finity
Actuarial and Insurance Consultants

3 May 2017

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 31 March 2017

We have been asked by Southern Response Earthquake Services Limited ("SRES") to make an assessment of its insurance liabilities as at 31 March 2017. 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 31 March 2017. This assessment follows on from the update we provided as at 31 December 2016. This letter sets out the high level issues as they relate to movements in the liability between 31 December 2016 and 31 March 2017. We include commentary on the key changes to assumptions later in this letter.

In order to better align our analysis of emerging experience with the settlement processes now being applied by SRES, we have made some modifications to our valuation approach, with the main change being to combine the experience of cash settled and Arrow managed properties. With SRES' focus on cash settlements, we believe this approach will support a more consistent and robust set of future claim size development assumptions. This change in approach does mean, however, that a number of the metrics presented in previous valuations are no longer appropriate for comparison purposes. We include commentary on the key changes 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 31 March 2017. 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.

Table 1 – Recommended EQ Provisions at 31 March 2017

Provisions for Outstanding Claims as at 31 Mar 2017	Cat 93 4-Sep-10 $m	Cat 106 22-Feb-11 $m	Cat 112 13-Jun-11 $m	Total Major $m	Total Minor $m	Total Overall $m	
Gross Incurred Cost in 31 Mar $ before EQC	1,152.7	3,027.1	137.3	4,317.2	43.9	4,361.1	
Expected EQC Share	-321.7	-699.0	-45.5	-1,066.3	-6.2	-1,072.5	
Gross Incurred Cost in 31 Mar $ after EQC	831.0	2,328.1	91.8	3,250.9	37.7	3,288.6	
less paid to 31 Mar 2017	-707.5	-1,792.2	-67.1	-2,566.8	-32.9	-2,599.7	
Gross Outstanding Claims							
In 31 Mar 2017 Values	123.5	535.9	24.7	684.1	4.8	688.9	
Allowance for Future Inflation	0.0	0.1	0.0	0.1	0.0	0.1	
Inflated Values	123.5	535.9	24.7	684.2	4.8	689.0	
Discount to Present Value	-2.3	-10.1	-0.5	-12.8	-0.1	-12.9	
OSC Discounted to 31 Mar 2017	**121.3**	**525.8**	**24.2**	671.3	4.7	676.1	
Claims Handling	[redacted]						9(2)(i)
Gross Central Estimate							
Catastrophe R/I Recoveries	0.0	0.0	-24.2	-24.2	-1.8	-26.0	
Aggregate R/I Recoveries	0.0	0.0	0.0	0.0	0.0	0.0	
Net Central Estimate	[redacted]						9(2)(i)
Risk Margin							
Recommended provision							
Inflated Gross Central Estimate (Incl paid to date, excl CHE)	**831**	**2,328**	**92**	**3,251**	**38**	**3,288.7**	
Change on 31 Dec 2016 Valuation	**-45**	**151**	**14**	**120**	**-3**	**116**	
Change on 30 Jun 2016 Valuation	**20**	**343**	**24**	**387**	**-2**	**385**	

Our central estimate of the gross inflated ultimate cost excluding CHE at 31 March 2017 is $116m higher than our 31 December 2016 estimate. It is worth noting that a reallocation of ultimate costs mainly to the June event has resulted in an increase in the reinsurance recoverable of $13 million. Table 2 shows the main components of cost underpinning our overall estimate of SRES' ultimate earthquake liabilities.

Table 2 – Estimated Ultimate EQ Liabilities at 31 March 2017

	31 Dec 16 $m	31 Mar 17 $m	Mov't Dec16 to Mar17 $m	
Ultimate Outflows				
Over Cap	3,501	3,662	161	
Out of Scope	339	339	0	
Other	158	154	-4	
Claims Cost (Excl PM Cost)	3,998	4,155	157	
Project Management Costs	[redacted]			9(2)(b)(ii)
SRES Claims Handling				9(2)(i)
Ultimate Inflows				
EQC Contributions	1,030	1,072	42	
Reinsurance Recoveries	1,269	1,283	14	
	2,300	2,355	55	
Net Outflow (net of RI)	[redacted]			9(2)(i)
Cum. Paid Net of EQC (excl CHE)	2,504	2,600	95	
Discounted Net Liability				
Central Estimate	687	681	-6	
Risk Margin	[redacted]			9(2)(i)
Recommended Provision				

Summary of Key Movements

The major drivers of the movements in the central estimate are described in the table below.

Table 3 – Summary of Key Movements in Liability Estimate

		Traffic Light	Notes	$ Mov't from Dec-16	
New Over Cap Properties	Numbers		The early numbers coming from the JART review suggest that both the number of properties yet to be settled and the proportion of these likely to come Over Cap is higher than we had allowed for in the December valuation.	$95M	
	Value		The profile of these properties (largely remedial repairs) means that the value of settling these properties is likely to be lower than the properties SRES has received to date. Early EQC and Arrow assessments support this conclusion.		
Closed & Completed Properties	Payments after Completion		[redacted].	$9M	9(2)(i)
	EQC contributions		The clean-up of EQC contribution data in EMS has revealed that our algorithm for estimating EQC recoveries on closed files has overstated past EQC contributions resulting in negative OSC values on a number of closed claims	$6M	
Open Properties	Rebuilds		Movement reflects small but favourable trend in projected ultimate cost of Rebuilds.	-$6M	
	Repairs		Increasing complexity is generating continued escalation during construction phase. Valuation allows for similar cost outcomes to filter through to cash settlements. Pre-RFP development lower than allowed for in December.	$5M	
	Payments after Completion		[redacted]	$8M	9(2)(i)
	EQC contributions		The profile of outstanding properties (higher proportion of multi-units and repairs) means that the average EQC contribution is expected to be lower for future settlements than allowed for at December	$3M	
Other Classes			SRES has done a clean up and closure of old claims in the system. This has reduced the number of open temporary accommodation and lost rent claims.	-$4M	
Total Inflated Ultimate Ex. CHE				**$116M**	

We comment on the key drivers of these movements in turn below.

9(2)(i) and 9(2)(b)(ii)

[redacted]

9(2)(i) and 9(2)(b)(ii)

[redacted]

Valuation of Existing Properties

Post completion payments

Our valuation basis allows for a small stream of payments continuing to be made against properties for some time beyond the completion of construction activity. Examples of post-completion payments include partial cash settlements, landscaping, amongst a number of other miscellaneous items. [redacted] 9(2)(i)

Open properties

As noted above, changes in how we have chosen our valuation assumptions means that it is not feasible to make direct comparisons to previous valuation bases. For this valuation, we have focused on how the movement in our estimated ultimate values compares to the movements in SRES recorded estimates.

The table below shows the projected ultimate Over Cap sizes at this valuation compared to December, broken down by phase, for the properties that are not yet completed.

9(2)(i) and 9(2)(j)

[redacted]

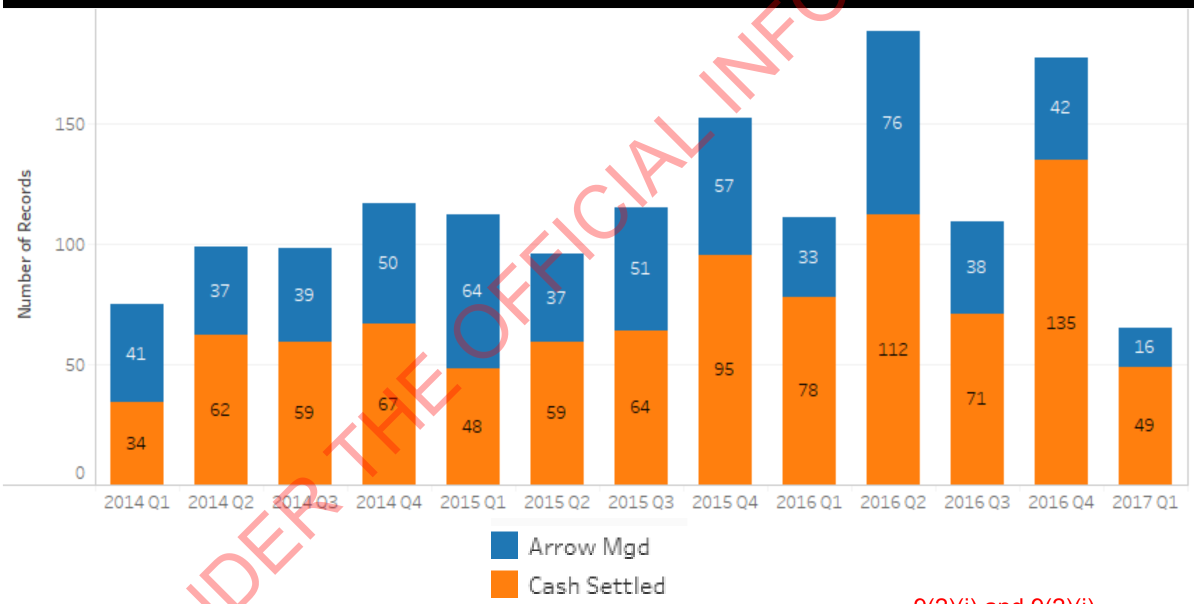
[redacted] 9(2)(i)

[redacted].

Figure 1 - Repair Cost Trends 9(2)(i) and 9(2)(j)

Quarter of Completed Phase Qtr

[redacted]



9(2)(i) and 9(2)(j)

[redacted]

EQC Contributions

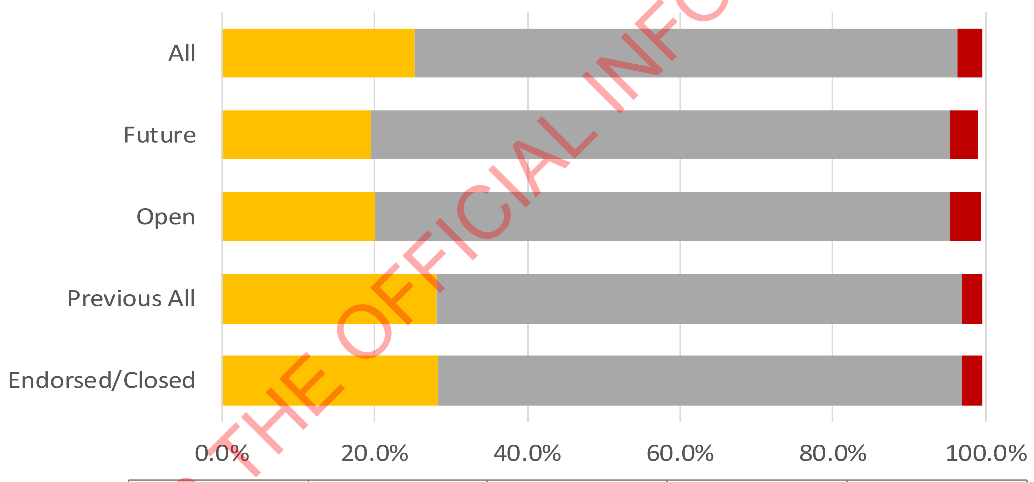
For this valuation we were able to use a new and more current source of data in respect of EQC contributions. This lead to a deeper analysis being undertaken, through which we identified that as a result of a lower level of Rebuilds being outstanding, the EQC contribution for outstanding properties should be lower than that received on completed properties. As such, we have reduced the projected EQC contribution.

Event allocation and reinsurance

We were also able to access more reliable data in respect of event apportionment for properties yet to be completed and/or endorsed. This data highlighted that open properties are expected to have a slightly higher allocation to the February and June events, and lower allocation to the September event.

While reallocation across February and September has no net impact on SRES' liability, the reallocation toward June does give rise to an increase in expected reinsurance recoveries by about $10 million. In addition, the additional new over cap claims result in about $3 million being allocated to the June event, all of which will be recoverable from reinsurers. The figure below shows the allocation based on the endorsed experience (used at previous valuations) compared to the allocations for Open properties.

Figure 2 – Allocation of cost across the events



	Endorsed/Closed	Previous All	Open	Future	All
Sep-10	28.3%	28.1%	20.2%	19.6%	25.3%
Feb-11	68.6%	68.8%	75.2%	75.7%	71.0%
Jun-11	2.8%	2.6%	4.0%	3.7%	3.2%

Uncertainty of our Estimates

It should be noted that considerable uncertainty still surrounds the projection and valuation of SRES' EQ liabilities. 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, an increasing proportion of SRES' outstanding claims 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 previous valuations, we have set our risk margin at 14% 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.

In our view, there remain two key areas of uncertainty which could result in material adjustments to the ultimate outcome for SRES' remaining claims:

- the volume of future new Over Cap claims which might emerge
- further escalation in the 'unforeseeable' cost components

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)

[redacted]

9(2)(a)

[redacted]

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