



Russell Investments Master Trust - Jemena
Employer Division

Actuarial Valuation as at 30 June 2022

15 December 2022

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Section 1: Purpose and Summary

The Jemena Employer Division of the Russell Investments Master Trust (“the Plan”) consists of a closed Defined Benefit section, which provides benefits which are defined as final average salary and period of membership, and an open section for Defined contribution members. Additional accumulation benefits are provided for most Defined Benefit Members.

With such a plan, a regular actuarial review is necessary to:

- examine the sufficiency of the assets in relation to members’ accrued benefit entitlements;
- determine the recommended Company contribution rate required to ensure that the Plan maintains a satisfactory financial position;
- examine the suitability of the Plan’s insurance and investment arrangements;
- satisfy Clauses 15.6 to 15.8 of the Trust Deed which require an actuarial investigation to be undertaken at times determined by the Trustee. Clause 15.7 also requires the Actuary, as a result of the investigation, to recommend a rate of contribution to be payable to the Plan by the employer sponsor, Jemena (“the Employer” or “the Company”); and
- meet legislative and prudential standard requirements, in particular paragraph 23 of Prudential Standard 160 Defined Benefit Matters (“SPS 160”). Under SPS 160 an actuarial investigation is required at least every three years.

This report has been prepared for the Trustee of the Plan, Total Risk Management Pty Limited, in my capacity as RSE Actuary to the Plan. The Effective Date of this actuarial valuation is 30 June 2022.

This report has been prepared in accordance with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia. The previous valuation, which was conducted by myself at 30 June 2019 with the results set out in a report dated 23 December 2019.

Reliance statement and data

This report is provided subject to the terms set out herein and in our engagement letter with the Trustee dated 13 March 2017 and the accompanying Terms and Conditions of Engagement. This report is provided solely for the Trustee’s use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

The Trustee may make a copy of this report available to its auditors, the Company and to any person to whom the Trustee may be required to provide a copy under relevant legislation, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee’s auditors the Company or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the Company when passing this report to them.

In preparing this valuation, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including Plan provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. The data and information we have relied upon is shown in Section 2.

In our opinion, all calculations are in accordance with the applicable legislative requirements, and the procedures followed and the results presented conform to applicable actuarial standards of practice.

Company Contributions & Other Recommendations

The Employer is currently not contributing (apart from 'Award' contributions for Division G members) in respect of defined benefit members.

The actuarial investigation of the Russell Investments Master Trust – Jemena Employer Division as at 30 June 2022 shows that the Fund is in a strong financial position, with a DB Vested Benefits Index of 172.4% and a DB Accrued Benefits Reserve Index of 190.7%.

We have projected that if experience is in line with the assumptions adopted for our investigation and the Employer continues the contribution holiday for defined benefit members, the DB VBI will be in excess of 220% at 30 June 2025.

Given this, we recommend that the contribution holiday in respect of defined benefit members, and insurance and expense costs for defined contributions members, continues until completion of the next actuarial investigation as at 30 June 2025. The table below shows our recommended minimum contributions. These rates include allowance for expenses and tax.

Division	Recommended Employer Contribution Rate % of salary
Division C – Contributory	Nil
Division C – Non-Contributory	Nil
Division G – Contributory	Award contributions only
Division G – Non-Contributory	Award contributions only
Defined Contribution	<ul style="list-style-type: none"> • A minimum of the SG rate of Ordinary Time Earnings; • PLUS Nil for insurance for permanent employees • PLUS Nil for expenses

In addition, the Employer should also contribute the SG rate of the excess of Ordinary Time Earnings over salary, where applicable, for defined benefit members.

We note that the surplus is sufficiently large such that it is likely no future contributions will be required in respect of defined benefit members. At some point in the future this surplus could be used to fund contributions for defined contribution members for a period.

The funding position, and in particular the coverage of vested benefits by Plan assets, should be monitored quarterly and more frequently if required. Additional supplementary contributions may be required should the funding position become unsatisfactory.

Use of surplus

The Plan's surplus has grown to such an extent that the Plan's Assets are greater than the present value of all future benefits expected to be paid out of the Plan, and we have recommended that the current contribution holiday in respect of defined benefit members, and insurance and expense costs for defined contributions members, continues to utilise some of this surplus.

It is our understanding that Clauses 7 and 8.4 of the Employer Application effectively prevent the payment of any surplus assets in the Plan to an Employer, so we also recommend that the Company consider additional strategies for the efficient use of this surplus, which may involve extension of the contribution holiday to cover contributions for defined contribution members or 'Award' contributions for Division G members.

We would be happy to assist the Company and Trustee in these considerations.

Funding Status Measures

Vested Benefits

Vested benefits are the benefits payable if all Members voluntarily resigned from service. As at the valuation date, the net assets of the Plan are sufficient to cover the vested benefits. The ratio of the Plan's assets to vested benefits in respect of the Defined Benefit liabilities is 172.4% at 30 June 2022.

Assuming:

- a. the benefits described in the Trust Deed remain unchanged
- b. Company contributions are paid at the recommended rate
- c. the future experience of the Plan is in accordance with the assumptions made in this actuarial valuation

then the assets of the Plan should remain in excess of the vested benefits up to 30 June 2025. On this basis, the financial position of the Plan is expected to remain satisfactory.

Present Value of Accrued Benefits

The present value of accrued benefits is the actuarial value (using the assumptions and methodology detailed in this report) of the expected future benefits payable from the Plan to the current members and their dependents in respect of Plan membership completed up to the date of the actuarial investigation.

The Plan's net assets are adequate to cover the present value of the accrued benefits of all members of the Plan at the valuation date. The ratio of the Plan's assets to the present value of accrued benefits in respect of the Defined Benefit liabilities is 190.7% at 30 June 2022.

From time to time the value of the Plan's assets may be greater than, or less than, the present value of accrued benefits. These excesses, or shortfalls, arise when the actual experience of the Plan differs from the assumptions used to determine contribution rates.

Minimum Benefits

The Plan is “solvent” if the net realisable value of the assets of the Plan, less the value of the benefit entitlements of former members, exceeds the Minimum Requisite Benefits (MRB).

As at the valuation date the net assets of the Plan exceeded the MRB and the Plan was in a solvent financial position. The ratio of the Plan’s net assets to the total MRB was 125.6% at 30 June 2022. At the previous valuation this ratio was 124.9%.

Shortfall Limit

As required under SPS 160 the Trustee has set the Shortfall Limit for the Plan at 97.0%. Given the current investment strategy, we consider this Shortfall Limit is appropriate for the Plan.

Superannuation Guarantee

The Company’s Superannuation Guarantee (SG) obligation is fully met for all Members by the minimum benefits provided under the Plan. The most recent Benefit Certificate is dated 4 August 2020.

A Funding and Solvency Certificate dated 9 March 2020 has been issued to the Trustee corresponding to the above mentioned Benefit Certificate. The purpose of this certificate is to specify the required Company contributions needed to fund the MRBs used to offset the Superannuation Guarantee charge. All necessary funding and solvency certificates have been issued to the Trustee during the three years to 30 June 2022. A superannuation fund is “solvent” if the net value of its assets, less the value of the benefit entitlements of former members, exceeds the minimum Superannuation Guarantee benefits. At 30 June 2022, the Plan is solvent and based on the actuarial assumptions, we see no reason why it would be unlikely that an actuary will not be able to certify the solvency of the Plan in three years time.

Investments

The Trustee has developed formal objectives and a policy for the investment of the Plan’s assets. These objectives and policies are summarised in the Investment Policy Statement for the RIMT.

At 30 June 2022, the investment policy was to have the assets supporting the Plan’s defined benefit liabilities invested approximately 70% in growth assets such as shares and property and 30% in income assets such as cash and bonds.

The current investment policy is considered suitable to the Plan’s liabilities in respect of defined benefit membership at 30 June 2022.

We recommend that the Trustee regularly monitors the investment managers’ performance.

Insurance

In comparison with the Plan’s net assets the total amount of insurance protection against death and total and permanent disablement benefits is adequate as at 30 June 2022.

Next Valuation

The next valuation should be held no later than 30 June 2025. Vested Benefits coverage should be monitored at least annually.



Richard Saverimuttu
Fellow of the Institute of Actuaries of Australia

15 December 2022

Review: D: HN | TR: JKB | CR,ER: RS

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https://wtwonlineau.sharepoint.com/sites/tctclient_987204_Jemena22/Documents/04.01_Actl_Valn/Deliverables/Jemena Val 30 June 2022_WTW.docx

Section 2: Background and Data

The AGL Employer Division in the Russell Investments Master Trust (RIMT), previously Russell SuperSolution Master Trust, was established by a successor fund transfer on 8 January 2004. It was renamed New Alinta (and subsequently, Alinta LGA, and Jemena) Employer Division, following the restructuring of the Employer and transfer out of the AGL Energy employees effective 26 October 2006, and of APA Group employees effective 2 October 2007.

The Fund is governed by the RIMT Trust Deed (dated 26 June 2003, as amended from time to time) and an Employer Application (dated 19 October 2014, as amended from time to time).

The Fund has a defined benefit section comprising two benefit categories and a defined contribution division. A substantial part of the Fund's liabilities relate to lump sum defined benefits (i.e. benefits based on period of membership and salary over the last few years of membership). However, the defined benefit division is closed to new members so over time the defined contribution division will grow and the defined benefit division will reduce in size. A detailed description of the benefits valued in this investigation is included in Appendix A to this report.

The RIMT has a notice of compliance under the Superannuation Industry (Supervision) Act which we understand has not been revoked, and the Trustee made a formal election for the RIMT to be a "regulated" fund under the Superannuation Industry (Supervision) Act. The RIMT, and the Plan, therefore qualifies for concessional tax treatment.

Previous Recommendations

The recommended Company contributions over the three year period ending 30 June 2022 are shown in the table below. These rates include allowance for expenses and tax

Division	Recommended Employer Contribution Rate % of salary
Division C – Contributory	Nil
Division C – Non-Contributory	Nil
Division G – Contributory	Award contributions only
Division G – Non-Contributory	Award contributions only
Defined Contribution	At the rates of: <ul style="list-style-type: none"> • A minimum of the SG rate of Ordinary Time Earnings; • PLUS Nil for insurance for permanent employees • PLUS Nil for expenses

In addition, the Employer should also have contributed the SG rate of the excess of Ordinary Time Earnings over salary, where applicable, for defined benefit members.

To the best of our knowledge the Employer has been contributing to the Plan in accordance with, or at rates above, the previous recommendations.

Changes since the last valuation of the Plan

There have been no changes to benefits since the last valuation as at 30 June 2019. From 1 July 2019 to 30 June 2022 the SG rate was 9.50% to 30 June 2021 and increased to 10.00% from 1 July 2021 to

30 June 2022. It further increased to 10.5% on 1 July 2022 and is set to increase by 0.50% annually up to 12.00% over the period 1 July 2023 to 1 July 2025 and we have allowed for this in our calculations.

As advised by the Plan administrator, Russell Investments, since the last valuation the Plan's defined benefit assets were invested in the Russell Investments Blended Balanced and Balanced options (approximately 30% and 70% respectively) up to 30 September 2020, after which the Balanced allocation was transitioned to the Balanced Growth option, and from 11 May 2022 all the Plan's defined benefit assets were invested in the Balanced Growth option. The overall investment strategy for the defined benefit assets continues to be 70% in growth assets and 30% in income assets and this is considered suitable for the Plan's defined benefit liabilities.

The Trustee of the Plan has advised that during the inter-valuation period an administration issue was identified with Division C members of the Plan relating to underreporting of SG contributions by the employer and incorrect accrual rates being applied to non-contributory members benefits. The Trustee has confirmed that impacted members benefits have been corrected and we understand that the corrections are reflected in the data as at 30 June 2022 provided by the Plan administrator for this valuation. The Trustee also advised that for Division C non-contributory members their accrual rate under the Plan's Trust Deed should be 9.8% p.a. (regardless of the SG rate) and we have reflected this in our valuation calculations and the description of benefits included in Appendix A to this report.

Sources of Information

We have relied on the administrative records at 30 June 2022, provided to us by the Plan administrator, Russell Investments.

We have relied on the unaudited financial information for the Plan prepared for the Russell Investments Master Trust for the period 30 June 2019 to 30 June 2022.

Where possible the information provided has been checked for reasonableness and is considered suitable for the purposes of this investigation.

Data

At 30 June 2022 there were 85 Defined Benefit members in the Fund with salaries totalling \$10,640,693 and accumulation accounts totalling \$42,826,256. Additionally, there were 80 defined contribution members with accumulation accounts totalling \$20,266,701. The Plan does not have any lifetime pensioners. The full membership details are summarised in Appendix B.

We have checked a sample of the membership data for internal consistency and are satisfied as to the accuracy of this sample. Since the previous valuation, the average attained age of Defined Benefit Members has increased from 56 years to 57 years. The average completed membership of Defined Benefit Members has also increased from 30 years to 31 years.

The salaries of Defined Benefit Members have increased on average by 1.7% p.a. over the period since the last valuation.

Section 3: Assets and Investment Strategy

Accounts

We have been supplied with accounts covering the three years to 30 June 2022. We understand that audited information at the sub-plan level is not available however the Russell Investments Master Trust (RIMT) accounts were prepared and audited as a whole.

The Plan's accounts suggest that the Employer has been contributing in accordance with, or at rates above, the recommendations of the last valuation report.

Market Value of Net Assets

At 30 June 2022 the net market value of assets of the total Plan was \$88,942,281. This value includes the Plan's ORFR Reserve and assets in respect of both defined benefit members (including accumulation accounts) and defined contribution members.

As shown in the table below, the net market value of defined benefit assets attributable to the defined benefit section of the Plan (i.e. excluding accumulation accounts for defined benefit members as well as defined contribution member liabilities) is \$25,677,635.

The breakdown of the market value of the Plan's defined benefit ("DB") assets at 30 June 2022 is summarised below.

Net Market Value of DB Assets at 30 June 2019	\$'000s
Total Plan assets	88,942
<i>less</i> ORFR Reserve	(171)
Total Plan assets net of ORFR	88,771
<i>less</i> DC member accounts	(20,267)
Total DB Assets net of ORFR	68,504
<i>less</i> Accumulation accounts of DB members	(42,826)
DB Assets (excluding accumulation accounts)	25,678

The Trustee maintains an operational risk financial reserve (ORFR) as shown in the table above.

Accumulation benefits

Defined Benefit Members do not have investment choice for their accumulation accounts. These accounts are credited with earnings based on the return of the Russell Investments Balanced Growth Option, as detailed below.

Defined contribution members can choose from a range of investment options available in the Russell Investments Master Trust. These investment options are unitised and distribute investment returns to members through movements in unit prices.

For the purpose of this valuation, accumulation accounts for Defined Benefit Members as well as defined contribution member benefits have been excluded from the defined benefit assets and liabilities, unless otherwise stated.

Suitability of Crediting Rate

The Plan uses daily unit prices to credit investment earnings to member's accounts. The rate of interest credited to defined benefit members' accounts (both additional accumulation accounts and those accounts included in the defined benefit design) reflects the investment performance of the Plan, or chosen option for defined contribution members.

The rate of interest for defined benefit members was based on the Russell Investments Blended Balanced option to 11 May 2022 and Balanced Growth option from that date.

We consider the crediting rate policy adopted by the Trustee to be appropriate.

Nature of Defined Benefit Liabilities

The level of the Defined Benefit liabilities does not bear the same direct relationship with the defined benefit assets as exists with accumulation liabilities (where the assets and liabilities are generally matched).

The Defined Benefit liabilities reflect membership and salary growth, whereas the supporting assets depend on a range of factors including:

- i. the level of Company contributions, and
- ii. the level of investment returns

In this case it is the Company that bears the investment risk as the level of contributions required depends on the level of investment returns achieved.

An investment strategy for the Defined Benefit Section which is framed to take a long-term view will often adopt relatively high levels of equity investment in order:

- i. to secure attractive long term investment returns, and
- ii. to provide an opportunity for capital appreciation and dividend growth, which gives some protection against inflation (as benefits are linked to salary growth which is also influenced by inflation)

The main constraint is that potential fluctuations in asset values mean the total asset value could fall below the level of Vested Benefits, placing the Plan in an unsatisfactory financial position.

While the impact of a sudden sharp fall in asset values can be limited by maintaining a buffer of assets over and above the level of vested benefits, the level of the buffer may never be sufficiently high to safeguard against all possible investment outcomes. However, the buffer should be at a level where the risk of the asset values falling below the level of vested benefits under a particular investment strategy is acceptable to the Trustee and the Company.

In this regard, a lower buffer may be acceptable where the Company is willing and able to accept short-term variations in contributions as part of underwriting the defined benefits of the Plan. In this case, short-term variations in company contributions may result from:

- i. reducing a buffer that has grown too large, or
- ii. rebuilding a buffer that has fallen or become negative

An alternative for a plan which does not have a sufficient asset buffer above the level of Vested Benefits is to adopt a more conservative investment strategy. While this may reduce short-term fluctuations in asset values, it is also likely to reduce long-term returns and hence result in increased company contributions in the long-term.

In summary, a balance needs to be achieved between these short-term and long-term considerations in funding the defined benefit liabilities.

Investment Objectives and Guidelines

The Plan has both defined contribution and defined benefit members. The defined contribution members have investment choice and are provided with a range of investment options which members can tailor to suit their personal investment objectives and strategy. The rate of interest for defined benefit members is based on the return on the Russell Investments Balanced Growth Option.

The investment objectives for each investment option are outlined in the Investment Policy Statement for the RIMT. It is our understanding that Russell Investments reviews the appropriateness of these objectives at least once a year. For the defined benefit assets, the investment objective is to achieve above average and above benchmark investment returns and to maximise the return.

Investment Strategy for Defined Benefit Section

The defined benefit assets are invested 100% in the Russell Investments Balanced Growth option.

The table below shows the benchmark asset allocation for the Defined Benefits Section as at 30 June 2022.

Asset Class	Benchmark Asset Allocation % as at 30 June 2022
Australian Equities	27.0
Overseas Equities	32.5
Property	11.0
Fixed Interest	15.0
Infrastructure	7.0
Cash	7.5
Total	100.0

We have taken account of this investment strategy in setting our actuarial assumptions in Section 4 of this report.

Suitability of Investment Strategy

The defined benefit categories within the Plan are now all closed to new members. The age profile of these categories will gradually increase. At 30 June 2022 the average age was 57 years old, so the investment timeframe is medium-term at present.

We expect that the investment timeframe will eventually decline over time as current members approach retirement age and exit the Plan. The Company and Trustee should therefore review the suitability of the investment strategy regularly (at least triennially) to determine whether the investment strategy remains appropriate as the age and risk profile changes. A more defensive portfolio would reduce the expected volatility of the financial position of the Plan and hence may reduce the expected volatility of the employer contribution rate, however would also result in a lower expected long term return and therefore a higher expected long term Company contribution rate.

Crediting rates applied to defined benefit members' accounts (both additional accumulation accounts and those accounts included in the defined benefit design) are currently based on the daily changes in the unit price of the Balanced Growth option in the RIMT. If a more defensive portfolio is adopted for the defined benefit assets this would likely require a corresponding change to this (to avoid a mismatch of assets and liabilities) which would be expected to reduce the crediting rates applied to these accounts and may therefore reduce members' expected future benefits.

Any consideration of de-risking the defined benefit assets should therefore take into account the funding levels, future contribution arrangements (including the potential for a holiday from Company accumulation contributions) and the expected impact on members' benefits. We would be happy to assist the Trustee and Company with these considerations.

On the basis that Vested Benefits coverage and funding requirements will continue to be reviewed quarterly and at 1 July each year, I consider the current investment strategy to be suitable.

Section 4: Valuation Method, Plan Experience and Actuarial Assumptions

To carry out an actuarial valuation for defined benefit liabilities, it is necessary to decide on:

- the valuation method to be adopted, and
- the assumptions as to the factors which will affect the cost of the benefits to be provided by the Plan in the future

The information in this Section 4 relates to the defined benefit section of the Plan.

Valuation Method

Attained Age method

For this valuation we have adopted the Attained Age valuation method. We believe the Attained Age method is a suitable method for determining Company contribution requirements, given the length of time the Plan's defined benefit membership has been closed to new members.

The calculation of the Employer contribution by this method consists of two parts.

The **first part** is the "normal cost". The total normal cost is expressed as a level % of expected future salaries and is equal to the sum of:

- the cost based on actuarial assumptions of the benefits accruing to the members in respect of all future membership following the valuation date, plus
- the cost of insurance premiums, administration and taxation expenses.

The **second part** is the Employer contribution required to amortise any surplus or deficiency at the valuation date.

The surplus or deficiency in respect of completed membership is then calculated as the difference between:

- the actuarial value of the Plan's assets attributable to the defined benefit section, and
- the present value of all benefits accrued to the date of the valuation in respect of defined benefit section members based on the valuation assumptions adopted.

The total Employer contribution for the year is the Employer's normal cost less (plus) any amortisation of surplus (deficit).

However, the contribution rate required to maintain vested benefits coverage above 100% in three years' time based on the valuation assumptions has also been considered.

Plan Experience and Valuation Assumptions

It is important when setting the valuation assumptions to examine the experience of the Plan to see whether the previous assumptions have been borne out in practice. A summary of the major items of experience over the last three years is given in the following paragraphs.

Investment Return

The assumption for investment returns at the last valuation was 3.8% p.a. The Plan's investment returns over the three years to 30 June 2022 in respect of the Defined Benefit assets, together with the crediting rates based on unit prices applied to defined benefit members' accounts, are as follows:

Year Ending 30 June	Investment Return (% p.a.)	Crediting Rate (% p.a.)
2020	-1.6%	-3.2%
2021	18.0%	19.6%
2022	-4.7%	-5.3%
Average over the 3 years	3.4%	3.1%

The average investment return was 0.4% p.a. lower than the assumed rate. This underperformance will have had a negative effect on the Plan's financial position.

For this valuation, we have adopted a long term future investment return assumption equal to 6.1% p.a. (net of tax, investment management fees and asset-based administration expenses). This assumption has been set based on our expectations for future asset class investment returns over a period matching the duration of the Plan's liabilities (around 5 years at present), along with the strategic asset allocation for the Plan's defined benefit assets. This assumption is consistent with the Trustee's investment strategy.

Salary Inflation

The assumed rate of salary inflation was 3.4% p.a. at the last valuation. The average rate of growth of Salaries for defined benefit members who were present at both the last and current valuation dates was 1.7% p.a. The actual salary growth rate was 1.7% p.a. lower than the assumed rate. This will have had a positive effect on the Plan's financial position. For this valuation we have increased the salary inflation assumption to 3.5% p.a. (plus a promotional scale which was also assumed at the previous valuation).

Over the long term, it is the "gap" between the investment return (net of tax, investment management fees and asset-based administration expenses) and salary inflation assumption that is important when valuing member's liabilities. In this valuation we have increased the "gap" of 0.4% p.a. used in the previous valuation (before considering the impact of promotional salary inflation) to a "gap" of 2.6%. Over the review period the actual "gap" was 1.7% p.a. which has had a positive impact on the Plan's financial position.

Demographic Assumptions

Statistically significant results based on actual experience are not available from a fund of this size. We have retained all demographic assumptions including retirement, mortality, disablements and withdrawal decrement rates used at the previous valuation, as we consider these still appropriate for the Plan.

Expenses and Insurance Premiums

Defined Benefit Members

At the previous actuarial valuation, expenses were allowed for in the assumed investment earning rate. For this actuarial investigation, we have continued to allow for asset-based administration expenses of 0.1025% (as advised by the Plan administrator) in the assumed investment earning rate.

Analysis of the actual expenses (aside from the abovementioned asset-based administration expenses) indicates that these are approximately 0.5% of defined benefit member Plan Salaries. In the previous valuation expenses equal to 1.3% of defined benefit member Plan Salaries were allowed for, however for this valuation we consider 0.5% of defined benefit member Plan Salaries to be an appropriate allowance in the long term contribution rate and projection of results shown in Section 7 and Section 8.

As was the case in the previous actuarial valuation the expected cost of insuring future death and total and permanent disablement benefits is included in the Future Service Defined Benefit Liabilities so no separate allowance is required to fund these expenses when determining the long term contribution rate. However, for this valuation in the projection of results shown in Section 7, based on an analysis of the actual insurance costs for defined benefit members, we have made an allowance of 0.9% of defined benefit member Plan Salaries to fund these insurance expenses.

Defined contribution members

For defined contribution members, administration expenses are composed of an asset-based administration fee of 0.03% (as advised by the Plan administrator), which we have calculated is approximately 0.1% of defined contribution member Plan Salaries. Therefore, for this valuation we consider 0.1% of defined contribution member Plan Salaries to be an appropriate allowance in the projection of results shown in Section 7 in order to fund the administration expenses of defined contribution members. This is lower than the allowance adopted at the previous actuarial investigation which was 0.2%.

Analysis of the actual insurance expenses for defined contribution members indicates that these are approximately 0.3% of defined contribution member Plan Salaries. Therefore, for this valuation we consider 0.3% of defined contribution member Plan Salaries to be an appropriate allowance in the projection of results shown in Section 7 in order to fund the insurance expenses of defined contribution members. This is same as the allowance adopted at the previous actuarial investigation.

Given the Plan's surplus at 30 June 2022, we have recommended that the current contribution holiday in respect of defined benefit contributions continue to also cover the abovementioned insurance and expense costs for defined contributions members.

Impact of changes in assumptions

The change in “gap” from 0.4% last valuation to 2.6% this valuation reduced the normal cost part of the contribution rate in respect of all defined benefit members by approximately 0.4% of defined benefit Plan Salaries, and the reduction in the allowance for expenses in respect of defined benefit members decreased the normal cost by 0.8% of defined benefit Plan Salaries.

Summary of Valuation Assumptions

A summary of our valuation assumptions is set out in Appendix E to this report.

Section 5: Insurance Arrangements

Adequacy of Insurance

The insurance coverage of the Plan is considered adequate if the net assets of the Plan are sufficient to cover the Death and Total and Permanent Disablement (TPD) benefits of the Plan after any insured components have been allowed for.

The Plan currently has Death and TPD Insurance with MetLife.

Death and TPD Benefits

The current level of Death and TPD insurance in respect of defined benefit members is equal to the excess of death benefits above the undiscounted Leaving Service Benefit, with some additions for members with death and TPD minimum benefits. Refer to Appendix A for full details of the Death and TPD benefit for defined benefit members.

Although the future service portion of defined benefit members' death and TPD benefits is insured, a small strain is incurred when a death or disablement occurs. This is because the uninsured benefit paid from the Fund (i.e. the uninsured part of the benefit) is the undiscounted component in respect of past membership which may be greater than the vested benefit for a member. However, the impact of this is not material in the context of the financial position of the Fund.

We understand that death and TPD benefits for defined contribution members are fully insured. The cost of insurance premiums in respect of defined contribution members is covered by the company, through contributions recommended by the Actuary as part of the broader funding of the defined benefits.

The insured amount may be limited by the insurer and where this occurs we understand this benefit is limited by the same amount.

Insurance Cover

The following table shows the adequacy of the Plan's insurance cover at 30 June 2022:

	Amount \$000
Lump Sum Death and Disablement Benefits (A) for DB members	69,783
Less Aggregate Group Life Insurance (B) for DB members	11,993
Plan's Exposure (A – B)	57,790
Plan's DB Net Assets (including accumulation accounts)	68,504

The Defined Benefit Net Assets as at 30 June 2022 of \$68.5 million is sufficient to meet the Plan's Exposure of \$57.8 million. The current insurance arrangements are considered adequate and no changes are recommended.

Section 6: Solvency and Funding Status Measures

There are several methods used to assess the current financial situation (i.e. funding status measures) of the Plan. These measures are dealt with below.

Defined Benefit Assets are \$25,677,635, as noted in Section 3. This amount excludes the full amount of the ORFR, accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

Vested Benefits

Pursuant to superannuation law and SPS 160, a fund (or a section of a fund) is in a “*satisfactory*” financial position if the assets of the fund cover the Vested Benefit entitlements of the members of the fund.

The Vested Benefits represent the benefit entitlements of Members should they voluntarily leave the Plan. The Vested Benefits Index is a test of the Plan’s solvency if all Members voluntarily resigned or retired (if eligible) on the review date.

The following table shows the progression of the Vested Benefits Index over the review period.

	30 June 2019 DB Only*	30 June 2022 DB Only*	30 June 2019 Total Plan	30 June 2022 Total Plan
Net Assets (\$000)	31,397	25,678	118,472	88,771
Vested Benefits (\$000)	18,790	14,892	105,865	77,985
Vested Benefits Index	167.1%	172.4%	111.9%	113.8%

* The “Defined Benefits Only” figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities i.e. excluding accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

As at 30 June 2022, the net assets of the Plan (excluding any amount held to meet the ORFR) exceeded the Vested Benefits and the Plan was in a satisfactory financial position. The ratio of the Plan’s net assets supporting defined benefits to the Vested defined benefits was 172.4%. At the previous valuation, this ratio was 167.1%. The ratio has improved primarily due to the following reasons:

- reductions in the Plan’s defined benefit membership;
- Salary increases being less than expected.

Actuarial Value of Accrued Benefits

An indication of the funding status of the Plan is given by the ratio of the Plan's net assets to the Actuarial Value of Accrued Benefits (AVAB). This is called the Actuarial Value of Accrued Benefits Index (AVABI).

AVAB represents the value in today's dollars of future benefits based on membership completed to the review date, allowing for future salary increases, investment earnings and expected incidence of payment. "Accrued Benefits" has the meaning given in Regulation 9.27 of the SIS Regulations.

It is important that the Actuarial Value of Accrued Benefits Ratio is not used to compare the level of funding between superannuation funds but is used as a measure to assess the funding status of a superannuation fund from time to time. Different superannuation funds can be expected to have different Actuarial Value of Accrued Benefits Ratios depending on the age and employment history of the members.

A fully secured position is represented by a ratio of 100.0%. At this level, if the Plan were closed to new entrants and no further benefits were allowed to accrue to current members, assets would be sufficient to meet all future benefit payments if the actuarial assumptions are borne out in practice.

The following table shows the progression of the Actuarial Value of Accrued Benefits Index over the review period.

	30 June 2019 DB Only*	30 June 2022 DB Only*	30 June 2019 Total Plan	30 June 2022 Total Plan
Net Assets (\$000)	31,397	25,678	118,472	88,771
Actuarial Value of Accrued Benefits (\$000)	16,764	13,465	103,839	76,558
Actuarial Value of Accrued Benefits Index	187.3%	190.7%	114.1%	116.0%

* The "Defined Benefits Only" figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities i.e. excluding accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

As at 30 June 2022, the net assets of the Plan (excluding any amount held to meet the ORFR) are adequate to cover the Actuarial Value of Accrued Benefits.

Minimum Benefits

The company's Superannuation Guarantee obligation is either fully or partly met for all members by the minimum benefits provided under the Plan. The Plan is "solvent" if the net assets of the Plan, less the value of the benefit entitlements of former members, exceed the Minimum Requisite Benefits (MRB) of all members in service.

As at 30 June 2022 the net assets of the Plan exceeded the MRB and the Plan was in a solvent financial position. The ratio of the Plan's net assets to the total MRB was 125.6% at 30 June 2022. At the previous valuation this ratio was 124.9%.

Shortfall Limit

As required under SPS 160 the Trustee has set the Shortfall Limit for the Plan as 97%. The shortfall limit is defined in paragraph 10 of SPS 160 as:

“... the extent to which an RSE licensee considers that a fund can be in an unsatisfactory financial position with the RSE licensee still being able to reasonably expect that, because of corrections to temporary negative market fluctuations in the value of fund assets, the fund can be restored to a satisfactory financial position within one year.”

Should the financial position of the Plan breach the Shortfall Limit, additional interim Actuarial investigations will be required with rectification plans to be put in place to address the unsatisfactory financial position. We consider the Shortfall Limit is appropriate given the nature of the defined benefit assets and liabilities.

Retrenchment Benefits

The retrenchment benefits of some Division G and Category C2 members may exceed their leaving service benefit (dependant on their age and contributory service). The defined benefit members of the Plan presently have retrenchment benefits only marginally higher in total (by approximately \$13,000) than their vested benefits, as per the data provided. Given this, any retrenchment program will not place a significant financial strain on the Plan.

Benefits Payable on Termination of the Fund

The Trust Deed states that, on termination of the Plan (cessation of participation by the Employer) the Trustee is to determine the portion of assets held in the Plan for each member after seeking advice of the Actuary and having regard to minimum benefits. This power to reduce benefits means that the Fund is never technically unable to cover benefits payable on termination of the Plan.

It is our understanding that Clauses 7 and 8.4 of the Employer Application effectively prevent the payment of any surplus assets in the Plan to an Employer, so we have also recommend in this valuation that the Company consider additional strategies for the efficient use of this surplus, which may involve extension of the contribution holiday to cover contributions for defined contribution members or ‘Award’ contributions for Division G members.

Experience since the Investigation Date

It is likely the levels of the funding measures will have remained stable over the period since 1 July 2022, and we estimate that the Plan remains in a satisfactory financial position as at the date of this report.

Summary

The levels of the funding measures have increased as a result of the experience of the Plan over the review period.

Section 7: Valuation Contribution Results

It should be emphasised that the funding measures shown in Section 6 relate to the current position at the review date. A projection of the Plan is required to assess the adequacy of Company contribution rates to provide defined benefits in the future.

Such a projection has been carried out using the funding method and assumptions discussed in Section 4 and set out in Appendix E. The results of the valuation are summarised in this Section.

ATTAINED AGE METHOD

Long Term Defined Benefit Contribution Rate (before adjustments for current surplus/deficits)

As described in Section 6, the total value of accrued defined benefits of \$13,465,000 represents the present value of all expected future benefits in respect of defined benefit membership accrued up to the valuation date. We have similarly calculated the present value of all expected future Defined Benefits in respect of expected membership after the valuation date ("future service defined benefits").

The amount of long term Company contributions needed for the defined benefit (DB) membership is calculated as the present value of Future Service Defined Benefits less the present value of expected future member contributions expressed as a percentage of defined benefit member salaries (with allowances for contributions tax and expenses). These long term Company contribution rates under the Attained Age are shown in the table below.

	All DB members
	\$000
Future Service DB Liabilities	4,598
Less Value of future member contributions	0
DB Liability to be funded	4,598
Value of 1% future Company contributions	414
Future Company contribution rate required	11.1%
Plus Allowance for 15% contributions tax	2.0%
Plus Allowance for Plan expenses (excl. asset-based administration fees)	0.5%
Total Gross Company Contribution Rate required (% of DB member Plan Salaries)	13.6%

Hence, the long term contribution rate at 30 June 2022, produced by the Attained Age Method, to fund future benefits across all Defined Benefit Members is 13.6% of Plan Salaries. Note the expected cost of insuring future death and total and permanent disablement benefits is included in the Future Service Defined Benefit Liabilities figure in the table above.

The long term Company contribution rate at the previous valuation across all Defined Benefit members was approximately 14.7%, so the above result is lower than the calculations in the previous valuation. This change in the long term contribution rate is attributable as follows (all percentages shown below are in relation to defined benefit member Plan salaries):

- the change in financial assumptions reduced the long term contribution rate by 0.4%
- the change of the explicit expense allowance (for defined benefit members) reduced the long term contribution rate by 0.8% of defined benefit Plan Salaries
- Plan experience and changes in membership profile over the three years to 30 June 2022

Adjustment for Surplus at 30 June 2022

As at 30 June 2022, the surplus/deficit (assets relative to Actuarial Value of Accrued Benefits) was \$12,212,000. This surplus could be used to reduce the long term defined benefit Company contribution rate detailed above. The Plan's surplus at 30 June 2022 was great enough to warrant a continuation of the current contribution holiday.

Recommended Company Contribution Rate

In the absence of any special circumstances, we recommend that the Employer contributes to the Plan at the rates shown in the table below commencing 30 June 2022. These rates include allowance for expenses and tax.

Division	Recommended Employer Contribution Rate % of salary
Division C – Contributory	Nil
Division C – Non-Contributory	Nil
Division G – Contributory	Award contributions only
Division G – Non-Contributory	Award contributions only
Defined Contribution	<ul style="list-style-type: none"> • A minimum of the SG rate of Ordinary Time Earnings; • PLUS Nil for insurance for permanent employees • PLUS Nil for expenses

In addition, the Employer should also contribute the SG rate of the excess of Ordinary Time Earnings over salary, where applicable, for defined benefit members.

Use of surplus

The Plan's surplus has grown to such an extent that the Plan's Assets are greater than the present value of all future benefits expected to be paid out of the Plan, and we have recommended that the current contribution holiday in respect of defined benefit contributions, and insurance and expense costs for defined contributions members, continues to utilise some of this surplus.

It is our understanding that Clauses 7 and 8.4 of the Employer Application effectively prevent the payment of any surplus assets in the Plan to an Employer, so we also recommend that the Company consider additional strategies for the efficient use of this surplus, which may involve extension of the contribution holiday to cover contributions for defined contribution members or 'Award' contributions for Division G members.

We would be happy to assist the Company and Trustee in these considerations.

Projection of Results

For Defined Benefit members, we have tested the impact of the adoption of the recommended Company contribution rates above, by projecting the cash flows of the Plan and the build up of the

Plan's assets over the next three years under the valuation assumptions as set out in Appendix E, and comparing the Plan's defined benefits assets to the projected levels of the Vested Benefits.

Projection Date	Defined Benefit Net Assets \$'000s *	Defined Benefit Vested Benefits \$'000s *	VBI %
30 June 2022	25,678	14,892	172.4%
30 June 2023	21,498	10,982	195.8%
30 June 2024	19,724	9,533	206.9%
30 June 2025	18,131	8,173	221.8%

* The figures above are in respect of Defined Benefit liabilities i.e. excluding accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

The projection shows an increase in the VBI over the next three years, primarily driven by earnings on the surplus already within the Plan and anticipated reductions in the Plan's membership.

If the recommended Company contribution rates shown in this Section are paid, then I expect the Vested Benefits Index (VBI) to remain above 100% over the three years to 30 June 2025, assuming the valuation assumptions are borne out in practice.

Future Review

The financial status of the Plan is sensitive to actual financial experience (principally, investment returns and salary increases) and membership movements. We therefore recommend that a check is placed on the Vested Benefits Index at each annual review date, and also at any time if the Defined Benefit membership reduces significantly, or if contribution arrangements are changed, in order to confirm that the Plan maintains coverage of vested benefits.

The next actuarial valuation is due at 30 June 2025 with the results to be available by 31 December 2025.

Section 8: Sensitivity Analysis and Material Risk

Sensitivity Analysis

For the purpose of this investigation the “gap” between the investment return (net of tax, investment management fees and asset-based administration expenses) and salary inflation assumption (before the impact of the promotional scale) is 2.6% pa. Other assumptions could be used and the table below shows the impact of varying the “gap” between these assumptions on the Fund’s financial position and long term contribution rate.

Scenario 1 shows the results if the Fund achieved an investment return in the 75th percentile over the expected lifetime of the fund. Scenario 2 shows the results if the Fund achieved an investment return in the 25th percentile over the expected lifetime of the fund.

No changes have been made to the demographic assumptions adopted for this valuation in the scenarios below.

	This Valuation Basis	Scenario 1	Scenario 2
“Gap” between investment return and salary inflation assumptions	2.6% p.a.	4.3% p.a.	0.9% p.a.
Actuarial Value of Accrued Benefits Index	190.7%	200.8%	180.3%
Long Term Contribution Rate (% of DB member Plan Salaries)	13.6%	13.3%	13.9%

It should be noted that the variations selected in the sensitivity analysis above do not indicate upper or lower bounds of all possible outcomes. Further analysis can be carried out if required.

Material Risks

Salary Growth

For this valuation I have adopted a salary inflation assumption of 3.5% p.a. (plus a promotional scale). However if actual salary increases are greater than this, with all other actuarial assumptions borne out, then the funding position (Vested Benefits Index) will worsen and increased Company contributions may be required. Further analysis can be carried out if required.

Investment Returns

For this valuation I have adopted an investment return assumption (net of tax, investment management fees and asset-based administration expenses) of 6.1% p.a. However if actual investment returns are less than this, with all other actuarial assumptions borne out, then the funding position (Vested Benefits Index) will worsen and increased company contributions may be required.

Change to investment strategy

Any change to the investment strategy that impacts future expected return on assets supporting the defined benefit liabilities will potentially have an impact on the financial position of the Plan. If the Trustee is considering changing the investment strategy, we recommend that we be asked to assess the potential impact on the financial position of the Plan and future Company contribution requirements, as well as the potential impact on members' benefits, given that the crediting rates applied to defined benefit members' accounts reflect the investment performance of the Plan.

Crediting Rate Risk

The rate of interest credited to defined benefit members' accounts (both additional accumulation accounts and those accounts included in the defined benefit design) is based on the return on the Russell Investments Blended Balanced Option as a proxy for the actual return on the defined benefit assets.

Depending on the actual experience of the investments, the mismatch in crediting rates and actual investment return of the defined benefit assets may have a financial effect on the Plan. However, while the investment strategy of the Russell Investments Blended Balanced Option remains close to that of the defined benefit assets this risk should be mitigated.

A comparison of the return on the Plan's defined benefit assets together with the crediting rates applied to defined benefit members' accounts, as shown in Section 4 above, should be performed as part of each triennial actuarial investigation.

Appendix A: Summary of Benefits

DIVISION C

A summary of the benefits provided under Division C is set out below.

Definitions

Categories of Membership

There are 5 categories of membership

Category Description	
C1	Standard Members
C2	AGL Group/Gas Fund Transfers
C3	Division B transfers
C4	Division D transfers
C5	Casual members

Eligibility

Closed to new members

Normal Retirement Date

The member's 65th birthday.

Final Average Salary (FAS)

The greater of:

- a. the average of the member's earnings over the preceding 3 years; and
- b. the highest average annual rate of the member's earnings over any 3 consecutive years during the preceding 10 years.

Final Salary

The prospective Final Average Salary at age 65 assuming current salary remains unchanged.

Member Contributions

Members can contribute to the Fund in the following manner:

- Normal Contributions:
0%, or 5% of salary
- Special Contributions:
If a member is making Normal Contributions equal to 5% of salary, the member may make Special contributions in multiples of 1% of salary up to a maximum of 5% of salary.

- **Additional Contributions:**
If Normal and Special Contributions made by a member total 10% of salary, the member may elect to contribute additional contributions in any multiple of 1 % of salary.

Employer Contributions

The Employer is to contribute to the Fund in such amounts as it considers necessary to maintain the level of benefits payable from the Fund (upon considering the advice of the Actuary).

Member Contribution Account

The total of the member's contributions plus allocated Fund earnings. Expenses and tax may be deducted.

Additional Employer Account

Accumulation of additional notional employer contributions (Category C4 only) to make up for the shortfall between the standard benefits payable by this Fund and the benefit the member would have received had they remained a member of certain public sector funds. Contributions are accumulated with interest less tax.

Compulsory Contribution Account

Accumulated Superannuation Guarantee Charge contributions made by the Employer in respect of the member accumulated with interest less tax.

Surcharge Account

Any surcharge liability paid by the Fund, accumulated with interest.

Benefits - Categories C1, C2, C3 and C4

Leaving Service Benefit

On resignation or retirement prior to age 65 the benefit payable is the sum of.

- the Members Contribution Account
- 11.5% (subject to a minimum of NC%) x FAS x YCM x Discount
- $NC\%$ x FAS x YNM x Discount
- CFBM (Old) x FAS (category C2 only) x Discount
- BBM x FAS (category C2 only) x Discount
- Additional Employer Account x AEA vesting factor (category C4 only)
- Rollover Account

less

- Surcharge Account

where:

Discount	=	1 minus 1/12 of 2% for each month that age at date of leaving service precedes age 60, with a maximum reduction of 25%.
YCM	=	Years (with part years counting) as a contributory member.
YNM	=	Years (with part years counting) as a non contributory member.
NC%	=	Non contributory benefit multiple of 9.8%
CFBM (Old)	=	Company Financed Benefit multiple at 1 January 1996 (for Group Fund transfers) and at date of transfer for Gas Fund transfers.
<i>BBM</i>	=	Buy back multiple at date of calculation. The buy back multiple accrues for eligible members who make Special Contribution.

Death or Total and Permanent Disablement Benefit:

On death or total and permanent disablement the benefit payable is the sum of:

- the Leaving Service Benefit, as determined above, but with no reduction applied for members under the age of 60; and
- For Contributors:
 - 15% of Final Salary multiplied by years of future membership to age 65.
 - For Non contributors: 5% of Final Salary multiplied by years of future membership to age 65.

Members of Categories C2 and C3 are subject to minimum death benefits, and Category C2 members to minimum TPD benefits. These minimum benefits are as follows:

Category C2

- Death Minimum benefit is death benefit calculated at 1 January 1996 for Group Fund transfers and at date of transfer for Gas Fund transfers under the pre 1993 rules and updated with interest to date of death.
- TPD minimum benefit is TPD benefit calculated at 1 January 1996 for Group Fund transfers and at Date of transfer for Gas Fund transfers under the pre 1993 rules.

Category C3

If the member is aged less than 55

Minimum Death Benefit = Death Benefit Factor x Salary + Rollover

If the member's age is greater than 55 the Death Benefit Factor is reduced by 1 for each complete year by which the member's age exceeds age 55 (subject to a minimum Death Benefit Factor of nil).

where:

Death Benefit Factor is 5 for previous Division B Category A members and 7 for previous Division B Category B members.

Benefits - Category C5

All benefits for Category C5 are equal to the balance of the Compulsory Contribution Account.

DIVISION G

A summary of the benefits provided under Division G is set out below.

Definitions

Eligibility

Closed to new members

Normal Retirement Date

The member's 65th birthday.

Salary

The annual rate of remuneration paid to an employee but does not include overtime, bonuses, commission, shift allowances and other emoluments of a similar nature. Further, it does not include additional remuneration paid for additional duties carried out temporarily by a Member.

Final Average Salary (FAS)

The greater of:

- a. the average annual rate of remuneration of the member during the three years preceding the date of calculation; and
- b. the average annual rate of remuneration of the member during any three consecutive years of service preceding the date of calculation.

Final Salary

The prospective Final Average Salary at age 65 assuming current salary remains unchanged.

Member Contributions

Members can contribute to the Fund in the following manner:

- Normal Contributions:
0%, 3%, 4% or 5% of salary
- Special Contributions:
If a member is making Normal Contributions equal to 5% of salary, the member may make Special contributions in multiples of 1% of salary up to a maximum of 5% of salary.
- Additional Contributions:
If Normal and Special Contributions made by a member total 10% of salary, the member may elect to contribute additional contributions in any multiple of 1 % of salary.

Member's Contribution Accumulation

The Member's Contribution Accumulation is equal to the member's contributions to the Fund increased with interest at the Net Earning Rate as determined by the Trustee.

Compulsory Contribution Account

The Compulsory Contribution Account is equal to the accumulation of contributions made under various Awards and in accordance with the Superannuation Guarantee Act, less tax, updated with interest at the Net Earning Rate as determined by the Trustee.

Company Financed Benefit

The Company Financed Benefit is equal to a multiple of the Member's Final Average Salary. The multiple is based upon the member's contribution history and is determined in the following manner:

- 2 x ACP (for contributions up to 1 March 1989); plus
- 1.7 x ACP (for the period from 1 March 1989 up to 1 January 1993); plus
- for each Superannuation Guarantee charge period, the Defined Benefit Multiple x ACP (for that period),

where:

ACP is equal to the Member's Aggregate Contribution Percentage which is the sum of:

- The rates of Normal Contribution adopted by the member multiplied by the period of contributory membership at each rate;
- The rates of Special Contribution adopted by the member multiplied by the period of contributory membership at each rate.
- subject to a maximum of 6% times the total period of service with the Company between 8 January 1954 and 31 December 1976, plus 5% times any other periods of service.

Defined Benefit Multiple

Determined by the table below with reference to the level of charge percentage as specified in the SG Act.

Charge Percentage	Defined Benefit Multiple
5	1.3
6	1.1
7	0.9
8	0.7
9	0.5
9.25	0.45
9.5	0.4
10	0.3
10.5	0.2
11	0.1
11.5	0.0
12	0.0

Benefits

Normal Retirement Benefit

The benefit payable on normal retirement is equal to the sum of the following:

- Company Financed Benefit;
- Member's Contribution Accumulation; and
- Compulsory Contribution Account.

Retirement Prior to Normal Retirement Date

Members may retire at their own option within five years of their Normal Retirement Date. Female members who were members on 31 December 1976 may retire at their own option within 10 years of their Normal Retirement Date.

The benefit payable is equal to the Member's Normal Retirement Benefit.

Retirement After Normal Retirement Date

Where a member retires after the Normal Retirement date, the benefit is calculated as the greater of:

- the benefit calculated in the same way as the Normal Retirement Benefit, but calculated at the actual date of retirement; and
- the Normal Retirement Benefit increased by compound interest at the Net Earning Rate as determined by the Trustee.

Death Benefit

Temporary or Casual Employees (other than Previously Contributory)

On death the benefit payable is an amount equal to the Compulsory Contribution Account.

Non Contributory Members

On death the benefit payable is an amount equal to the sum of:

- the Compulsory Contribution Account;
- $5\% \times \text{Final Salary} \times \text{YFS}$;

where:

YFS = years and fractions of a year between the date of death and the member's Normal Retirement Date.

Provided that if the member was a member of the Fund at 1 January 1993, the benefit shall not be less than the sum of:

- once times Salary; and
- the Deemed Productivity Accumulation Account.

Previously Contributory Members

On death the benefit payable is an amount equal to the sum of:

- the Member's Contribution Account; and
- the Compulsory Contribution Account; and
- the Company Financed Benefit; and
- $5\% \times \text{Final Salary} \times \text{YTS}$

Provided that if the member was a member of the Fund at 1 January 1993, the benefit shall not be less than the sum of:

- the Member's Contribution Accumulation; and
- the greater of:
 - a. once times Salary; and
 - b. the Company Financed Benefit; and
- the Deemed Productivity Accumulation Account.

Contributory Members

An amount equal to the sum of:

- the Member's Contribution Accumulation; and
- the Compulsory Contribution Account; and
- the Company Financed Benefit; and
- $15\% \times \text{Final Salary} \times \text{YFS}$

Provided that if a member was a member at 1 January 1993, the benefit shall not be less than the sum of:

- the Member's Contribution Accumulation; and
- the Deemed Productivity Accumulation Account; and
- four times salary; and
- $\text{NCR} \times \text{Salary} \times t$

where:

NCR = The member's Normal Contribution Rate at the date of death.

t = Complete years between the member's date of death and the Member's Normal Retirement Date.

Total and Permanent Disablement Benefit

Temporary or Casual Employees (other than Previously Contributory)

On disablement, the benefit payable is an amount equal to the Compulsory Contribution Account.

Non Contributory Members

An amount equal to the sum of:

- the Compulsory Contribution Account; and
- $5\% \times \text{Final Salary} \times \text{YFS}$

where:

YFS = years and fractions of a year between the date the member is declared Totally and Permanently Disabled and the member's Normal Retirement Date.

Provided that if the member was a member at 1 January 1993, the benefit shall not be less than the sum of:

- $2.5\% \times \text{Final Salary} \times t$; and
- the Deemed Productivity Accumulation Account.

where

t = The period of service measured in years and fractions of a year to the nearer month which the member would have completed had the member continued in employment until the member's Normal Retirement Date, subject to a maximum of 40 years.

Previously Contributory Members

An amount equal to the sum of:

- the Member's Contribution Accumulation; and
- the Compulsory Contribution Account; and
- the Company Financed Benefit; and
- 5% x Final Salary x YFS

Provided that if the member was a member at 1 January 1993, the benefit shall not be less than the sum of:

- the Member Contribution Accumulation; and
- the greater of:
 - a. once times Final Salary; and
 - b. the Company Financed Benefit; and
- the Deemed Productivity Accumulation Account.

Contributory Members

An amount equal to the sum of:

- the Member's Contribution Accumulation; and
- the Compulsory Contribution Account; and
- the Company Financed Benefit; and
- 15% x Final Salary x YFS

Provided that if the member was a member at 1 January 1993, the benefit shall not be less than the sum of:

- the Member's Contribution Accumulation; and
- two times the Average Contribution Rate times Years of Contributory Membership times Final Salary; and
- three times the Average Contribution Rate times Years of Future Service times Final Salary; and
- the Deemed Productivity Accumulation

where:

Average Contribution Rate means the greater of:

- a. The member's Aggregate Contribution Percentage divided by the member's Years of Contributory Membership both calculated at the date that the member was declared to be Totally and Permanently Disabled; and
- b. The member's Aggregate Contribution Percentage divided by the member's Years of Contributory Membership both calculated as at the member's Normal Retirement Date assuming that the member's Normal Contribution Rate and Salary remained unchanged.

Years of Contributory Membership means the period of contributory membership of the Fund plus any additional contributory years purchased by Special Contributions made by the member. Years of Contributory Membership is subject to a maximum of the actual period of service with the Company.

Years of Future Service means years and fractions of a year between the date the member is declared Totally and Permanently Disabled and the member's Normal Retirement Date.

Retrenchment Benefit

If a member's service is terminated as a result of any reduction or re-organisation of the Company's staff and the member has completed ten or more years service before the Normal Retirement Date then the benefit payable is equal to the sum of:

- the Member's Contribution Accumulation; and
- the Company Financed Benefit; and
- the Compulsory Contribution Account.

Resignation Benefit

The sum of:

- the Member's Contribution Accumulation; and
- the Compulsory Contribution Account; and
- a percentage of the Company Financed Benefit.

This percentage is determined in the following manner:

Vesting Percentage = 0 if Vesting Number is less than 21;
 = 2.5% x (Vesting Number - 20), if Vesting Number is between 20 and 60;
 = 100% if Vesting Number is greater than 60.

where:

Vesting Number is equal to the number of complete years calculated as the sum of:

- the member's age at the date of cessation of employment calculated in years and months (to the nearer month); and
- the number of years and months in the Member's period of Contributory Membership taken to the nearer month.

Surcharge

Any Surcharge Liability in respect of a member is deducted from any benefit payment made.

Appendix B: Details of Membership

DB Membership as at 30 June 2022

	30 June 2019	30 June 2022
Number of Members	124	85
Average Age	56 years	57 years
Average Past Membership	30 years	31 years
Total DB Salaries	\$14,747,559	\$10,640,693
Average DB Salary	\$118,932	\$125,185

Appendix C: Valuation Method and Assumptions

Asset Value

Market value taken from unaudited accounts at the valuation date.

Investment Returns

6.1% p.a. compound (net of tax, investment management fees and asset-based administration expenses)

Salary Increases

3.5% p.a. compound (this includes allowances for general inflationary but promotional increases have been allowed for in a separate scale).

Promotional Increases

Specimen annual rates of promotional salary increases appear in the tables below.

Age	Category C	Category G
20	6.0	4.5
25	4.2	3.2
30	3.2	2.4
35	2.4	1.8
40	1.9	1.4
45	1.4	1.0
50	1.0	0.8
55	0.6	0.5
60	0.3	0.2

Rates of Mortality, Total and Permanent Disability (TPD), and Leaving Service

Specimen annual rates of decrement appear in the tables below:

Rates of Mortality, Disablement and Withdrawal

The age-based probabilities of active members leaving the fund during the year on account of the decrement indicated are equivalent to the following number of exits per 10,000 members.

Age	Death Male	Death Female	Disablement	Withdrawal
20	9.6	3.6	1.0	1,800
25	11.4	3.8	1.0	1,450
30	11.9	4.5	1.0	1,100
35	12.8	6.1	2.0	880
40	15.9	8.8	6.0	660
45	21.8	13.0	14.0	450
50	31.5	20.2	32.0	520
55	50.2	32.2	68.0	1,200
60	84.8	51.0	140.0	-

Rates of Retirement

The age-based probabilities of active members leaving the fund during the year on account of retirement are equivalent to the following number of exits per 10,000 members:

Age	Retirement
60	2,600
61	2,550
62	2,500
63	3,000
64	6,000
65	10,000

Expenses and Insurance Premiums

Investment management expenses are allowed for by assuming a net rate of investment return.

Defined Benefit Members

The assumed rate of investment return is also net of asset-based administration expenses of 0.1025%.

Plan expenses (aside from the abovementioned asset-based administration expenses) of 0.5% of defined benefit member Plan Salaries have been allowed for in the long term contribution rate and projection of results shown in Section 7 and an additional allowance for insurance costs of 0.9% of defined benefit member Plan Salaries has also been allowed for in the projection of results.

The expected cost of insuring future death and total and permanent disablement benefits is included in the Future Service Defined Benefit Liabilities.

Defined contribution members

An allowance for expenses for defined contribution members of 0.1% of defined contribution member Plan salaries has been allowed for in the projection of results shown in Section 7.

An allowance for the cost of insurance for defined contribution members of 0.3% of defined contribution member Plan salaries has been allowed for in the projection of results shown in Section 7.

New Entrants

No allowance for new entrants as the Plan is closed to new members.

Taxes

Tax on investment income is allowed for in the Investment Returns shown above.

Tax on contributions has been allowed for as 15% of Company contributions reduced by allowable deductions (administration and insurance costs). No allowance has been made for GST or Reduced Input Tax Credits.

Appendix D: Statements required under Paragraph 23 of SPS 160

The statements made here are in relation to the Jemena Employer Division of the Russell Investments Master Trust (the "Plan") in connection with the actuarial investigation I conducted effective 30 June 2022. The statements required under paragraphs 23(a) to (h) of SPS 160 for regular investigations are set out below. Note, these are provided in relation to the Plan's defined benefit liabilities only, and exclude accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

Plan Assets

The Plan's assets attributable to the defined benefit liabilities at 30 June 2022 was \$25,677,635. This amount is the amount disclosed in the Plan Accounts, adjusted for a benefits payable and tax payable amounts, and excludes assets attributable to accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities and any Operational Risk Financial Requirement.

This value of assets at 30 June 2022 was used to determine the recommended Company contribution rates and assess the funding status measures and is also referred to as the "actuarial value" of the assets.

The net market value of the total Plan assets (net of ORFR but including accumulation accounts for Defined Benefit Members as well as defined contribution members) at 30 June 2022 was \$88,770,592.

Projection of Vested Benefits

The projected likely future financial position of the defined benefit categories of the Plan during the three years following the valuation date and based on my best estimate assumptions is as follows:

Date	Defined Benefit Net Assets \$'000s *	Defined Benefit Vested Benefits \$'000s *	VBI %
30 June 2022	25,678	14,892	172.4%
30 June 2023	21,498	10,982	195.8%
30 June 2024	19,724	9,533	206.9%
30 June 2025	18,131	8,173	221.8%

* The figures above are in respect of Defined Benefit liabilities i.e. excluding accumulation accounts for Defined Benefit Members as well as defined contribution member liabilities.

Accrued Benefits

In my opinion, the value of the assets of the defined benefit members of the Plan (excluding any amount held to meet the ORFR) at 30 June 2022 was adequate to meet the liabilities in respect of the accrued benefits of defined benefit members of the Plan (measured as the value of members' accrued entitlements using the valuation assumptions). We consider that the assumptions and valuation methods set out in this report are appropriate for determining the accrued liability.

Vested Benefits

At 30 June 2022 the Plan was in a satisfactory financial position, as defined in SPS 160. In my opinion the Plan does not need to be treated as being in an unsatisfactory financial position. The shortfall limit does not need to be reviewed.

Minimum Benefits

At 30 June 2022 the value of the minimum requisite benefits for all Plan members (including accumulation accounts for Defined Benefit Members as well as defined contribution members) was \$70,663,798 which was less than the total Plan assets at that date. Minimum benefits are as defined in Regulation 5.04 of the Superannuation Industry (Supervision) Regulations.

The coverage of the MRBs for all Plan members (including accumulation accounts for Defined Benefit Members as well as defined contribution members) was 125.6%.

Funding and Solvency Certificates

Funding and Solvency Certificates for the Plan covering the period from 30 June 2019 to 30 June 2022 have been obtained. The Plan was solvent, as defined in the Superannuation Industry (Supervision) Regulations at 30 June 2022. In my opinion, the solvency of the Plan will be able to be certified in any other Funding and Solvency Certificate required under the Regulations during the three year period to 30 June 2025.

Recommended Company Contributions

The recommended contributions payable by the Company as a result of this investigation are shown in the table below. These rates include allowance for expenses and tax.

Division	Recommended Employer Contribution Rate % of salary
Division C – Contributory	Nil
Division C – Non-Contributory	Nil
Division G – Contributory	Award contributions only
Division G – Non-Contributory	Award contributions only
Defined Contribution	<ul style="list-style-type: none"> • A minimum of the SG rate of Ordinary Time Earnings; • PLUS Nil for insurance for permanent employees • PLUS Nil for expenses

In addition, the Employer should also contribute the SG rate of the excess of Ordinary Time Earnings over salary, where applicable, for defined benefit members.

We also recommend that:

- The formula being used to determine the insurance component of the death and disablement benefits be retained.
- The Trustee discuss with the Company the use of the Plan's surplus, including consideration of alternative contribution holiday arrangements such as extension of the contribution holiday to various accumulation style contributions.



Richard Saverimuttu
Fellow of the Institute of Actuaries of Australia

15 December 2022

Review: D: HN | TR: JKB | CR: RS

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