



18 August 2013

Mr I Simpson
Chief Executive Officer
Earthquake Commission
PO Box 790
WELLINGTON

Dear Ian

EQC – Scenario Testing: 30 June 2013

I refer to the Audit Risk Committee ('ARC') meeting held on Monday 12 August 2013 where we discussed the results of our valuation of the Earthquake Commission's ('EQC') liabilities. As part of that meeting, a request was made from the ARC for alternate sets of results under differing scenarios. The scenarios requested were:

- Diminution of Value ('DoV') applied, 75% PoA – current valuation results
- DoV applied, 85% PoA
- DoV not applied, 75% PoA
- DoV not applied, 85% PoA

Background

The valuation results, as detailed in our draft insurance liability valuation report ('ILVR'), dated 31 July 2013 are noted as:

- Gross ultimate incurred claims: \$11.62b
- Net outstanding claims (75% probability of adequacy) \$3.914b

The valuation methodology is detailed in the ILVR but of interest is that we have assumed that the principle of DoV is applied to land sub-claims for damage categories 8 and 9.

Also, the net outstanding claims liabilities have allowed for a risk margin calculated at the 75% probability of adequacy. The accounting standards require a risk margin for the OS claims liabilities although they leave the determination of the appropriate level to the relevant company.

Original report

This letter is an addendum to the Draft Insurance Liability Valuation Report as at 30 June 2013 dated 31 July 2013 and should be read in conjunction with that report.

Released under the Official Information Act 1982

Scenario analysis - result

The tables below summarise the gross ultimate incurred liabilities and the net outstanding claims liabilities for the four scenarios. Further detail is shown in the Appendices.

Ultimate incurred claims cost - central estimate

Scenario	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	BAU \$m	Total	Change
DoV Applied*								
Gross ultimate incurred claims inc C	3,258	6,370	1,131	478	382	n.a.	11,620	
Reinsurance recoveries	(1,739)	(2,478)	(133)	-	(0)	n.a.	(4,349)	
Net ultimate incurred claims including	1,519	3,893	998	478	382	n.a.	7,270	
DoV Not Applied*								
Gross ultimate incurred claims inc C	3,351	6,591	1,180	512	382	n.a.	12,016	396
Reinsurance recoveries	(1,831)	(2,477)	(179)	0	0	n.a.	(4,488)	(138)
Net ultimate incurred claims including	1,520	4,113	1,001	512	382	n.a.	7,528	258

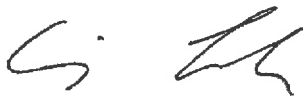
*Ultimate incurred claims costs are central estimates only. There is no PoA.

Net OSCL and risk margin 85% PoA, discounted

Scenario	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	BAU \$m	Total	Change
DoV Applied, 75% PoA								
Central estimate	19	2,344	669	386	231	29	3,679	
Risk margin	1	180	43	25	15	2	235	
Net provision	20	2,494	712	411	246	31	3,914	-
DoV Applied, 85% PoA								
Central estimate	19	2,344	669	386	231	29	3,679	
Risk margin	2	254	72	42	25	3	398	
Net provision	21	2,598	741	428	257	32	4,077	163
DoV Not Applied, 75% PoA								
Central estimate	20	2,605	672	419	231	29	3,976	
Risk margin	1	142	37	23	13	2	217	
Net provision	21	2,747	708	442	244	30	4,192	279
DoV Not Applied, 85% PoA								
Central estimate	20	2,605	672	419	231	29	3,976	
Risk margin	2	296	76	48	24	3	451	
Net provision	22	2,900	748	467	255	32	4,427	513

Please don't hesitate to contact me should you have any queries.

Yours sincerely



Craig Lough
Fellow of the NZ Society of Actuaries

Results - DoV Applied (75% PoA and 85% PoA)

Canterbury earthquakes only

Estimated ultimate claims costs (undiscounted, excluding CHE) - 30 June 2013 valuation

	EQ1	EQ2	EQ3	EQ4	AS	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Claims costs paid to date *						
Land	5	42	1	0	1	48
Building	1,547	2,594	214	35	84	4,474
Contents	116	243	22	9	7	396
Total	1,668	2,878	237	44	91	4,919
Case estimates						
Land	94	169	51	19	12	345
Building	442	1,072	595	144	226	2,479
Contents	6	18	5	5	2	36
Total	542	1,258	651	168	239	2,860
Actuarial determination - central estimate						
Land	204	717	254	78	(12)	1,242
Building	411	1,022	(156)	82	(37)	1,321
Contents	12	20	3	3	2	40
Total	627	1,758	102	163	(47)	2,603
Gross ultimate incurred claims cost - central estimate						
Land	302	927	307	97	1	1,635
Building	2,400	688	654	261	272	8,275
Contents	134	280	30	17	11	472
Total	2,837	5,895	990	375	284	10,381
31 December 2012 comparative						
Gross ult inc claims cost - cent est	2,780	5,964	981	408	269	10,399

*Includes Fletcher PMO direct costs of repair (excludes 3.5% margin and infrastructure costs)

Canterbury earthquakes only

Ultimate claims costs, central estimate, undiscounted, including CHE - 30 June 2013 valuation

	EQ1	EQ2	EQ3	EQ4	AS	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Claims paid to date*	1,668	2,878	237	44	91	4,919
Case estimates	542	1,258	651	168	239	2,860
Actuarial determination	627	1,758	102	163	(47)	2,603
Gross estimated ultimate incurred claims	2,837	5,895	990	375	284	10,381
Claims handling expenses (CHE)						
Paid to date	298	313	81	40	35	786
Estimated future	123	162	60	63	49	452
Total	421	475	141	103	98	1,238
Gross ultimate incurred claims including CHE	3,258	6,370	1,131	478	382	11,620
Reinsurance recoveries	(1,739)	(2,478)	(133)	-	(0)	(4,349)
Net ultimate incurred claims including CHE	1,519	3,893	998	478	382	7,270
31 December 2012 comparatives						
Gross ult incurred claims including CHE	3,157	6,398	1,118	517	367	11,556
Net ult incurred claims including CHE	1,517	3,921	996	517	367	7,318

*Includes Fletcher PMO direct costs of repair (excludes 3.5% margin and infrastructure costs - included in CHE)

All EQC claims

Estimated outstanding claims liabilities (OSCL) - 30 June 2013

	All EQC Claims						Total \$m
	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	BAU \$m	
Gross outstanding claims liabilities - central estimate							
Gross claims including CHE, undiscounted	1,292	3,179	813	394	236	29	5,944
Discounting	(25)	(81)	(17)	(8)	(4)	(0)	(116)
Gross claims including CHE, discounted	1,267	3,118	797	386	231	29	5,828
Reinsurance recoveries - central estimate							
Reinsurance recoveries, undiscounted	1,273	780	133	-	-	-	2,186
Discounting	(25)	(6)	(5)	-	-	-	(37)
Reinsurance recoveries, discounted	1,249	773	128	-	-	-	2,150
Net outstanding claims liabilities - central estimate							
Net claims excluding CHE, undiscounted	19	2,399	680	394	236	21	3,749
Non-reinsurable CHE, undiscounted	-	-	-	-	-	8	8
Net claims including CHE, undiscounted	19	2,399	680	394	236	29	3,758
Discounting	(0)	(55)	(11)	(8)	(4)	-	(79)
Net claims including CHE, discounted	19	2,344	669	386	231	29	3,679
Net outstanding claims liabilities - risk margin, 75% PoA							
Net risk margin, undiversified		199	2	30	18	2	235
Net risk margin, diversified		150	43	25	15	2	235
Net OSCL and risk margin 75% PoA, discounted	20	494	712	411	246	31	3,914
Net outstanding claims liabilities - risk margin, 85% PoA							
Net risk margin, undiversified	2	316	3	47	29	3	398
Net risk margin, diversified	2	251	72	42	25	3	398
Net OSCL and risk margin 85% PoA, discounted	21	2,595	741	428	257	32	4,077

B Results – No DoV Applied (75% PoA and 85% PoA)

Canterbury earthquakes only

Estimated ultimate claims costs (undiscounted, excluding CHE) - 30 June 2013 valuation

	EQ1	EQ2	EQ3	EQ4	AS	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Claims costs paid to date *						
Land	5	42	1	0	1	48
Building	1,547	2,594	214	35	84	4,474
Contents	116	243	22	9	7	396
Total	1,668	2,878	237	44	91	4,919
Case estimates						
Land	94	169	51	19	12	345
Building	442	1,072	595	144	226	2,479
Contents	6	18	5	5	2	36
Total	542	1,258	651	168	239	2,860
Actuarial determination - central estimate						
Land	297	938	303	112	(12)	1,638
Building	411	1,022	(156)	82	(37)	1,321
Contents	12	20	3	3	2	40
Total	720	1,979	150	196	(47)	2,999
Gross ultimate incurred claims cost - central estimate						
Land	305	1,148	355	131	1	2,031
Building	2,400	6,688	654	261	272	8,275
Contents	134	280	30	17	11	472
Total	2,930	6,116	1,039	409	284	10,778
31 December 2012 comparative						
Gross ult inc claims cost - cent est	2,780	5,901	981	408	269	10,399

*Includes Fletcher PMO direct costs of repair (excludes 3.5% margin and infrastructure costs)

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Ultimate claims costs, central estimate, undiscounted, including CHE - 30 June 2013 valuation

	EQ1	EQ2	EQ3	EQ4	AS	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Claims paid to date*	1,668	2,878	237	44	91	4,919
Case estimates	542	1,258	651	168	239	2,860
Actuarial determination	720	1,979	150	196	(47)	2,999
Gross estimated ultimate incurred claims	2,930	6,116	1,039	409	284	10,778
Claims handling expenses (CHE)						
Paid to date	298	313	81	40	65	786
Estimated future	123	162	60	63	45	452
Total	421	475	141	103	98	1,238
Gross ultimate incurred claims including CHE	3,351	6,591	1,180	512	382	12,016
Reinsurance recoveries	(1,831)	(2,477)	(179)	0	0	(4,488)
Net ultimate incurred claims including CHE	1,520	4,113	1,001	512	382	7,528
31 December 2012 comparatives						
Gross ult incurred claims including CHE	3,157	6,398	1,118	517	367	11,556
Net ult incurred claims including CHE	1,517	3,921	996	517	367	7,318

*Includes Fletcher PMO direct costs of repair (excludes 3.5% margin and infrastructure costs - included in CHE)

All EQC claims

Estimated outstanding claims liabilities (OSCL) - 30 June 2013

	All EQC Claims						Total \$m
	EQ1 \$m	EQ2 \$m	EQ3 \$m	EQ4 \$m	AS \$m	BAU \$m	
Gross outstanding claims liabilities - central estimate							
Gross claims including CHE, undiscounted	1,386	3,400	862	428	236	29	6,340
Discounting	(27)	(67)	(18)	(9)	(4)	(0)	(125)
Gross claims including CHE, discounted	1,358	3,333	844	419	231	29	6,215
Reinsurance recoveries - central estimate							
Reinsurance recoveries, undiscounted	1,365	733	179	-	-	-	2,278
Discounting	(27)	(5)	(7)	-	-	-	(39)
Reinsurance recoveries, discounted	1,338	729	172	-	-	-	2,239
Net outstanding claims liabilities - central estimate							
Net claims excluding CHE, undiscounted	20	2,666	683	428	236	21	4,054
Non-reinsurable CHE, undiscounted	-	-	-	-	-	8	8
Net claims including CHE, undiscounted	20	2,666	683	428	236	29	4,062
Discounting	(0)	(62)	(11)	(9)	(4)	-	(86)
Net claims including CHE, discounted	20	2,605	672	419	231	29	3,976
Net outstanding claims liabilities - risk margin, 75% PoA							
Net risk margin, undiversified	2	167	0	29	19	2	217
Net risk margin, diversified	1	142	37	23	13	2	217
Net OSCL and risk margin 75% PoA, discounted	21	2,747	708	442	244	30	4,192
Net outstanding claims liabilities - risk margin, 85% PoA							
Net risk margin, undiversified	2	206	1	45	29	3	451
Net risk margin, diversified	2	296	76	48	26	3	451
Net OSCL and risk margin 85% PoA, discounted	22	2,900	748	467	258	32	4,427