

25 October 2016

Mr Peter Jensen
Chief Executive Officer
Southern Response Earthquake Services Ltd
10 Show Place
Christchurch 8149
NEW ZEALAND

Dear Peter

Earthquake Claim Liabilities as at 30 September 2016

We have been asked by Southern Response Earthquake Services Limited ("SRES") to make an assessment of its insurance liabilities as at 30 September 2016. SRES is the Crown-owned entity which emerged from a transaction whereby, with effect from 5 April 2012, the ongoing business of AMI Insurance Limited ("AMI") was separated from the existing AMI entity and sold to Insurance Australia Group.

The purpose of this letter is to provide an estimate of the earthquake claim liabilities for Southern Response Earthquake Services Limited ("SRES") as at 30 September 2016. This valuation is predominantly based on a roll forward of our 30 June 2016 valuation with changes to valuation assumptions where emerging experience, or new information in respect of emerging issues, suggests changes are appropriate. We include commentary on the key changes to assumptions later in this letter.

This letter does not deal with the other non-earthquake retained events that were retained by SRES following the transaction on 5 April 2012.

Summary of Results

Table 1 summarises our estimates of SRES' earthquake liabilities at 30 September 2016. The line below the table indicates our estimate of the total amount which will be ultimately paid once all claims are settled (including payments already made but excluding SRES CHE expenses). This represents our central estimate of the ultimate liability. Our recommended provisions incorporate a risk margin which we believe to be consistent with the requirements to establish provisions which incorporate at least a 75% probability of sufficiency.

Sydney
Tel +61 2 8252 3300
Level 7, 68 Harrington Street
The Rocks, NSW 2000

Melbourne
Tel +61 3 8080 0900
Level 3, 30 Collins Street
Melbourne, VIC 3000

Auckland
Tel +64 9 306 7700
Level 5, 79 Queen Street
Auckland 1010

Table 1 – Recommended EQ Provisions at 30 September 2016

Provisions for Outstanding Claims as at 30 Sep 2016	Cat 93	Cat 106	Cat 112	Total		
	4-Sep-10 \$m	22-Feb-11 \$m	13-Jun-11 \$m	Major \$m	Minor \$m	Overall \$m
Gross Incurred Cost in 30 Sep \$ before EQC	1,160.5	2,666.6	106.3	3,933.4	43.2	3,976.5
Expected EQC Share	-332.9	-635.3	-33.5	-1,001.6	-4.7	-1,006.3
Gross Incurred Cost in 30 Sep \$ after EQC	827.6	2,031.3	72.8	2,931.7	38.5	2,970.2
less paid to 30 Sep 2016	-660.5	-1,585.7	-65.1	-2,311.3	-33.3	-2,344.6
Gross Outstanding Claims						
In 30 Sep 2016 Values	167.1	445.6	7.6	620.4	5.2	625.6
Allowance for Future Inflation	3.8	8.5	0.3	12.7	0.8	13.5
Inflated Values	171.0	454.2	8.0	633.1	6.0	639.1
Discount to Present Value	-2.4	-6.2	-0.1	-8.7	-0.1	-8.8
OSC Discounted to 30 Sep 2016	168.6	447.9	7.9	624.4	5.9	630.3
Claims Handling						
Gross Central Estimate						
Catastrophe R/I Recoveries	0.0	0.0	-7.9	-7.9	-1.6	-9.5
Aggregate R/I Recoveries	0.0	0.0	0.0	0.0	0.0	0.0
Net Central Estimate						
Risk Margin						
Recommended provision						
Inflated Gross Central Estimate (Incl paid to date, excl CHE)	831	2,040	73	2,944	39	2,983.7
Change on 30 Jun 2016 Valuation	21	55	5	81	0	80
Change on 30 Jun 2015 Valuation	30	213	16	259	8	267

Our central estimate of the gross inflated ultimate cost excluding CHE at 30 September 2016 is \$80m higher than our 30 June 2016 estimate. Table 2 shows the main components of cost underpinning our overall estimate of SRES' ultimate earthquake liabilities.

Table 2 – Estimated Ultimate EQ Liabilities at 30 September 2016

	30 Jun 16 \$m	30 Sep 16 \$m	Mov't Jun16 to Sep16 \$m
Ultimate Outflows			
Over Cap	3,210	3,301	91
Out of Scope	338	338	0
Other	153	153	1
Claims Cost (Excl PM Cost)	3,701	3,793	92
Project Management Costs			
SRES Claims Handling			
Ultimate Inflows			
EQC Contributions	996	1,008	11
Reinsurance Recoveries	1,259	1,264	5
	2,256	2,272	16
Net Outflow (net of RI)			
Cum. Paid Net of EQC (excl CHE)	2,228	2,345	117
Discounted Net Liability			
Central Estimate	701	660	-42
Risk Margin			
Recommended Provision			

9(2)(b)(ii)

The major drivers of the movements in the central estimate are described in Table 3.

Table 3 – Explanation of Movements in Inflated Gross Central Estimate

	Traffic Light	Notes	Mov't from Jun-16
New Overcaps	●	While the total volume of properties being turned Over Cap by the EQC has come through in line with expectations in the last quarter (66 reported in 3 months), there are a significantly higher than expected number of properties still to be settled by the EQC. In response we have extended our pattern of new reports to continue into early 2017. This has increased our expected ultimate number of over cap properties by 100.	\$34M
Rebuild Size	●	As the build program comes to a close the ratio of builds with significant complexities is higher than previously experienced. For those complex builds there are increased variations during the construction phase and also higher increases at RFP stage. This has led us to increase our assumed average rebuild cost.	\$9M
Repair Size	●	As seen in the rebuild program the properties that are going through to a managed repair are increasingly those with significant complexities. For these complex repairs contract variations are at a higher level than previously expected. Our basis has been adjusted to allow for this higher development of cost to continue into the future. Across the portfolio it was previously expected that there would be minimal scope increases on repair properties where their engineering and design was done at the time of their initial assessment. However, we have continued to see higher than allowed for increases occur on these properties, both prior to RFP and at the RFP stage.	\$20M
Cash Settlements	●	As the settlement process moves into the "tail", the proportion of outstanding settlements which are more complex is increasing. Our revised average size assumptions reflect the expected impact of this change in mix.	\$12M
Repairs to Rebuilds	●	The additional cost of future properties switching from repair to rebuild was understated in the previous valuation, as design costs that have been already incurred at the time of the switch are not included in the rebuild budget. We have increased our expected size of these properties in line with this.	\$5M
Out of Scope and Minor Classes	●	Experience has been in line with expectations.	\$0M
Other Movements	●	Minor contributions from Escalation, Throughput, EQC contributions, Enhanced foundations, Legal costs and Arrow Project Management Costs	\$0M
Inflated Ultimate			\$80M

● Higher than previous valuation
● In line with previous valuation
● Better than previous valuation

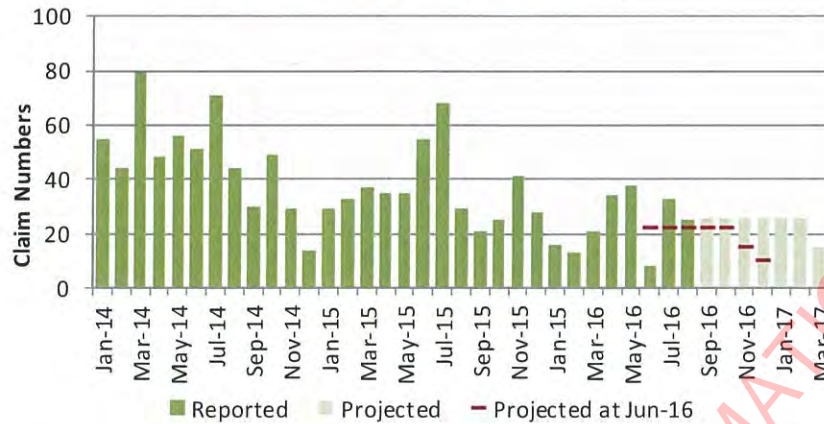
Key Observations

In this section we provide further detail around the key movements in the valuation during the quarter.

New Over Cap Numbers

The number of properties being turned Over Cap by the EQC has been consistent with expectations in the last quarter (66 reported in 3 months), however there are a significantly higher than expected number of properties still to be settled by the EQC. In response, we have extended our pattern of new Over Cap reports to continue into early 2017 as shown in Figure 1.

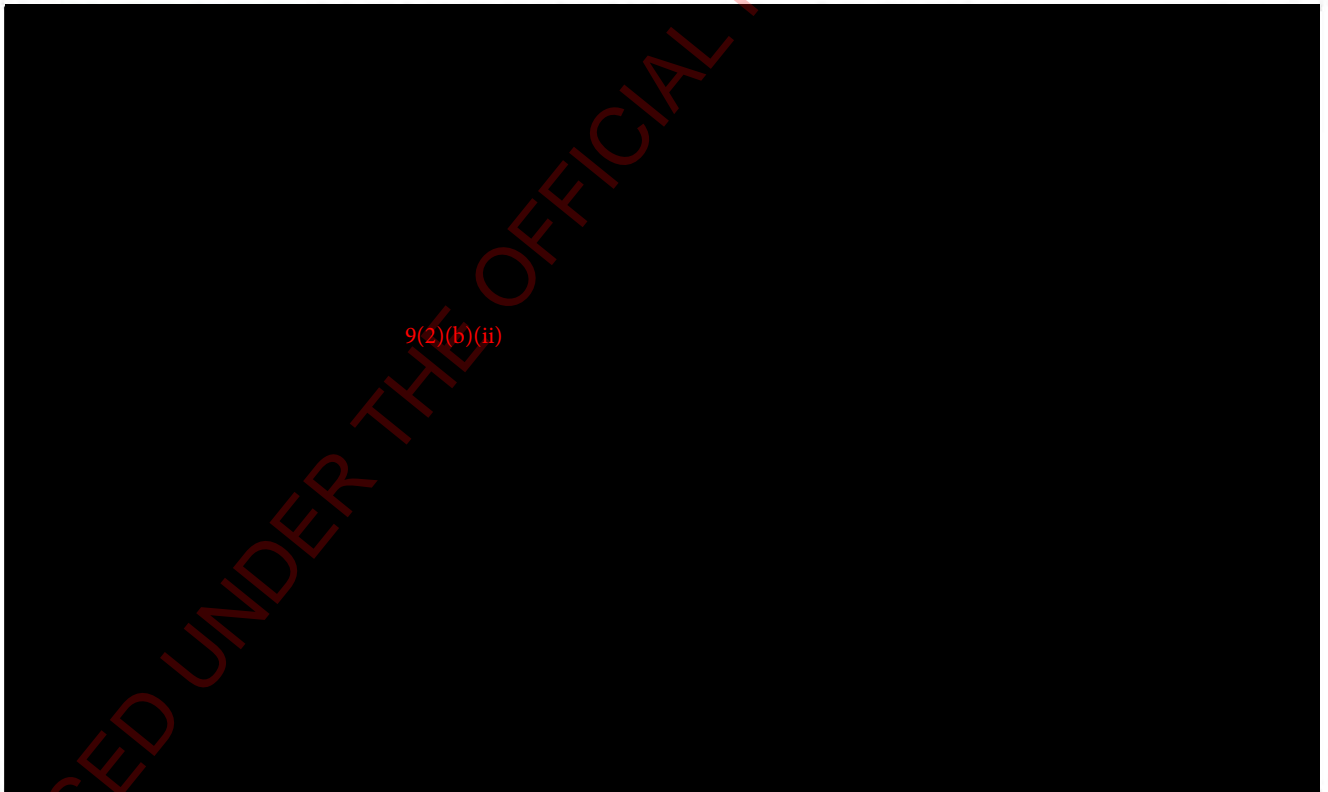
Figure 1 – New Over Cap Numbers



We are now expecting 100 more ultimately Over Cap properties from the EQC, which has led to a \$34 million increase.

Rebuild Sizes

Figure 2 shows how rebuild properties have developed through their construction phases:

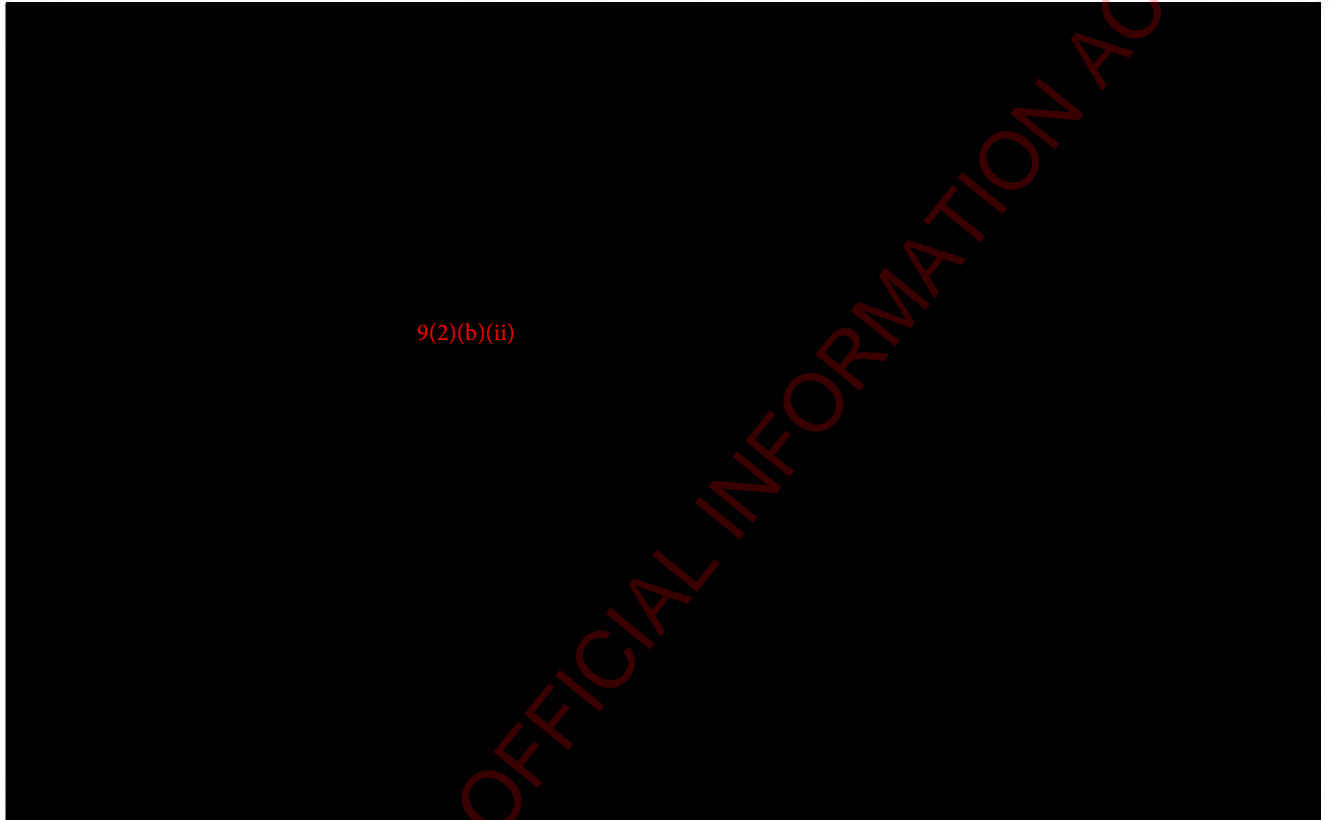


Increased variation activity during the construction and higher increases at the RFP stage has been the major drivers of the \$9 million increase.

Repair Sizes

Repair Size Development

Figure 3 shows how repair properties have developed through their construction phases:



Additionally, we have also seen significant scope increase on repair properties prior to RFP stage, which we weren't expecting under the new process with design and engineering done upfront. This, along with the increased allowance for pre-RFP to RFP scope changes and contract variations has resulted in the \$20 million increase in the estimated cost of repairs.

Cash Settlements

Cash Settlement Sizes

As the settlement process moves into the "tail", the proportion of outstanding settlements which are more complex is increasing. Our revised size assumptions reflect the expected impact of this change in mix and result in a \$12 million increase in SRES' liability.

Cash Settlement Numbers

There has also continued to be an increased proportion of customers choosing a cash settlement decision initially, particularly for repair properties. This is expected to continue in the future and is consistent with SRES' announcement of introducing a June 2017 deadline for properties to enter the construction programme.

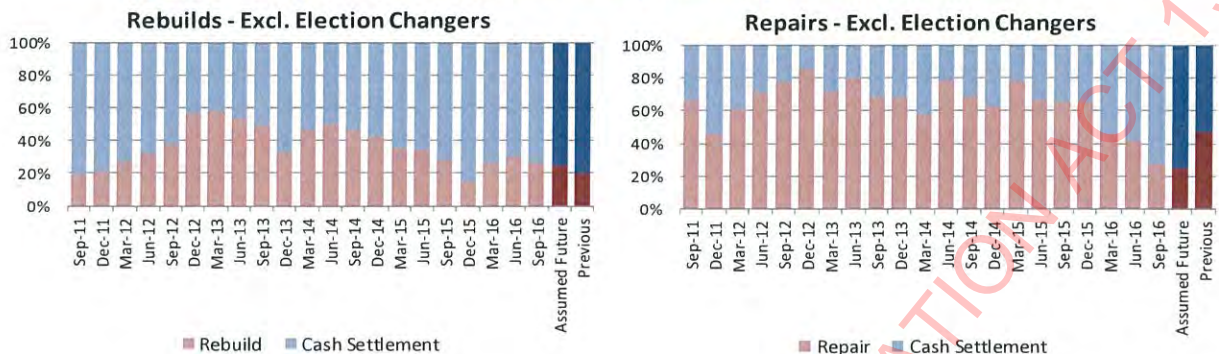
Figure 4 – Proportion of Customers Initially Choosing a Cash Settlement


Table 4 shows the effect of the higher number of cash settlements on ultimate property types. There has been a reduction in the number of Arrow Managed properties and an increase in the number of cash settlements.

Table 4 – Ultimate Claim Numbers Breakdown

Properties with Buildings Claims	All Events Combined		
	Jun-16	Sep-16	Movt from Jun16
Ultimate No with Over cap damage	8,021	8,121	100
Arrow Managed			
- Rebuild	1,729	1,726	-3
- Repair	1,092	1,057	-35
	2,820	2,783	-37
Cash Settlements	5,201	5,338	137

Whether a property is cash settled or Arrow managed through the rebuild/repair does not have a material impact on our valuation basis.

‘Wash Up’ matters between SRES and the EQC

There are ongoing discussions between SRES and EQC around the settlement of a few areas of cost:

- EQC Contributions – EQC has settled their liability on Over Cap claims in line with their view of the expected ultimate cost of these properties. To the extent that properties have incurred costs in excess of what the EQC expected, there is an additional liability owed to SRES in respect of properties with a partial cap. Our analysis on stand-alone properties that have been assessed prior to June 2016 indicates that the additional contributions from the EQC could be in excess of \$18 million (there may be an additional liability for multi-unit and late assessed properties).

- Protocol 1 Properties – These are properties that EQC have determined to be Over Cap after construction on these properties had commenced. To date, EQC have notified SRES of \$8.5 million of Over Cap liability corresponding to Protocol 1 properties, with more being notified regularly. It is expected the final liability to SRES in respect of Protocol 1's could be of the order of \$10-12 million.

Further, there remains the risk that the rate of protocol 1 notifications increases as EQC begins to revisit a number of their repairs. Increases of scope on revisits, could lead to more properties turning Over Cap.

Given the uncertainty around the final outcome of these issues and the likely offsetting nature of these settlements, we have not adjusted our valuation basis for their potential impact (i.e. we have assumed that these various issues will be largely offsetting).

Uncertainty of our Estimates

It should be noted that considerable uncertainty still surrounds the projection and valuation of SRES' EQ liabilities. While SRES has progressed most of the way through the damage assessment phase, a reasonably large proportion of the overall incurred cost is yet to be settled. In addition, the run-off is exposed to a higher level of variability in claims experience than a typical residential property run-off portfolio. As the claim settlement process has progressed, a greater proportion of outstanding claims liability relates to more complex claims, meaning the uncertainty around future settlement outcomes for outstanding claims is magnified (as compared to 'normal' residential property claims). Unchanged from our June valuation, we have set our risk margin at 9(2)(b)(ii) % of the estimated liability (net of EQC contributions but gross of reinsurance recoveries) which maintains SRES' approach of its provisions containing a margin sufficient to produce at least a 75% probability of sufficiency.

Our view on the key areas of uncertainty is set out in Table 5.

Table 5 – Key Areas of Uncertainty in Valuation Basis

Component of O/S Liability	Gross Exposure to Adverse Mov't \$m	Key Areas of Risk	Risk of an Adverse Movement
Additional Over Cap Claims	79	While latest information from EQC provides a more granular view, there remains a residual risk that higher volumes might emerge	●
Settlement Outcome			
Rebuilds	212	Currently scoped DRA's have understated the required foundation and/or superstructure costs.	●
Repairs	150	Uncertainty involved with the changing repair DRA process results in costs being higher than expected.	●
MUB's	123	Limited experience for MUB's and adverse trends in repairs results in uncertainty about reliability of estimates for these claims	●
Cash settlements	304	Complexity of rebuild/repair and/or customer circumstances results in higher settlement terms	●
Out of Scope	14	Not materially exposed	●
Temp Accommodation, Other	20	Not materially exposed	●
Arrow, SRES CHE	71	Run down in staff numbers and overheads not as fast as budgeted	●
Time to Settlement			
Throughput Delays	894	Inflation impact of delays in the time taken for repairs and MJB's	●
Inflation	894	Inflation over the runoff period is higher than assumed	●

Potential for material change to valuation basis:

High ●
 Medium ●
 Low ●
 Unlikely ●

Reliances and Limitations

This letter has been prepared for the use of SRES for the stated purpose. We understand that a copy of the letter may be provided to the Board of SRES. No other use of, nor reference to, our letter other than as required by the Crown, should be made without prior written consent from Finity, nor should the whole or part of our letter be disclosed to any unauthorised person.

Third parties, whether authorised or not to receive this letter, should recognise that Finity will not be liable for any losses or damages howsoever incurred by the third party as a result of them receiving, acting upon or relying upon any information or advice contained in the report.

Our letter should be considered as a whole. Members of Finity staff are available to answer any queries, and the reader should seek that advice before drawing conclusions on any issue in doubt.

Yours sincerely

9(2)(a)

9(2)(a)

Fellows of the New Zealand Society of Actuaries
 Fellows of the Institute of Actuaries of Australia