[2]

| **AB 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 | (14,073) | (1,486) | (15,559) | (68) | (1,051) | (16,678) |
| CAY | (5,828) | (562) | (6,390) | (21) | - | (6,411) |
| Prem Def | (1,458) | (140) | (1,598) | (25) | - | (1,623) |
| TOTAL | (21,359) | (2,188) | (23,547) | (114) | (1,051) | (24,712) |

As indicated in the preceding table, the incorporation of the new valuation had an estimated ***$24.7 million favourable impact*** on the month's net result from operations, subtracting an estimated 24.4 points (see following table) from the **year-to-date Combined Operating Ratio** to end at **68.3%**.

*Summary of Impact (% YTD EP) of Implementing Result of Valuation as at June. 30, 2021*

| **AB Grid** | ytd EP 101,362 (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 | (13.9%) | (1.5%) | (15.3%) | (0.1%) | (1.0%) | (16.5%) |
| CAY | (5.7%) | (0.6%) | (6.3%) | - | - | (6.3%) |
| Prem Def | (1.4%) | (0.1%) | (1.6%) | - | - | (1.6%) |
| TOTAL | (21.1%) | (2.2%) | (23.2%) | (0.1%) | (1.0%) | (24.4%) |

[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 **favourable by $21.4 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 **$14.1 million favourable** nominal variance or 5.1% of the PAYs nominal unpaid balance of $254.3 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 for accident year **2021** (decreased 4.5 points to 66.3%). 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 $2.2 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 2021. Column [4] accounts for the change in the **discount rate** selected (increased 1 basis point to **0.72%**), indicating a favourable impact of $0.1 million. The impact *related only to claims liabilities* (i.e. PAYs plus CAY) was $0.1 million at August 2021 – this compares to the $0.1 million change one would estimate as the impact by interpolation using the interest rate sensitivity table provided in last month's Actuarial Highlights.

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.

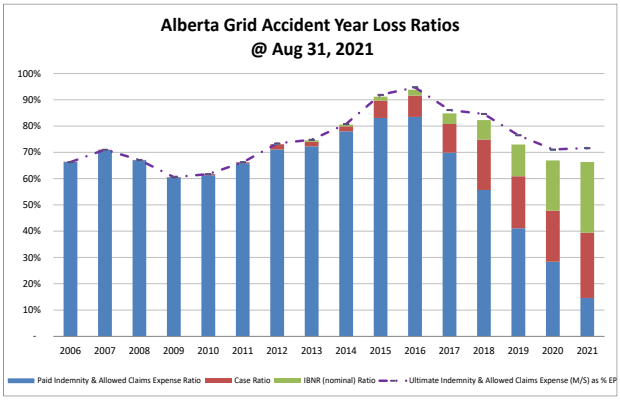
Consideration and assessment of potential impacts of legal decisions and changes in legislation / regulation constitutes a regular part of the valuation process. Descriptions of some of the more recent (i.e. within the last five years) changes are provided below.

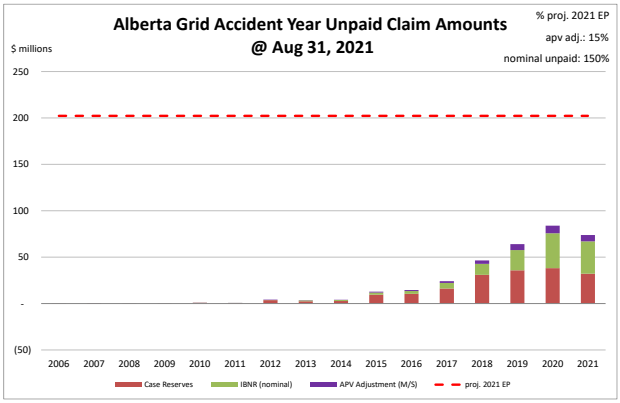
In the **Alberta Treasury Board and Finance Notice 04-2018** (Clarification of Minor Injury Regulation), dated **August 17, 2018**, the Alberta Superintendent of Insurance advised that clarifying amendments have been made to the definition of minor injuries under the Minor Injury Regulation (MIR). With 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 ($30.6 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 | 185,272 | 55.4% |
| ibnr | 118,787 | 35.5% |
| M/S apv adjust. | 30,566 | 9.1% |
| M/S total | 334,625 | 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 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 expenes 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 | 117,091 | 125.9% |
| prem def/(dpac) | (31,844) | (34.2%) |
| M/S apv adjust. | 7,764 | 8.3% |
| M/S total | 93,011 | 100.0% |

policy liabilities ($000s)

| | amt | % |
|---|---|---|
| claim | 304,059 | 71.1% |
| premium | 85,247 | 19.9% |
| M/S apv adjust. | 38,330 | 9.0% |
| M/S total | 427,636 | 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 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 | (135) | (135) | 5,796 | (1,360) | 1,473 | (1,486) |
| | | May | (102) | (102) | 5,380 | (1,958) | (2,299) | (4,520) |
| **PAY Total** | | | **(237)** | **(237)** | **11,176** | **(3,318)** | **(826)** | **(6,006)** |
| **CAY** | **2021** | April | 15,616 | (2,757) | 2,440 | (1,885) | 5,252 | (2,303) |
| | | May | 16,298 | (3,342) | 2,021 | (2,386) | 7,555 | (713) |
| **CAY Total** | | | **31,914** | **(6,099)** | **4,461** | **(4,271)** | **12,807** | **(3,016)** |
| **Grand Total** | | | **31,677** | **(6,336)** | **15,637** | **(7,589)** | **11,981** | **(9,022)** |

(Recorded transaction amounts exclude IBNR & other actuarial provisions)

Claims transaction activity is generally volatile; 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.

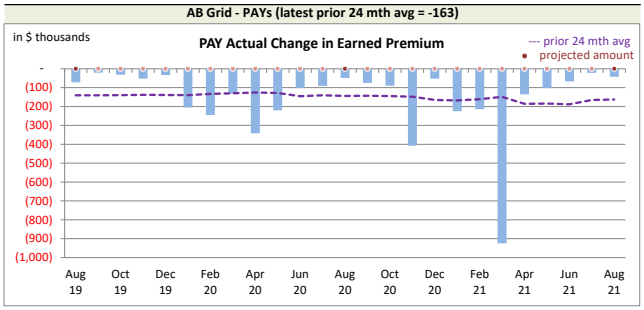
More detailed analysis and commentary on actual vs. projected for the most recent reporting months is provided below.

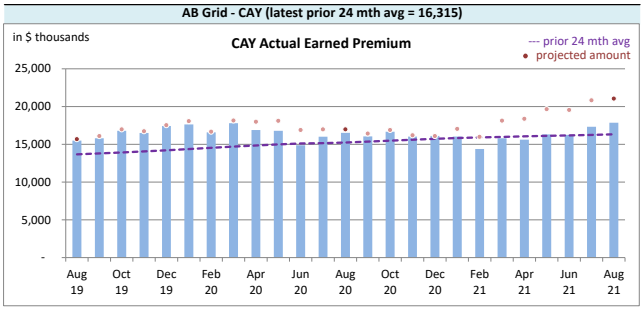
#### 2.1.a Actual vs. Projected (AvsP): Earned Premium

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 Grid RSP Actual **Earned Premium** by Calendar Month*



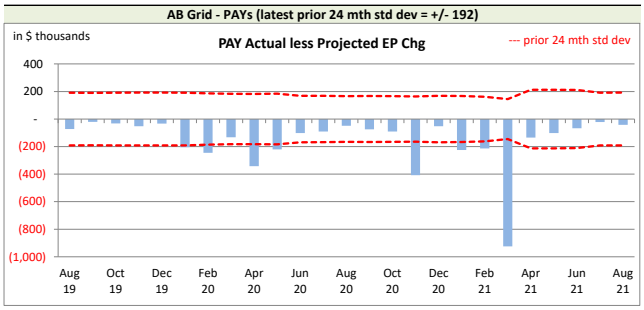



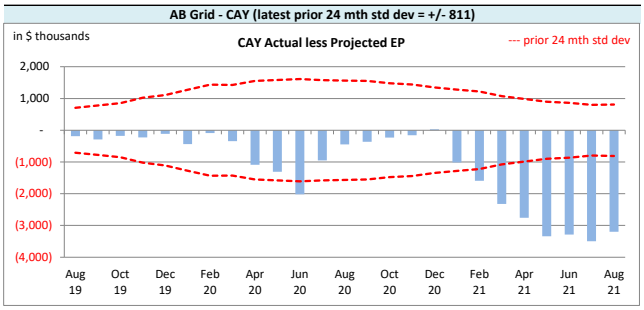

**Earned premium** changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

| On Latest $ thousands | | |
|---|---|---|
| **Earned Premium** | PAYs | CAY |
| Mthly Avg EP Chg (prior 24 mths) | (163) | 16,315 |
| std dev | 192 | 811 |
| A-P <> std dev | 8 | 8 |
| % <> std dev | 32.0% | 32.0% |
| norm <> std dev | 31.7% | 31.7% |
| performance vs 24-mth avg: | no better | no better |

The associated variances 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 Grid RSP Actual vs. Projected Summary: **Earned Premium** Variances by Calendar Month*




We project **earned premium** changes from known unearned premium balances 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 has not currently deemed as a priority.

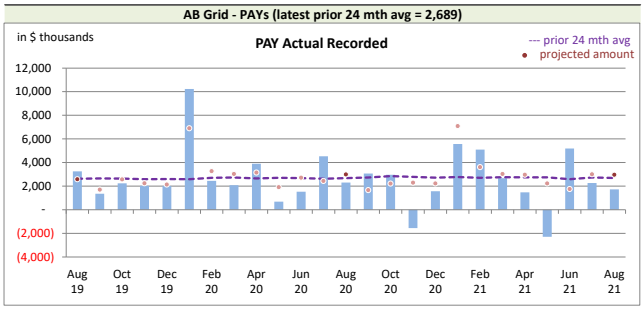
[5]The PAYs' variances will show bias as the projection upload forces all earned premium projections to be attributed to the CAY.

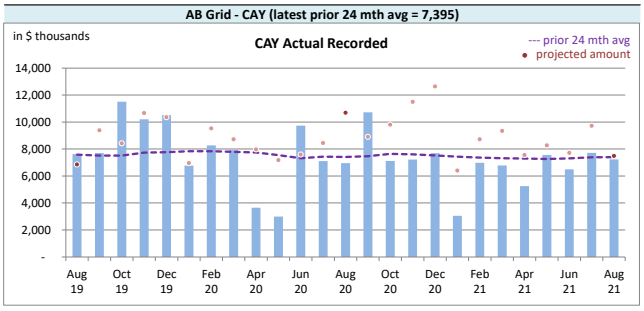
[6]We measure bias based on a 95% confidence range for a binominal distribution with trials based on the range being considered (25 in this case) and 50% probability of success. The rolling 25-month CAY variances at August 2021 has only 2 months where the actuals were higher than projected, and as the 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.

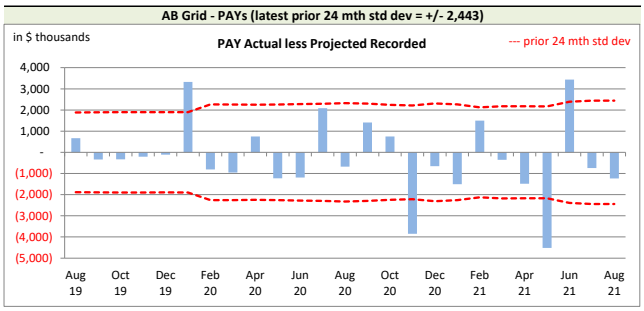
*Alberta Grid RSP Actual* **Recorded** *by Calendar Month*

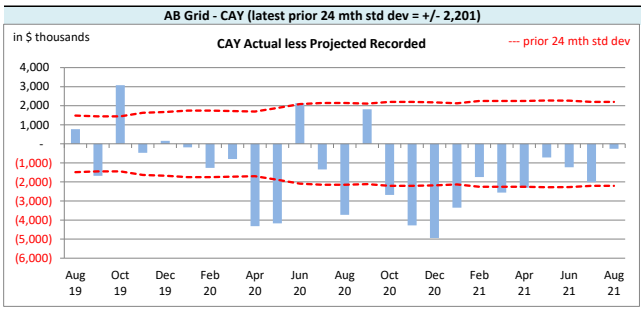



**Recorded** activity variances from the previous month's projections shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

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




| On Latest $ thousands | | |
|---|---|---|
| **Recorded** | PAYs | CAY |
| Mthly Avg Recorded (prior 24 mths) | 2,689 | 7,395 |
| std dev | 2,443 | 2,201 |
| 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[7] has not been indicated at a 95% confidence level on a rolling 25-month basis (8 of 25 variances were 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 preceding table on the left), suggesting that the projection process has performed worse than simply projecting the prior 24-month average amount. Bias has

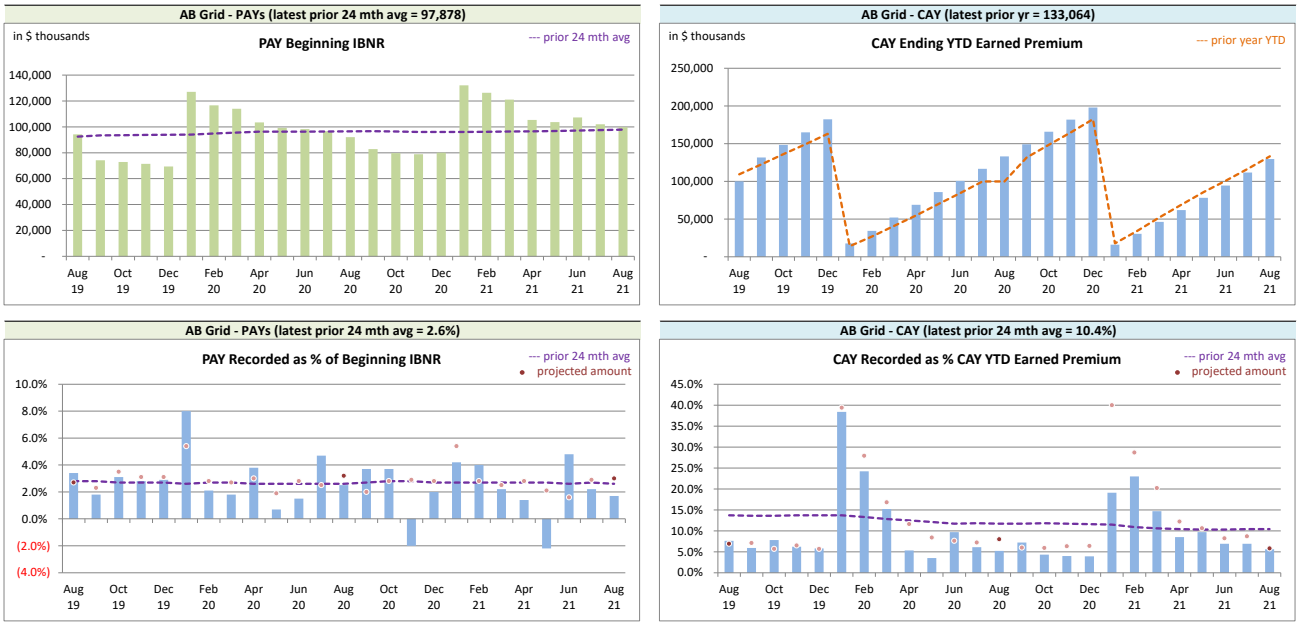
[7] For the binomial distribution with 25 trials and an assumed 50% success probability, the 95% confidence range is 8 to 17 successes. That is, favourable or unfavourable counts of 0 to 7 or 18 to 25 out of 25 outcomes would suggest bias.

been indicated at a 95% confidence level on a lagging 24-month basis (3 of 25 variances were 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, additional charts below related to levels influencing **recorded** activity. Note in particular the changes in the level of PAY beginning IBNR over the months, as a response to valuations and showing up as a beginning IBNR change one month after the valuation is implemented (i.e. April, June, September, and November).

*Alberta Grid RSP Levels that influence[8] **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:

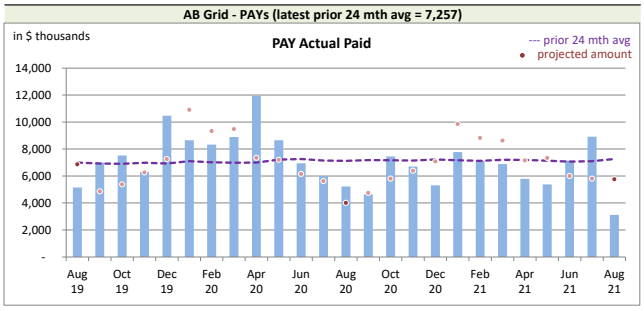
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one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

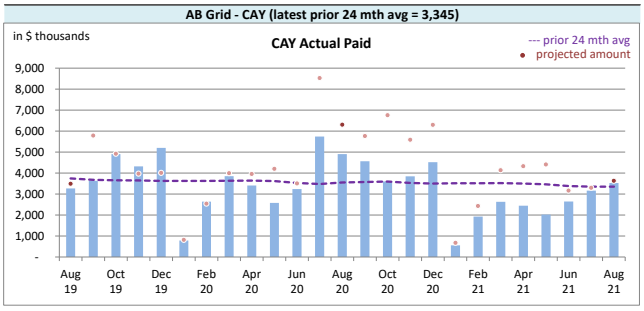
[8]Our recorded activity projections for the prior accident years are based on selected ratios of recorded activity to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date IBNR to year-to-date selected ultimate (i.e. selected LR x earned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

### 2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

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

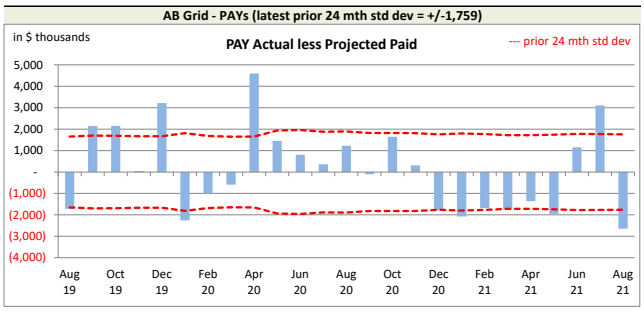
*Alberta Grid RSP Actual **Paid** activity by Calendar Month*

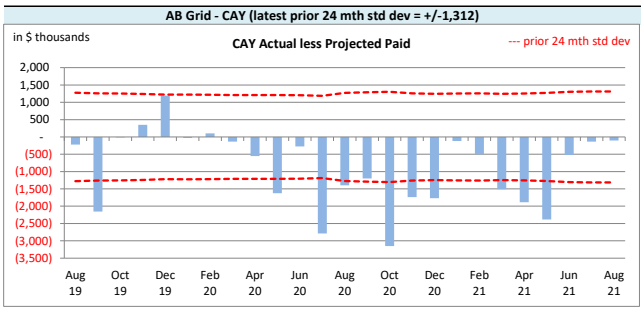



**Paid** activity variances from the previous month's projections shown in the following charts, including the prior 24-month standard deviation levels to show how the variances from projection compare with historical standard deviations.

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




| On Latest $ thousands | | |
|---|---|---|
| **Paid** | PAYs | CAY |
| Mthly Avg Paid (prior 24 mths) | 7,257 | 3,345 |
| std dev | 1,759 | 1,312 |
| A-P <> std dev | 12 | 10 |
| % <> std dev | 48.0% | 40.0% |
| norm <> std dev | 31.7% | 31.7% |
| performance vs 24-mth avg: | worse | worse |

With respect to **paid** indemnity & allowed claims expense, 48% 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 worse than simply projecting the prior 24-month average amount (assuming it follows a normal distribution), and we are actively looking into the projection process for means of improving this result. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (13 of 25 variances are positive).

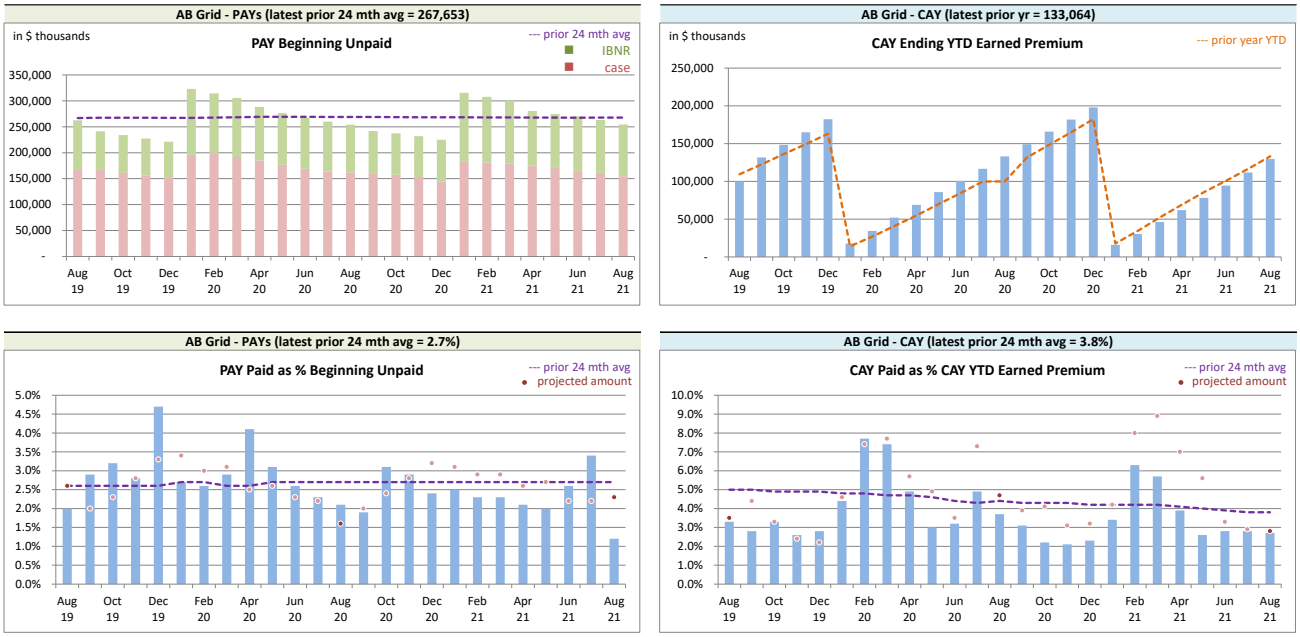
The PAY **paid** variance was just outside of the one standard deviation band this month (see preceding chart on the right). The lower than projected recorded activity was reviewed, and attributed to process variance.

The current accident year (CAY) **paid** variances fell outside one standard deviation 40% of the time over the last 25 calendar months (see preceding table on the left), suggesting the projection process

has performed worse than simply projecting the prior 24-month average amount. Bias has been indicated at a 95% confidence level on a rolling 25-month basis (3 of 25 variances are positive).

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

*Alberta Grid RSP Levels that influence[9] **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[10], 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

[9]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.

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

projections and actuals based on the applicable valuation.

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

(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[11] 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[12], 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 67.2% rather than 66.3% (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 Grid RSP Summary of Operations due to rounding.)

[11]"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).

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

*Alberta 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 | (26,452) | (20.7%) | (12,881) | (10.1%) | (39,333) | (30.8%) | (17,019) | (10.5%) |
| CAY | 85,876 | 67.2% | 6,884 | 5.4% | 92,760 | 72.6% | 7,160 | (5.2%) |
| TOTAL | 59,424 | 46.5% | (5,997) | (4.7%) | 53,427 | 41.8% | (9,859) | (15.7%) |

("% 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 present value adjustments with claims payments, except when valuations 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 to 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 to 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 shown in the Operational Report as "Undiscounted IBNR".

The ultimate loss ratios presented in section 6, Exhibit B, refer to the estimates derived based on various actuarial methodologies applied to the experience of the Alberta 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

Amounts in $000s

IBNR + M/S actuarial present value adjustments

discount rate 0.72%

interest rate margin 25 basis pts

| 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 | (39) | (39) | (37) | (36) | (35) | (35) | (33) | (35) |
| 2006 | (120) | (200) | (191) | (186) | (179) | (177) | (169) | (177) |
| 2007 | (130) | (131) | (125) | (122) | (117) | (117) | (111) | (117) |
| 2008 | (2) | (2) | (2) | (3) | (2) | (2) | (2) | (2) |
| 2009 | 9 | 9 | 8 | 7 | 7 | 6 | 6 | 6 |
| 2010 | (55) | 185 | 177 | 172 | 165 | 161 | 155 | 161 |
| 2011 | 511 | 74 | 71 | 68 | 65 | 64 | 62 | 64 |
| 2012 | 229 | 422 | 410 | 395 | 380 | 368 | 359 | 368 |
| 2013 | 1,016 | 1,185 | 1,138 | 1,105 | 1,062 | 1,044 | 1,005 | 1,044 |
| 2014 | 1,439 | 1,409 | 1,352 | 1,315 | 1,264 | 1,243 | 1,196 | 1,243 |
| 2015 | 3,950 | 3,242 | 3,113 | 3,024 | 2,905 | 2,854 | 2,765 | 2,854 |
| 2016 | 5,255 | 4,113 | 3,948 | 3,837 | 3,688 | 3,625 | 3,498 | 3,625 |
| 2017 | 9,628 | 7,953 | 7,682 | 7,471 | 7,317 | 7,013 | 6,753 | 7,013 |
| 2018 | 17,967 | 15,560 | 15,267 | 14,892 | 14,231 | 13,895 | 13,333 | 13,895 |
| 2019 | 33,268 | 28,208 | 27,278 | 26,596 | 26,094 | 25,692 | 25,057 | 25,692 |
| 2020 | 53,526 | 45,723 | 44,984 | 43,869 | 42,757 | 41,322 | 39,929 | 41,322 |
| 2021 | 41,783 | 41,712 | 49,173 | 55,132 | 56,107 | 56,822 | 52,444 | 56,822 |
| TOTAL | 168,165 | 149,353 | 154,179 | 157,470 | 155,646 | 153,716 | 156,836 | 153,716 |
| Change | | (18,812) | 4,826 | 3,291 | (1,824) | (1,930) | 3,120 | |

*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 |
|---|---|---|---|---|---|---|---|---|---|
| 60.5% | 2005 | (77) | (77) | (74) | (72) | (69) | (68) | (65) | (68) |
| 66.3% | 2006 | (129) | (204) | (195) | (190) | (183) | (181) | (173) | (181) |
| 71.0% | 2007 | (159) | (159) | (152) | (148) | (142) | (141) | (135) | (141) |
| 67.1% | 2008 | (20) | (20) | (19) | (19) | (18) | (18) | (17) | (18) |
| 60.6% | 2009 | (10) | (10) | (10) | (10) | (10) | (10) | (10) | (10) |
| 61.7% | 2010 | (121) | 98 | 94 | 92 | 88 | 87 | 83 | 87 |
| 66.2% | 2011 | 425 | 25 | 24 | 23 | 22 | 22 | 21 | 22 |
| 73.2% | 2012 | (103) | 76 | 73 | 71 | 68 | 67 | 64 | 67 |
| 74.6% | 2013 | 724 | 881 | 842 | 821 | 789 | 781 | 747 | 781 |
| 80.6% | 2014 | 1,093 | 1,066 | 1,019 | 994 | 955 | 945 | 904 | 945 |
| 91.2% | 2015 | 2,838 | 2,194 | 2,097 | 2,045 | 1,965 | 1,945 | 1,861 | 1,945 |
| 93.8% | 2016 | 3,929 | 2,931 | 2,802 | 2,732 | 2,625 | 2,599 | 2,487 | 2,599 |
| 84.8% | 2017 | 7,526 | 6,013 | 5,785 | 5,640 | 5,584 | 5,361 | 5,130 | 5,361 |
| 82.3% | 2018 | 13,049 | 11,837 | 11,600 | 11,310 | 10,756 | 10,541 | 10,024 | 10,541 |
| 73.0% | 2019 | 26,346 | 21,866 | 21,057 | 20,531 | 20,182 | 19,920 | 19,283 | 19,920 |
| 66.9% | 2020 | 44,550 | 37,520 | 36,920 | 35,960 | 34,989 | 33,694 | 32,313 | 33,694 |
| 66.3% | 2021 | 35,251 | 34,828 | 41,231 | 46,228 | 46,552 | 46,675 | 42,941 | 46,675 |
| | TOTAL | 135,034 | 118,787 | 123,019 | 125,935 | 124,083 | 122,150 | 124,383 | 122,150 |
| | Change | | (16,247) | 4,232 | 2,916 | (1,852) | (1,933) | 2,233 | |

*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) | 111,528 | 117,091 | 122,482 | 129,543 | 134,886 | 136,140 | 134,648 | 136,140 |
| FOR MEMBER SHARING | | | | | | | | |
| (2) expected future costs ratio {% of (1)} | 80.1% | 79.4% | 81.2% | 83.0% | 84.7% | 86.6% | 86.6% | 86.6% |
| (3) expected future costs {(1) x (2)} | 89,348 | 93,011 | 99,507 | 107,468 | 114,269 | 117,837 | 116,586 | 117,837 |
| (4) premium deficiency / (deferred policy acquisition cost) | (22,180) | (24,080) | (22,975) | (22,075) | (20,617) | (18,303) | (18,062) | (18,303) |
| Excluding Actuarial Present Value Adjustments | | | | | | | | |
| (5) expected future costs ratio {% of (1)} | 73.4% | 72.8% | 74.5% | 76.0% | 77.6% | 79.3% | 79.4% | 79.3% |
| (6) expected future costs {(1) x (5)} | 81,861 | 85,247 | 91,202 | 98,498 | 104,729 | 108,000 | 106,852 | 108,000 |
| (7) premium deficiency / (deferred policy acquisition cost) | (29,667) | (31,844) | (31,280) | (31,045) | (30,157) | (28,140) | (27,796) | (28,140) |

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 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 | 400 | (68) | 332 | - | - | 33 | - | 33 | 33 | 365 |
| 2006 | 144 | (181) | (37) | - | - | 4 | - | 4 | 4 | (33) |
| 2007 | 391 | (141) | 250 | (1) | - | 25 | - | 25 | 24 | 274 |
| 2008 | 178 | (18) | 160 | (1) | 1 | 16 | - | 16 | 16 | 176 |
| 2009 | 182 | (10) | 172 | (2) | 1 | 17 | - | 17 | 16 | 188 |
| 2010 | 726 | 87 | 813 | (9) | 3 | 81 | (1) | 80 | 74 | 887 |
| 2011 | 442 | 22 | 464 | (5) | 2 | 46 | (1) | 45 | 42 | 506 |
| 2012 | 3,250 | 67 | 3,317 | (41) | 14 | 332 | (4) | 328 | 301 | 3,618 |
| 2013 | 2,134 | 781 | 2,915 | (36) | 12 | 291 | (4) | 287 | 263 | 3,178 |
| 2014 | 2,350 | 945 | 3,295 | (41) | 14 | 329 | (4) | 325 | 298 | 3,593 |
| 2015 | 8,298 | 1,945 | 10,243 | (153) | 53 | 1,024 | (15) | 1,009 | 909 | 11,152 |
| 2016 | 9,080 | 2,599 | 11,679 | (188) | 65 | 1,168 | (19) | 1,149 | 1,026 | 12,705 |
| 2017 | 13,578 | 5,361 | 18,939 | (319) | 109 | 1,894 | (32) | 1,862 | 1,652 | 20,591 |
| 2018 | 27,997 | 10,541 | 38,538 | (661) | 227 | 3,854 | (66) | 3,788 | 3,354 | 41,892 |
| 2019 | 32,558 | 19,920 | 52,478 | (992) | 340 | 6,548 | (124) | 6,424 | 5,772 | 58,250 |
| 2020 | 36,714 | 33,694 | 70,408 | (1,454) | 498 | 8,765 | (181) | 8,584 | 7,628 | 78,036 |
| PAYs (sub-total): | 138,423 | 75,475 | 213,898 | (3,903) | 1,339 | 24,434 | (451) | 23,983 | 21,419 | 235,317 |
| CAY (2021) | 52,086 | 46,675 | 98,761 | (2,073) | 709 | 11,758 | (247) | 11,511 | 10,147 | 108,908 |
| **claims liabilities:** | 190,509 | 122,150 | 312,659 | (5,976) | 2,048 | 36,192 | (698) | 35,494 | 31,566 | 344,225 |

| | Unearned Premium | Premium Deficiency / (DPAC) | Total Provision | discount | investment PfAD | nominal development PfAD | development PfAD discount | development PfAD | Total apvs | TOTAL* |
|---|---|---|---|---|---|---|---|---|---|---|
| **premium liabilities:** | 136,140 | (28,140) | 108,000 | (2,158) | 738 | 11,488 | (231) | 11,257 | 9,837 | 117,837 |

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

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **policy liabilities:** | | | **420,659** | **(8,134)** | **2,786** | **47,680** | **(929)** | **46,751** | **41,403** | **462,062** |

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% | 12.5% | 12.5% |
| 2020 | 12.5% | 10.0% | 12.5% | 12.4% |
| 2021 | 12.2% | 10.0% | 8.7% | 11.9% |
| 2022 | 12.0% | 10.0% | 5.1% | 10.7% |
| prem liab | 12.0% | 10.0% | 5.1% | 10.7% |

| | |
|---|---|
| discount rate: | 0.72% |
| 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 (0.72%), the prior valuation assumption (0.71%) and the prior fiscal year end valuation assumption (0.20%) 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% | 0.22% | 0.72% | 1.22% | 1.72% | 2.22% | 0.71% | 0.20% |
| 2004 & prior | - | - | - | - | - | - | - | - |
| 2004 | - | - | - | - | - | - | - | - |
| 2005 | - | - | - | - | - | - | - | - |
| 2006 | 119 | 119 | 119 | 119 | 119 | 119 | 119 | 119 |
| 2007 | 341 | 340 | 340 | 339 | 338 | 337 | 340 | 340 |
| 2008 | 139 | 139 | 138 | 137 | 136 | 135 | 138 | 139 |
| 2009 | 129 | 129 | 128 | 127 | 126 | 125 | 128 | 129 |
| 2010 | 749 | 748 | 743 | 737 | 732 | 726 | 743 | 748 |
| 2011 | 419 | 418 | 415 | 412 | 409 | 405 | 415 | 418 |
| 2012 | 3,409 | 3,408 | 3,380 | 3,352 | 3,324 | 3,296 | 3,381 | 3,408 |
| 2013 | 2,871 | 2,870 | 2,846 | 2,822 | 2,798 | 2,775 | 2,847 | 2,870 |
| 2014 | 3,608 | 3,607 | 3,577 | 3,546 | 3,516 | 3,486 | 3,578 | 3,607 |
| 2015 | 11,145 | 11,141 | 11,031 | 10,917 | 10,806 | 10,698 | 11,033 | 11,141 |
| 2016 | 14,845 | 14,838 | 14,681 | 14,518 | 14,359 | 14,204 | 14,684 | 14,839 |
| 2017 | 22,028 | 22,017 | 21,773 | 21,521 | 21,275 | 21,035 | 21,778 | 22,018 |
| 2018 | 42,325 | 42,305 | 41,826 | 41,332 | 40,850 | 40,381 | 41,836 | 42,307 |
| 2019 | 58,514 | 58,476 | 57,745 | 56,993 | 56,261 | 55,549 | 57,760 | 58,479 |
| 2020 | 77,770 | 77,715 | 76,653 | 75,562 | 74,503 | 73,473 | 76,675 | 77,720 |
| 2021 | 102,436 | 102,362 | 100,934 | 99,470 | 98,050 | 96,672 | 100,964 | 102,369 |
| Total | 340,846 | 340,632 | 336,328 | 331,903 | 327,600 | 323,416 | 336,417 | 340,652 |
| | 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% | 0.22% | 0.72% | 1.22% | 1.72% | 2.22% | 0.71% | 0.20% |
| Total | 4,518 | 4,305 | - | (4,425) | (8,727) | (12,911) | 90 | 4,324 |
| | 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% | 0.22% | 0.72% | 1.22% | 1.72% | 2.22% | 0.71% | 0.20% |
| 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 | 0.3% | 0.2% | 0.0% | -0.3% | -0.5% | -0.8% | 0.0% | 0.2% |
| 2008 | 0.6% | 0.6% | 0.0% | -0.6% | -1.3% | -1.9% | 0.0% | 0.6% |
| 2009 | 0.8% | 0.7% | 0.0% | -0.8% | -1.5% | -2.2% | 0.0% | 0.7% |
| 2010 | 0.8% | 0.7% | 0.0% | -0.8% | -1.5% | -2.3% | 0.0% | 0.7% |
| 2011 | 0.8% | 0.8% | 0.0% | -0.8% | -1.6% | -2.4% | 0.0% | 0.8% |
| 2012 | 0.8% | 0.8% | 0.0% | -0.8% | -1.7% | -2.5% | 0.0% | 0.8% |
| 2013 | 0.9% | 0.8% | 0.0% | -0.9% | -1.7% | -2.5% | 0.0% | 0.8% |
| 2014 | 0.9% | 0.8% | 0.0% | -0.9% | -1.7% | -2.5% | 0.0% | 0.8% |
| 2015 | 1.0% | 1.0% | 0.0% | -1.0% | -2.0% | -3.0% | 0.0% | 1.0% |
| 2016 | 1.1% | 1.1% | 0.0% | -1.1% | -2.2% | -3.2% | 0.0% | 1.1% |
| 2017 | 1.2% | 1.1% | 0.0% | -1.2% | -2.3% | -3.4% | 0.0% | 1.1% |
| 2018 | 1.2% | 1.1% | 0.0% | -1.2% | -2.3% | -3.5% | 0.0% | 1.2% |
| 2019 | 1.3% | 1.3% | 0.0% | -1.3% | -2.6% | -3.8% | 0.0% | 1.3% |
| 2020 | 1.5% | 1.4% | 0.0% | -1.4% | -2.8% | -4.1% | 0.0% | 1.4% |
| 2021 | 1.5% | 1.4% | 0.0% | -1.5% | -2.9% | -4.2% | 0.0% | 1.4% |
| Total | 1.3% | 1.3% | 0.0% | -1.3% | -2.6% | -3.8% | 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 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 | (70) | 5 | (5) | - | - | - | (70) |
| 2005 | 23 | (1) | (61) | - | (62) | (269.6%) | (39) |
| 2006 | (120) | 9 | (89) | - | (80) | 66.7% | (200) |
| 2007 | (130) | 7 | (7) | (1) | (1) | 0.8% | (131) |
| 2008 | 4 | (2) | (4) | - | (6) | (150.0%) | (2) |
| 2009 | 45 | (2) | (34) | - | (36) | (80.0%) | 9 |
| 2010 | (45) | 2 | (12) | 240 | 230 | (511.1%) | 185 |
| 2011 | 536 | (37) | 12 | (437) | (462) | (86.2%) | 74 |
| 2012 | 231 | (24) | 17 | 198 | 191 | 82.7% | 422 |
| 2013 | 943 | (63) | 145 | 160 | 242 | 25.7% | 1,185 |
| 2014 | 1,342 | (102) | 170 | (1) | 67 | 5.0% | 1,409 |
| 2015 | 4,308 | (303) | (127) | (636) | (1,066) | (24.7%) | 3,242 |
| 2016 | 6,470 | (436) | (630) | (1,291) | (2,357) | (36.4%) | 4,113 |
| 2017 | 12,647 | (642) | (2,753) | (1,299) | (4,694) | (37.1%) | 7,953 |
| 2018 | 19,572 | (1,370) | (684) | (1,958) | (4,012) | (20.5%) | 15,560 |
| 2019 | 35,028 | (3,199) | 830 | (4,451) | (6,820) | (19.5%) | 28,208 |
| 2020 | 54,685 | (3,364) | 1,604 | (7,202) | (8,962) | (16.4%) | 45,723 |
| 2021 | 30,372 | 21,969 | (4,218) | (6,411) | 11,340 | 37.3% | 41,712 |
| **Grand Total** | **165,841** | **12,447** | **(5,846)** | **(23,089)** | **(16,488)** | **(9.9%)** | **149,353** |

EXHIBIT G



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

## (June 2021 to August 2021)

RSP **Alberta 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 | (78) | 5 | (5) | - | - | - | (78) |
| 2005 | (16) | 2 | (63) | - | (61) | 381.3% | (77) |
| 2006 | (129) | 9 | (84) | - | (75) | 58.1% | (204) |
| 2007 | (159) | 10 | (10) | - | - | - | (159) |
| 2008 | (14) | 1 | (7) | - | (6) | 42.9% | (20) |
| 2009 | 26 | (1) | (35) | - | (36) | (138.5%) | (10) |
| 2010 | (112) | 9 | (18) | 219 | 210 | (187.5%) | 98 |
| 2011 | 450 | (29) | 4 | (400) | (425) | (94.4%) | 25 |
| 2012 | (102) | 7 | (12) | 183 | 178 | (174.5%) | 76 |
| 2013 | 603 | (35) | 166 | 147 | 278 | 46.1% | 881 |
| 2014 | 927 | (68) | 207 | - | 139 | 15.0% | 1,066 |
| 2015 | 3,077 | (199) | (97) | (587) | (883) | (28.7%) | 2,194 |
| 2016 | 4,951 | (303) | (540) | (1,177) | (2,020) | (40.8%) | 2,931 |
| 2017 | 10,184 | (499) | (2,479) | (1,193) | (4,171) | (41.0%) | 6,013 |
| 2018 | 14,375 | (1,070) | (663) | (805) | (2,538) | (17.7%) | 11,837 |
| 2019 | 27,753 | (2,797) | 885 | (3,975) | (5,887) | (21.2%) | 21,866 |
| 2020 | 45,553 | (2,747) | 1,199 | (6,485) | (8,033) | (17.6%) | 37,520 |
| 2021 | 25,682 | 18,549 | (3,575) | (5,828) | 9,146 | 35.6% | 34,828 |
| **Grand Total** | **132,971** | **10,844** | **(5,127)** | **(19,901)** | **(14,184)** | **(10.7%)** | **118,787** |