

**Eastland Network**

**Responses to:**

**Notice to Supply Information to the Commerce Commission – 16 March 2011**

**Notice to Supply Information to the Commerce Commission – 15 June 2011**

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**Directors Certificate**

**Independent Assurance Report**

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**Eastland Network**

**Schedules A-A6 and B – Financial Information**

	A	B	C	D				
1	 <b>COMMERCE COMMISSION</b>  <b>Non-Exempt EDB Starting Price Adjustment Information Request            Information Request Schedules</b>							
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7								
8					<b>Company Name</b>	<input type="text" value="Eastland Network Limited"/>		
9					<b>Reporting Date</b>	<input type="text" value="29 June 2011"/>		
10								
11					<b>Disclosure Year Ended</b>	<input type="text" value="31 March 2010"/>		
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13								
14						Template updated 29 April 2011		
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A	<a href="#">REQUIRED INFORMATION</a>
A1	<a href="#">REGULATORY INCOME AND EXPENSES</a>
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A2	<a href="#">ALLOCATION OF OPERATING COSTS 2010 (PUBLIC)</a>
A3	<a href="#">REGULATORY ASSET BASE VALUES 2010</a>
A4	<a href="#">ASSET ADJUSTMENT PROCESS</a>
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A5	<a href="#">ALLOCATION OF UNALLOCATED RAB VALUES 2010 (PUBLIC)</a>
A6	<a href="#">REGULATORY TAX INFORMATION</a>
B	<a href="#">REQUIRED INFORMATION</a>

Instructions for completing this workbook

- EDBs must complete Schedules A1 to A6. The information entered in those schedules will automatically flow to 'Schedule A - Required Information'.
- EDBs must also complete Schedule B (Term Credit Spread Differential Information) if applicable to them.
- Bolded terms in this workbook have the meanings specified in the *Commerce Act (Electricity Distribution Services Input Methodologies) Determination 2010*.
- For further assistance in interpretation, clause references to the *Determination* are supplied under the column 'Ref' in each schedule where applicable.
- In addition, the following specific definition applies in respect of Schedule A6:

Weighted average remaining useful life of relevant assets means the weighted average **remaining asset life** of all assets with an **initial RAB value** calculated by using the **initial RAB values** as weights.

	A	B	C	D	E	F
1						
2			EDB Name	Eastland Network Limited		
3			Disclosure Year Ended	31 March 2010		
4	<b>SCHEDULE A: REQUIRED INFORMATION</b>					
5	row					
6	6			<b>(\$000)</b>	<i>Ref</i>	
7	7	Line revenue through prices		27,635	from A1	
8	8					
9	9	Other regulated income		770	from A1	
10	10					
11	11	Pass-through costs		112	from A1	
12	12					
13	13	Recoverable costs		8,729	from A1	
14	14					
15	15	Operating expenditure		5,727	from A1	
16	16					
17	17	Sum of opening RAB values—disclosure year 2010		113,965	from A3	
18	18					
19	19	Sum of depreciation		4,225	from A3	
20	20					
21	21	Sum of opening RAB values of assets with nil physical asset life at end of the disclosure year 2010		3,065	from A3	
22	22					
23	23	Sum of opening RAB values of disposed assets for the disclosure year 2010		259	from A3	
24	24					
25	25	Sum of opening RAB values of lost assets for the disclosure year 2010		—	from A3	
26	26					
27	27	Sum of closing RAB values of commissioned assets for the disclosure year 2010		5,076	from A3	
28	28					
29	29	Sum of closing RAB values of found assets for the disclosure year 2010		—	from A3	
30	30					
31	31	Positive permanent differences		9	from A6	
32	32					
33	33	Negative permanent differences		196	from A6	
34	34					
35	35	Discretionary discounts and customer rebates		—	from A6	
36	36					
37	37	Positive temporary differences		296	from A6	
38	38					
39	39	Negative temporary differences		154	from A6	
40	40					
41	41	Deferred tax balance relating to assets acquired in the disclosure year 2010		—	from A6	
42	42					
43	43	Tax depreciation for disclosure year 2010		5,625	from A6	
44	44					
45	45	Sum of regulatory tax asset values - first day of disclosure year 2010		58,604	from A6	
46	46					
47	47	Weighted average remaining useful life of relevant assets (years)		34	from A6	
48	48					

	A	B	C	D	F	G	H
1							
2				EDB Name	Eastland Network Limited		
3				Disclosure Year Ended	31 March 2010		
4			<b>SCHEDULE A1: REGULATORY INCOME AND EXPENSES</b>				
5		row					
6	6	<b>Income</b>		<b>(\$000)</b>	<b>(\$000)</b>		<i>Ref</i>
7	7	Line revenue through prices			27,635		1.1.4
8	8						
9	9	<b>Other regulated income</b>			770		5.3.2(7)
10	10						
11	11	<b>Costs and expenditure</b>					
12	12	<b>Pass-through costs</b>			112		3.1.2(1)
13	13						
14	14	<b>Recoverable costs</b>			8,729		3.1.3
15	15						
16	16	General management, administration and overheads		2,122			from A2
17	17	plus System management and operations		1,385			from A2
18	18	plus Routine and preventative maintenance		958			from A2
19	19	plus Refurbishment and renewal maintenance		144			from A2
20	20	plus Fault and emergency maintenance		1,029			from A2
21	21	plus Other		89			from A2
22	22	<b>Operating expenditure</b>			5,727		1.1.4
23	23						

**SCHEDULE A2: ALLOCATION OF OPERATING COSTS 2010 (PUBLIC)**

Opex category	Cost allocators	Percentage of value allocated to electricity distribution services using proxy allocator type	Percentage of value allocated to electricity distribution services using ACAM	Percentage of value allocated to electricity distribution services using ABAA	Percentage of value allocated to electricity distribution services using OVABAA	Value allocated			OVABAA allocation increase	Line items
						Arm's length deduction	Electricity distribution services	Non-electricity distribution services		
<b>General management, administration and overheads</b>										
Directly attributable operating costs							390,459			
Operating costs not directly attributable	Shared Services labour and other employee costs; Shared Services directors fees & expenses; Shared Services general administrative expenses;		32 - 100%				1,732,048	1,911,552		3,643,600
<b>Total operating costs</b>							<b>2,122,507</b>			
<i>to A1</i>										
<b>System management and operations</b>										
Directly attributable operating costs							1,384,810			
Operating costs not directly attributable	Nil									-
<b>Total operating costs</b>							<b>1,384,810</b>			
<i>to A1</i>										
<b>Routine and preventive maintenance</b>										
Directly attributable operating costs							958,234			
Operating costs not directly attributable	Nil									-
<b>Total operating costs</b>							<b>958,234</b>			
<i>to A1</i>										
<b>Refurbishment and renewal maintenance</b>										
Directly attributable operating costs							143,885			
Operating costs not directly attributable	Nil									-
<b>Total operating costs not directly attributable</b>							<b>143,885</b>			
<i>to A1</i>										
<b>Fault and emergency maintenance</b>										
Directly attributable operating costs							1,029,309			
Operating costs not directly attributable	Nil									-
<b>Total operating costs</b>							<b>1,029,309</b>			
<i>to A1</i>										
<b>Other</b>										
Directly attributable operating costs							88,570			
Operating costs not directly attributable	Nil									-
<b>Total operating costs</b>							<b>88,570</b>			
<i>to A1</i>										

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EDB Name **Eastland Network Limited**  
Disclosure Year Ended **31 March 2010**

**SCHEDULE A3: REGULATORY ASSET BASE VALUES 2010**

	Unallocated RAB *	RAB	Ref
	(\$000)	(\$000)	
<b>Calculation of Initial RAB Values</b>			
2009 disclosed assets - 'Total Regulatory Asset Base Value (Excluding FDC)' as of 31 March 2009		111,840	2009 disclosure reports
2009 modified asset values (adjusted for results of asset adjustment process)		113,965	Note 1
Adjustment to reinstate 2009 modified asset values to unallocated amounts	(96)		2.2.3(3)
Unallocated 2009 modified asset values		113,869	
less (to the extent included in row 13)			
Assets not used to supply electricity distribution services	-		1.1.4
Easement land			1.1.4
Non-qualifying intangible assets	-		2.2.2
Works under construction	-		2.2.2
Unallocated asset values excluded from unallocated 2009 modified asset values		-	1.1.4
plus FDC allowance of 2.45% (system fixed assets only)		2,777	2.2.3(1)(b)
Sum of opening RAB values—disclosure year 2010		116,646	113,965 from A5
<b>RAB-related Information - Disclosure Year 2010</b>			
Sum of depreciation		4,225	2.2.5(2)
Sum of opening RAB values of assets with nil physical asset life at end of the disclosure year 2010		3,065	2.2.9(3)
Sum of opening RAB values of disposed assets for the disclosure year 2010		259	1.1.4
Sum of opening RAB values of lost assets for the disclosure year 2010		-	1.1.4
Sum of closing RAB values of commissioned assets for the disclosure year 2010		5,076	from A5
Sum of closing RAB values of found assets for the disclosure year 2010		-	from A5

Note 1: '2009 modified asset values' are the values of 2009 disclosed assets - 'Total Regulatory Asset Base Value (Excluding FDC)' contained in the 2009 disclosure reports adjusted for the results of the asset adjustment process, being the asset register adjustments summarised in Schedule A4 with the resultant value adjustments then updated to 31 March 2009 by taking account of unallocated depreciation and revaluation in accordance with cl. 2.2.1(4) and (5) (and disposals if applicable) and excluding any finance during construction allowance of 2.45%.

\* The 'unallocated RAB' is the total value of assets used wholly or partially to provide electricity distribution services as if no allowance were made for the allocation of costs to non-electricity distribution services.

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EDB Name **Eastland Network Limited**  
Disclosure Year Ended **31 March 2010**

**SCHEDULE A4: ASSET ADJUSTMENT PROCESS**

**Summary of Engineer's Valuation Adjustments (at time asset enters regulatory asset register)**

Asset adjustment process - adjustments	2004 * (\$000)	2005 (\$000)	2006 (\$000)	2007 (\$000)	2008 (\$000)	2009 (\$000)	Ref
Include load control relays						1,950	2.2.1(2)(a)
Correct asset register errors for 2004 ODV assets							
400V Poles	(488)						
50-33kV Poles	-						
11kV Poles	(828)						
400V Lines	(81)						
50-33kV Lines	-						
11kV Lines	(21)						
400V Cables	(52)						
50-33kV Cables	-						
11kV Cables	(200)						
Switches	204						
Services	-						
SCADA	-						
Zone Sub Equipment	-						
Comms	-						
Sites	-						
Transformers	(31)						
Transformer Fuses	(2)						
	(1,499)						2.2.1(2)(b)
Correct asset register errors for 2005 – 2009 assets							
Load control Relays						(1,950)	
						(1,950)	2.2.1(2)(b)
Re-apply an existing multiplier to 2004 ODV assets							
400V Poles	186						
50-33kV Poles	168						
11kV Poles	556						
400V Lines	235						
50-33kV Lines	101						
11kV Lines	335						
400V Cables	-						
50-33kV Cables	-						
11kV Cables	-						
Switches	-						
Services	-						
SCADA	-						
Zone Sub Equipment	-						
Comms	-						
Sites	-						
Transformers	-						
Transformer Fuses	-						
	1,581						2.2.1(2)(c)
Re-apply a modified multiplier to 2004 ODV assets							
400V Poles	30						
50-33kV Poles	438						
11kV Poles	819						
400V Lines	44						
50-33kV Lines	282						
11kV Lines	562						
400V Cables	-						
50-33kV Cables	-						
11kV Cables	-						
Switches	-						
Services	-						
SCADA	-						
Zone Sub Equipment	-						
Comms	-						
Sites	-						
Transformers	-						
Transformer Fuses	-						
	2,175						2.2.1(2)(d)
Re-apply optimisation or EV tests to 2004 ODV assets							
Nil							
							2.2.1(2)(e)
Total value of adjustments by disclosure year	2,257	-	-	-	-	-	

\* Includes assets which first entered the regulatory asset register in a disclosure year prior to 2004.

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112															
113	SCHEDULE A5: ALLOCATION OF UNALLOCATED RAB VALUES 2010 (PUBLIC)											EDB Name For Year Ended		Eastland Network Limited 31 March 2010	
114	row														
115	Allocation of Opening RAB Values														
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2			EDB Name	Eastland Network Limited			
3			Disclosure Year Ended	31 March 2010			
4			<b>SCHEDULE A6: REGULATORY TAX INFORMATION</b>				
5		row					
6	6		<b>Tax Permanent Differences</b>		<b>(\$000)</b>		<i>Ref</i>
7	7						
8	8		Income not included in regulatory profit / (loss) before tax but taxable	-	*		2.3.3(2)
9	9		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	9	*		2.3.3(2)
10	10		<b>Positive permanent differences</b>			9	
11	11						
12	12		<i>* Provide descriptions and values for each category of item (further explanation can be provided in a separate note if necessary).</i>				
13	13		1). The \$9k non-deductible expenditure is made up of the following:				
14	14		- Legal fees of \$9k which are non-deductible for income tax purposes;				
15	15						
16	16						
17	17						
18	18		Income included in regulatory profit / (loss) before tax but not taxable	196	*		2.3.3(4)
19	19		Expenditure or loss deductible but not in regulatory profit / (loss) before tax		*		2.3.3(4)
20	20		<b>Negative permanent differences</b>			196	
21	21						
22	22		<i>* Provide descriptions and values for each category of item (further explanation can be provided in a separate note if necessary).</i>				
23	23		1). The \$196k non-taxable income is made up of non-assessable capital Contributions/Vested Assets for the 2010 disclosure year.				
24	24						
25	25						
26	26						
27	27						
28	28		<b>Discretionary discounts and customer rebates</b>			-	2.3.3(6)
29	29						
30	30		<b>Tax Temporary Differences</b>		<b>(\$000)</b>		<i>Ref</i>
31	31						
32	32		Income not included in regulatory profit / (loss) before tax but taxable		*		2.3.8(4)
33	33		Expenditure or loss in regulatory profit / (loss) before tax but not deductible	296	*		2.3.8(4)
34	34		<b>Positive temporary differences</b>			296	
35	35						
36	36		<i>* Provide descriptions and values for each category of item (further explanation can be provided in a separate note if necessary).</i>				
37	37		1). The \$296k non-deductible temporary differences in profit/(loss) is made up of the following:				
38	38		- \$150k provision for annual leave as at 31.03.10				
39	39		- \$76k provision for termination gratuities as at 31.03.10				
40	40		- \$70k provision for staff bonuses as at 31.03.10				
41	41						
42	42		Income included in regulatory profit / (loss) before tax but not taxable		*		2.3.8(5)
43	43		Expenditure or loss deductible but not in regulatory profit / (loss) before tax	154	*		2.3.8(5)
44	44		<b>Negative temporary differences</b>			154	
45	45						
46	46		<i>* Provide descriptions and values for each category of item (further explanation can be provided in a separate note if necessary).</i>				
47	47		1). The \$154k temporary differences which are deductible but not included in regulatory profit/(loss) is made up of the following:				
48	48		- Provision for termination gratuities at 31.03.09 of \$29k				
49	49		- Provision for annual leave at 31.03.09 of \$107k				
50	50		- Provision for doubtful debts at 31.03.09 of \$18k				
51	51						
52	52		<b>Deferred tax balance relating to assets acquired in the disclosure year 2010</b>				2.3.7(3)
53	53						
54	54		<b>Tax depreciation for disclosure year 2010</b>			5,625	2.3.8(3)
55	55						
56	56		<b>Tax Asset Value Information</b>		<b>(\$000)</b>		
57	57						
58	58		Sum of <b>regulatory tax asset values</b> - first day of <b>disclosure year 2010</b>			58,604	2.3.9
59	59						
60	60		Weighted average remaining useful life of relevant assets (years)			34	defined
61	61						

	A	B	C	D	E	F	G	H	I	J	K														
1	EDB Name <b>Eastland Network Limited</b> Disclosure Year Ended <b>31 March 2010</b>																								
2																									
3																									
4	<b>SCHEDULE B: REQUIRED INFORMATION</b>																								
5	row																								
6	6	<b>Term Credit Spread Differential Information</b> <span style="float: right;">(\$000 unless otherwise specified)</span>																							
7	7	This schedule is only to be completed if at the date of the most recently published financial statements, the weighted average original tenor of the EDB's debt portfolio (both <b>qualifying debt</b> and non-qualifying debt) is greater than five years - refer cl. 2.4.9(2) of the EDB IMs.																							
8	8	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Issuing party (or other identifying information)</th> <th style="width: 15%;">Issue date</th> <th style="width: 15%;">Pricing date</th> <th style="width: 15%;">Original tenor (in years) *</th> <th style="width: 10%;">Coupon rate (%)</th> <th style="width: 10%;">Book value at issue date (NZD)</th> <th style="width: 10%;">Book value at date of financial statements (NZD)</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: center; height: 100px;">Not Applicable</td> </tr> </tbody> </table>										Issuing party (or other identifying information)	Issue date	Pricing date	Original tenor (in years) *	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Not Applicable						
Issuing party (or other identifying information)	Issue date	Pricing date	Original tenor (in years) *	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)																			
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10	10																								
11	11																								
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16	16																								
17	17	* Where <b>qualifying debt</b> is issued to a related party, the meaning of 'original tenor' of the qualifying debt has the meaning given in cl. 2.4.10(3) of the EDB IMs.																							
18	18	Page 11																							

**Eastland Network**

**Directors Certificate**

## DIRECTORS' CERTIFICATE

We, Roger Neil Taylor and John McFadyen Rae, being directors of Eastland Network Limited (Eastland Network) certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Schedule A complies with the Commission's requirements in respect of the request for information, which was issued by notice in writing to Eastland Network under section 53ZD of the Commerce Act 1986 on 16 March 2011.



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**Roger Neil Taylor**  
29 June 2011



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**John McFayden Rae**  
29 June 2011

**Eastland Network**  
**Independent Assurance Report**

## INDEPENDENT AUDIT REPORT OF THE AUDITOR-GENERAL

### To the Commissioners of the New Zealand Commerce Commission and the Directors of Eastland Network Limited

The Auditor-General is the auditor of Eastland Network Limited (the company). The Auditor-General has appointed me, Graham Naylor, using the staff and resources of Deloitte, to carry out the audit of the financial statements and statement of service performance of the company on her behalf.

Deloitte has been engaged to provide an independent assurance report on behalf of the Auditor-General on the Schedule of Required Information (Schedules A to A6) and Schedule of Required Information (Schedule B) on pages 1 to 11 for the regulatory period ended 31 March 2010 prepared by the company in accordance with the Commerce Commission's requirements issued by notice in writing to the company under section 53ZD of the Commerce Act 1986 on 16 March 2011 (the Notice).

#### Directors' and Auditors' Responsibilities

The company's Directors are responsible for ensuring that the information provided is prepared in accordance with the Notice and for such internal controls as the Directors determine are necessary to ensure the information provided is free from material misstatement, whether due to fraud or error.

We are qualified as an auditor, on behalf of the Auditor-General, as defined in the Notice. Our responsibility is to express an independent opinion on whether the information prepared by the company has been calculated, in all material respects, in accordance with the Notice for the regulatory period ended 31 March 2010.

#### Use of this Independent Assurance Report

This independent assurance report has been prepared solely for the Directors of the company and the Commissioners of the New Zealand Commerce Commission in accordance with the Notice. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Directors of the company and the Commissioners, or for any purpose other than that for which it was prepared.

#### Independence

We have no relationship with, or interests in the company.

#### Basis of Opinion

We conducted this assurance engagement in accordance with International Standards on Auditing, International Standards on Auditing (New Zealand) and the Statement on Assurance Engagements 3100: Compliance Engagements (SAE 3100) with the objective of providing reasonable assurance on the company's compliance with the requirements of the Notice, in all material respects.

The professional standards require that we comply with ethical requirements and plan and perform the assurance engagement to obtain reasonable assurance about whether the information as provided is free from material misstatement.

Considering materiality requires that we understand the factors that might influence the decisions of the intended users of the information in Schedules A to A6 and B when determining the nature and extent of our evidence-gathering procedures.

Our assurance engagement involves performing procedures to obtain sufficient and appropriate evidence in respect of the information in Schedules A to A6 and B and the overall compliance with the Notice. The procedures selected depend on judgement, including the assessment of the risks of material misstatement, whether due to fraud, error or other reasons. In evaluating those risks we consider the internal controls that are relevant to the company's provision of the information in Schedules A to A6 and B in order to design assurance procedures that are appropriate in the circumstances. We do not express an opinion on the effectiveness of the company's internal controls.

In relation to the Notice, our assurance procedures included examination, on a test basis, of evidence relevant to each item of information in Schedules A to A6 and B. Specifically, our assurance procedures included examining, on a test basis, evidence to support the information in Schedules A to A6 and B, examination of internally and externally generated documents and records relevant to the information, interviewing selected personnel, and such other procedures as we considered necessary.

These procedures included:

- reviewing the methodologies used in preparing the information in Schedules A to A6 and B and confirming that they are in accordance with the methodologies set out in the Commerce Act (Electricity Distribution Services Input Methodologies) Determination 2010 (IM determination) and the requirements set out in the Notice, and providing assurance that the underlying assumptions used are reasonable;
- testing whether the calculations are mathematically correct; and
- identifying key inputs to the information in Schedules A to A6 and B and reconciling or agreeing them to source documents and systems.

In performing the procedures noted above, we have placed reliance, when appropriate on the company's underlying systems and business records from which inputs were sourced for the preparation of the information in Schedules A to A6 and B.

## Opinion

In our opinion:

- the recorded evidence and explanations we have obtained is sufficient and appropriate to provide a basis for our independent opinion on the company's compliance with the Notice;
- where relevant, the information used in the preparation of the information in Schedules A to A6 and B has been properly extracted from the company's accounting records, sourced from its financial systems; and
- the information in Schedule A to A6 and B has been calculated by the company, in all material respects, in accordance with the Notice.

Our assurance engagement was completed on 29<sup>th</sup> June 2011 and our opinion is expressed as at that date.



Graham Naylor  
Deloitte  
On behalf of the Auditor-General  
Hamilton, New Zealand

**Eastland Network**  
**Revenue Weights Information**

<b>EDB Name</b>	Electricity Distribution Business
-----------------	-----------------------------------

<b>Distribution Revenue Weights (excluding transmission charges)</b>		2010	2011
<b>Estimated Proportion of Distribution Revenue Recovered via:</b>			
Variable (throughput) unit charges (e.g. c/kwh)	%	83.75%	84.07%
Capacity or demand charges (e.g. \$/kva/day or \$/MW)	%	12.25%	12.15%
Fixed or other charges (e.g. \$/ICP, daily monthly or annual charges)	%	4.00%	3.78%
<b>(to add to 100%)</b>		100.0%	100.0%

Note: The quantities relating to each pricing year should relate to the quantities from the pricing year two years earlier. This means that for 2010 the quantities should cover the period 1 April 2008 to 31 March 2009. For 2011 the quantities should cover the period 1 April 2009 to 31 March 2010.

**Eastland Network**  
**Independent Engineer's Report**

# Independent Engineer's Report on the Asset Adjustment Process of: **Eastland Network**

- 27 June 2011



# Independent Engineer's Report on the Asset Adjustment Process of: **Eastland Network**

■ 27 June 2011

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## Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
V1	5 May 2011	R Fairbairn	S Wightman	5 May 2011	Draft
V2	10 May 2011	R Fairbairn	S Wightman	10 May 2011	Final
V3	27 June 2011	R Fairbairn	S Wightman	27 June 2011	Final subsequent to Commerce Commission comment

## Distribution of copies

Revision	Copy no	Quantity	Issued to
V1	Electronic	1	Ben Gibson
V2	Electronic	1	Ben Gibson
V3	Electronic	1	Ben Gibson

<b>Printed:</b>	27 June 2011
<b>Last saved:</b>	27 June 2011 01:12 PM
<b>File name:</b>	I:\ZPINA\Projects\ZP01032\DELIVERABLES\ZP01032 - Eastland Networks Engineering Report 100511 - Final - Revision for ComCom.docx
<b>Author:</b>	James Forsberg
<b>Project manager:</b>	Richard Fairbairn
<b>Name of organisation:</b>	Eastland Networks
<b>Name of project:</b>	Adjusted 2004 RAB
<b>Name of document:</b>	Independent Engineer's Report on the Asset Adjustment Process of Eastland Networks
<b>Document version:</b>	Version 3
<b>Project number:</b>	ZP01032



## GLOSSARY

EDB	Electricity Distribution Business
DRC	Depreciated Replacement Cost
EDB IM	Electricity Distribution Input Methodologies
GIS	Geographic Information System
ODRC	Optimised Depreciated Replacement Cost
ODV	Optimised Deprival Valuation
ORC	Optimised Replacement Cost
RAB	Regulatory Asset Base
RC	Replacement Cost
SKM	Sinclair Knight Merz



## Executive Summary

On 22 December 2010 the Commerce Commission (Commission) released a document entitled “*Commerce Act (Electricity Distribution Input Methodologies) Determination 2010*” (EDB IM). The EDB IM outlines a set of modifications (referred to as the “asset adjustment process”) that Electricity Distribution Businesses (EDBs) may choose to undertake to their disclosed 2004 ODVs as part of the process to establish an Initial Regulatory Asset Base (Initial RAB) as defined in clause 2.2.2 of the EDB IM.

On 16 March 2011 Eastland Network Ltd (Eastland) received, from the Commission, a “*Notice to supply information to the Commerce Commission Section - 53ZD of the Commerce Act 1986*” (Section 53ZD Notice). Associated with this Section 53ZD Notice was the requirement that Eastland supply an Independent Engineer’s Report in respect of the asset adjustment process used for setting its Initial RAB. The exact requirements of this report are contained in “Schedule C: Information Requirements for Engineer’s Report” of the Section 53ZD Notice.

Sinclair Knight Merz (SKM) was retained by Eastland to review the changes to its 2004 ODV and to prepare an Independent Engineer’s Report in accordance with Schedule C of the Section 53ZD Notice.

The following table compares Eastland’s original 2004 ODV with its adjusted 2004 RAB (the original 2004 ODV after the asset adjustment process).

	2004 ODV 31-Mar-04	Adjusted 2004 RAB 31-Mar-04	Movement
Replacement Cost (RC)	\$ 187,619,091	\$ 192,194,629	\$ 4,575,538
Depreciated Replacement Cost (DRC)	\$ 87,598,915	\$ 89,933,879	\$ 2,334,964
Optimised Replacement Costs (ORC)	\$ 184,685,056	\$ 189,065,225	\$ 4,380,169
Optimised Depreciation Replacement Cost (ODRC)	\$ 86,184,325	\$ 88,441,332	\$ 2,257,007
Optimised Deprival Value (ODV)	\$ 86,184,325	\$ 88,441,332	\$ 2,257,007

The following table outlines the adjustments to Eastland’s disclosed valuation over the period 2004 through 2009 (year ending 31 March).

Year	2004	2005	2006	2007	2008	2009
Value of Adjustments (ODV)	\$2.257m	\$0	\$0	\$0	\$0	\$0



# 1. Introduction

## 1.1. Background

Sinclair Knight Merz (SKM) was retained by Eastland Network Ltd (Eastland) to undertake an independent review of the Eastland asset adjustment process. SKM's review was undertaken to determine the appropriateness of the proposed adjustments in respect of the asset adjustment process as set out in clause 2.2.1 of the "Commerce Act (Electricity Distribution Input Methodologies) Determination 2010", 22 December 2010 (EDB IM).

This report details the findings of the independent review and has been prepared to comply with the requirements for the Independent Engineer's Report in Schedule C of the Commerce Commission's "Notice to supply information to the Commerce Commission Section 53ZD of the Commerce Act 1986 (Section 53ZD Notice), dated 16 March 2011. A copy of the signed statement required by the Section 53 ZD Notice is provided in Appendix C.

SKM's review principally considered the following elements of the asset adjustment process:

- the inclusion of load control relays;
- corrections for asset errors;
- the reapplication of asset multipliers; and
- the reapplication of optimisation or economic value.

## 1.2. Processes

The preparation of this report has been the responsibility of SKM. We have relied upon information and data prepared by Eastland. Wherever possible we have sought to verify this data to check its validity, and conducted site visits to relevant assets in both remote and rugged terrain in Eastland's network.

In the interests of accuracy and completeness, there has been significant interaction between SKM and Eastland during the review. This has been undertaken via telephone discussions, email correspondence and direct meetings.



## 2. Information Provided by Eastland

Eastland's asset register is contained in a suite of Microsoft Excel spreadsheets that was provided to SKM on 2 May 2011. The asset register had been developed specifically for the 2004 ODV valuation. Separate workbooks are kept for each asset class, with separate files showing the incremental breakdown of the movements due to each adjustment, where there is more than one adjustment to the same asset category. Table 1 is a summary of the file names of information provided by Eastland in electronic format used during the asset adjustment process.

### ■ Table 1: Asset information files

File Name	Size
11kV Cables.xlsx	345 KB
11kV Lines - multipliers adj broken down.xlsx	46,434 KB
11kV Lines.xlsx	13,249 KB
11kV Poles - multipliers adj broken down.xlsx	23,505 KB
11kV Poles.xlsx	18,956 KB
50-33kV Cables.xlsx	12 KB
50-33kV Lines - multipliers adj broken down.xlsx	1,670 KB
50-33kV Lines.xlsx	1,059 KB
50-33kV Poles - multipliers broken down.xlsx	10,038 KB
50-33kV Poles.xlsx	6,203 KB
400V Cables.xlsx	4,437 KB
400V Lines - multipliers adj broken down.xlsx	16,117 KB
400V Lines.xlsx	14,134 KB
400V Poles - multipliers broken down.xlsx	13,098 KB
400V Poles.xlsx	11,813 KB
2004 ODV Revaluation Adjustment Summary - Includes Breakdown.xlsx	38 KB
2004 ODV Revaluation Adjustment Summary.xlsx	34 KB
Comms.xlsx	50 KB
ENLPoles2004 Location.xlsx	2,705 KB
ODV2004_make_Spans.xlsx	3,748 KB
SCADA.xlsx	30 KB
Services.xlsx	2,392 KB
Sites.xlsx	436 KB
Switch Assets ODV - OSRC adj.xlsx	446 KB
Switchgear.xlsx	326 KB
Transformer Fuses.xlsx	1,487 KB
Transformers.xlsx	1,819 KB
Zone Sub Equipment.xlsx	88 KB
Load Control Relays	24KB

In addition, Eastland provided the following documents.

- Asset Management Plan; and
- 2004 ODV Report.



### 3. Consideration of RAB Adjustments

This section sets out the adjustments to the Eastland 2004 RAB made under the asset adjustment process.

Note that for the 2004 ODV Eastland's overhead lines were decoupled into poles and conductor, and cross-checks were undertaken to ensure that the addition of poles and conductor resulted in the standard ODV Handbook replacement costs. This approach has been taken to establish the 2004 adjusted RAB.

#### 3.1. Load Control Relays

Reference EDB IM cl 2.2.1(2)(a). An EDB may designate a load control relay asset owned by an EDB, except a 2009 disclosed asset, as of 'included' type. Clause 2.2.1(3) goes on to say that assets to which sub-clause (2)(a) applies may be valued as:

- its depreciated historic cost as at 31 March 2009; or
- if there are insufficient records, then its depreciated carrying value from the general purpose financial statements.

Eastland has identified various load control relays that were historically classified as both 'system' and 'non-system' fixed assets in its initial RAB. All of these assets have been valued at depreciated historic cost values.

The value that was disclosed as system fixed assets at 31 March 2009 was \$627,000. This comprised relays purchased between 2005 and 2009 (at depreciated historic cost values) and also equipment included in Comms and Zone Sub (at ODRC values).

The value that was disclosed as non-system fixed assets at 31 March 2009 was \$1.950m. Eastland's auditors, Deloitte has confirmed that these assets should now be classified as system fixed assets, and not non-system fixed assets.

As such no overall change has taken place to Eastland's 2004 RAB as a result of this adjustment, merely a reclassification. This is reflected in Appendix A Schedule A4, which shows the inclusion of load control relays in 2009 for \$1.950m, and then the reversal of this through the correction to asset register errors for 2005 – 2009 assets of -\$1.950m.



## 3.2. Correct Asset Register Errors

### 3.2.1. Assets included in error

Reference EDB IM cl 2.2.1(2)(b). EDBs may correct asset related errors in the light of new information. The allowable corrections being due to:

- assets being omitted in error;
- assets being included in error;
- assets being incorrectly categorised; and
- asset ages, quantity, category or locations being incorrectly recorded.

Eastland identified a number of cables, poles and associated equipment that are not owned by Eastland, but had been included in error in its 2004 ODV.

This change resulted in a reduction in Eastland's adjusted 2004 RAB in terms of RC of \$6,250,819 and in terms of ODRC of \$1,787,880. The resultant modified value for these assets in the 2004 RAB is zero. The value of each asset type and the implication for the Adjusted 2004 RAB is shown in Table 2 below:

#### Table 2: Summary of movements in 2004 ODRC due to asset register errors

	Quantity	RC	DRC	ORC	ODRC
400V Poles	2.3 Km	-\$2,693,306	-\$ 488,282	-\$2,693,306	-\$ 488,282
400V Lines	14.2 Km	-\$ 257,810	-\$ 101,219	-\$ 257,810	-\$ 101,219
400V Cables	Poles	-\$ 147,312	-\$ 52,236	-\$ 147,312	-\$ 52,236
11kV Poles	3.7 Km	-\$2,560,696	-\$ 828,125	-\$2,560,696	-\$ 828,125
11kV Lines	20.1 km	-\$ 207,625	-\$ 86,465	-\$ 203,617	-\$ 84,862
11kV Cables	Poles	-\$ 319,670	-\$ 200,132	-\$ 319,670	-\$ 200,132
Transformers	3	-\$ 57,900	-\$ 31,571	-\$ 57,900	-\$ 31,267
Transformer Fuses	7	-\$ 6,500	-\$ 1,757	-\$ 6,500	-\$ 1,757
Total Movement		-\$6,250,819	-\$1,789,787	-\$6,246,811	-\$1,787,880

### 3.2.2. Residual life calculation

During the review of its ODV calculations, Eastland identified an error in the calculation of the 3 year residual life of various assets in several of its asset categories.



In the adjusted 2004 RAB, those assets which are still in operation and have exceeded their standard lives or have a remaining life of less than 3 years, have been allocated a residual life of three years (as per the ODV Handbook). The correction of this error resulted in an increase in ODRC of \$288,497.

■ **Table 3: Residual life calculation correction: Quantity of assets affected**

	No. of Items	km of Line
400V Lines	392	22.87
11kV Lines	9,212	863.25
Switches	703	

Table 4, Table 5 and Table 6 show the original value of the adjusted assets and the movement in asset value as a result of the correction to the residual life calculation.

■ **Table 4: Residual life calculation correction: Value of asset groups as entered into the 2004 ODRC asset register**

	RC	DRC	ORC	ODRC
400V Lines	\$ 439,127	\$ 1,723	\$ 439,127	\$ 1,723
11kV Lines	\$ 1,493,185	\$ 1,241	\$ 1,492,971	\$ 1,131
Switches	\$ 2,617,000	\$ 15,371	\$ 2,617,000	\$ 15,371
<b>Total</b>	<b>\$ 4,549,312</b>	<b>\$ 18,335</b>	<b>\$ 4,549,098</b>	<b>\$ 18,225</b>

■ **Table 5: Residual Life Calculation Correction: Movement in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Lines	\$ -	\$ 20,237	\$ -	\$ 20,237
11kV Lines	\$ -	\$ 63,733	\$ -	\$ 63,861
Switches	\$ -	\$ 204,400	\$ -	\$ 204,400
<b>Total</b>	<b>\$ -</b>	<b>\$ 288,370</b>	<b>\$ -</b>	<b>\$ 288,497</b>

■ **Table 6: Residual Life Calculation Correction: Resulting Modified Value in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Lines	\$ 439,127	\$ 21,960	\$ 439,127	\$ 21,960
11kV Lines	\$ 1,493,185	\$ 64,974	\$ 1,492,971	\$ 64,992
Switches	\$ 2,617,000	\$ 219,771	\$ 2,617,000	\$ 219,771
<b>Total</b>	<b>\$ 4,549,312</b>	<b>\$ 306,705</b>	<b>\$ 4,549,098</b>	<b>\$ 306,723</b>

There were a number of other asset categories affected by this error, but review by Eastland and SKM found that these were not material and have not been incorporated in the adjusted 2004 RAB.



### 3.3. Reapplication of Asset Multipliers

Reference EDB IM cl 2.2.1(2)(c) and (d). EDBs may reapply multipliers where more accurate information has become available and to make adjustments to multipliers in accordance with specific new multiplier ranges.

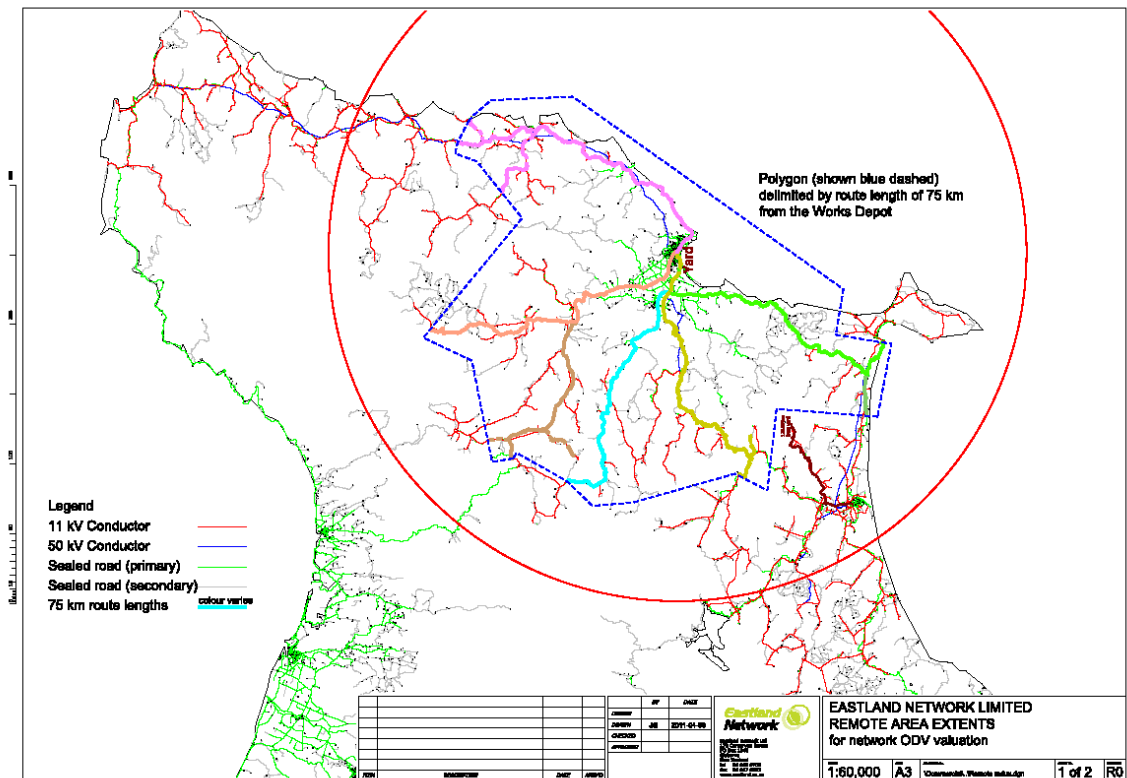
Eastland has made two adjustments to its application of multipliers that were used in its 2004 ODV. These are:

- redefining the boundary for remote assets; and
- increasing the rugged multiplier from 1.2 to 1.444.

#### 3.3.1. Re-apply an existing multiplier: Remote multiplier boundary

Reference EDB IM cl 2.2.1(2)(c). Eastland's 2004 ODV set the boundary for the application of the remote multiplier based on a 75km radius from its works depot in Gisborne. Given the rugged geographical nature of the region's network and roads, Eastland has proposed to base its definition of "remote" on road distance instead. The following chart presents the 2004 ODV 75km boundary shown as the red circle, and the proposed revised boundary shown as the dashed blue line.

■ **Figure 1: Current and proposed remote boundaries**





The proposed new remote boundary was derived by Eastland using its internal Geographic Information Systems (GIS) and measuring the road distance along the centre of the road. The network's overhead lines closely follow the road network. Using Eastland's GIS the main arterial roads radiating outwards from its Gisborne works depot have been plotted and measured in length. These are shown in the highlighted lines of varying colours. The extent of the 75km road distance along each main arterial road was then used to form a geographic polygon to express the remote boundary.

SKM has reviewed the proposed methodology of using 75km of road distance as the measure for remoteness and considers it is robust. SKM also conducted a field audit to test the proposed boundary by travelling along the Rakauroa Road to the south west of Gisborne (the highlighted brown line) and measured the road distance from the company's depot. A distance of slightly greater than 75km was measured to the proposed "remote boundary". SKM is comfortable that the proposed boundary is a fair and conservative reflection of road distance.

This change to the remote boundary results in an increase in RC of \$4,581,209 and ODRC of \$1,580,787.

■ **Table 7: Remote multiplier boundary changes: Quantity of assets affected**

	No. of Items	km of Line
400V Poles	2,570	
50-33kV Poles	534	
11kV Poles	10,846	
400V Lines	3,830	201.9
50-33kV Lines	536	73.6
11kV Lines	11,223	1,193.0

Table 8, Table 9 and Table 10 show the original value of the affected assets and the adjusted values (movement in asset value).

■ **Table 8: Remote multiplier boundary changes: Value of assets as entered into the 2004 ODRC asset register**

	RC	DRC	ORC	ODRC
400V Poles	\$ 2,557,150	\$ 928,739	\$ 2,557,150	\$ 928,739
50-33kV Poles	\$ 2,189,743	\$ 914,862	\$ 2,189,743	\$ 914,862
11kV Poles	\$ 15,940,205	\$ 6,720,694	\$ 15,940,205	\$ 6,720,694
400V Lines	\$ 3,866,354	\$ 1,161,890	\$ 3,866,354	\$ 1,161,890
50-33kV Lines	\$ 1,097,385	\$ 559,756	\$ 1,097,385	\$ 559,756
11kV Lines	\$ 12,812,644	\$ 4,204,626	\$ 12,097,826	\$ 3,894,700
<b>Total</b>	<b>\$ 38,463,481</b>	<b>\$ 14,490,568</b>	<b>\$ 37,748,663</b>	<b>\$ 14,180,641</b>



■ **Table 9: Remote Multiplier Boundary Changes: Movement in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Poles	\$ 511,430	\$ 185,748	\$ 511,430	\$ 185,748
50-33kV Poles	\$ 394,250	\$ 168,356	\$ 394,250	\$ 168,356
11kV Poles	\$ 1,478,715	\$ 555,377	\$ 1,478,715	\$ 555,377
400V Lines	\$ 773,271	\$ 234,921	\$ 773,271	\$ 234,921
50-33kV Lines	\$ 196,047	\$ 101,298	\$ 196,047	\$ 101,298
11kV Lines	\$ 1,227,496	\$ 355,200	\$ 1,172,655	\$ 335,088
<b>Total</b>	<b>\$ 4,581,209</b>	<b>\$ 1,600,899</b>	<b>\$ 4,526,368</b>	<b>\$ 1,580,787</b>

■ **Table 10: Remote Multiplier Boundary Changes: Resulting Modified Value in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Poles	\$ 3,068,580	\$ 1,114,486	\$ 3,068,580	\$ 1,114,486
50-33kV Poles	\$ 2,583,993	\$ 1,083,218	\$ 2,583,993	\$ 1,083,218
11kV Poles	\$ 17,418,920	\$ 7,276,071	\$ 17,418,920	\$ 7,276,071
400V Lines	\$ 4,639,625	\$ 1,396,811	\$ 4,639,625	\$ 1,396,811
50-33kV Lines	\$ 1,293,432	\$ 661,054	\$ 1,293,432	\$ 661,054
11kV Lines	\$ 14,040,140	\$ 4,559,826	\$ 13,270,481	\$ 4,229,787
<b>Total</b>	<b>\$ 43,044,690</b>	<b>\$ 16,091,467</b>	<b>\$ 42,275,031</b>	<b>\$ 15,761,429</b>

By way of illustrating the calculations taking place in the tables above, presented below is a summary of the 50-33kV poles replacement cost calculations. There are a total of 534 poles that have had the new remote multiplier applied to them, at an average replacement cost of \$3,961 per pole, and replacement cost of \$1,971,245. These poles also had a weighted average rugged multiplier of 1.111 already applied to them, producing a total replacement cost of \$2,189,743.

Applying the new remote multiplier of 1.2 to the replacement cost (without the rugged multiplier included) produces an increase in replacement cost of \$394,249. This process ensures that the multiplier calculation is additive and not compounded in any way.

Quantity of Poles	534
Replacement Cost per Pole ex Rugged Multiplier	\$ 3,691
Weighted average Rugged Multiplier	1.111
Pure Replacement Cost of Poles	\$ 1,971,245
Plus Rugged Multiplier - Replacement Cost as shown	\$ 2,189,743
Pure Replacement Cost of Poles	\$ 1,971,245
Plus New Remote Multiplier @ 1.2	\$ 2,365,494
Movement in RAB due to Remote Multiplier	\$ 394,249
Resulting Modified Value	\$ 2,583,992



### 3.3.2. Re-apply a modified multiplier: Changes to the rugged multiplier

Reference EDB IM cl 2.2.1(2)(d). SKM reviewed several of Eastland's recent network pole replacement projects and compared those projects completed in relatively flat terrain against pole replacement projects that were in a relatively rugged terrain. The cost difference between the flat terrain projects and the rugged terrain projects averaged 1.444. This average was the combined total cost of all the projects divided by the total number of poles replaced in each respective group of flat and rugged terrain, i.e. it is a weighted average, not simply an average of average numbers.

The 1.444 compares to the Rugged Multiplier of 1.2 used by Eastland in the 2004 ODV for their 50-33kV lines, and their 11kV lines. 400V lines did not receive a Rugged Multiplier in the 2004 ODV; hence the movement in RAB is greater for these asset classes than the others.

The sample projects were all of a planned nature, and not emergency pole replacements that would be more costly given their unplanned nature. The project sample focused on pole replacement projects as there has been very few planned conductor replacement or installation projects over the same time period. Finally, the analysis did not include any projects that were remote in nature, and therefore did not include the costs of accessing remote areas associated with them. Table 11 contains the details of this analysis.

■ **Table 11: Summary of pole replacement projects assessed for rugged multiplier**

Easy Conditions	Project Name	Cost	Poles	Cost per Pole
	Whakekopae Road	\$ 30,701	11	\$ 2,791
	Harper Road 1	\$ 25,792	9	\$ 2,866
	Harper Road 2	\$ 15,960	5	\$ 3,192
	Harper Road 3	\$ 24,593	8	\$ 3,074
	Waimata Valley	\$ 7,177	2	\$ 3,589
	<b>Total</b>	<b>\$ 104,223</b>	<b>35</b>	<b>\$ 2,978</b>
<b>Rugged Conditions</b>	<b>Project Name</b>	<b>Cost</b>	<b>Poles</b>	<b>Cost per Pole</b>
	Watangi Rd	\$ 22,809	5	\$ 4,562
	Rakauroa Rd	\$ 13,336	3	\$ 4,445
	Morere Hill 1&2	\$ 19,023	5	\$ 3,805
	Whakarau Rd	\$ 4,415	1	\$ 4,415
	Wharekopae Rd	\$ 4,201	1	\$ 4,201
	Rakauroa Rd	\$ 15,492	3	\$ 5,164
	Rakauroa Rd	\$ 53,757	13	\$ 4,135
	Waimata Valley	\$ 14,799	4	\$ 3,700
	Tiniroto	\$ 45,975	11	\$ 4,180
	Komihana/Mangamaia	\$ 9,379	2	\$ 4,690
	Waimata Valley	\$ 39,303	9	\$ 4,367
	Pararatu Rd	\$ 11,199	2	\$ 5,600
	<b>Total</b>	<b>\$ 253,688</b>	<b>59</b>	<b>\$ 4,300</b>
				<b>1.444</b>



SKM is satisfied that the review of pole replacement projects has been made on a comparable basis and the uplift factor of 1.444 is an appropriate proxy for use as a “Rugged Multiplier”. This change results in an increase in RC of \$6,245,148 and ODRC of \$2,175,602.

■ **Table 12: Rugged multiplier changes: Quantity of assets affected**

	No. of Items	km of Line
400V Poles	340	
50-33kV Poles	1,283	
11kV Poles	6,641	
400V Lines	114	18.9
50-33kV Lines	964	204.4
11kV Lines	4,327	830.0

Table 13, Table 14 and Table 15 show the original value of the affected assets and the adjustment to the value (movement in asset value).

■ **Table 13: Rugged multiplier changes: Value of asset groups as entered into the 2004 ODRC asset register**

	RC	DRC	ORC	ODRC
400V Poles	\$ 338,300	\$ 68,263	\$ 338,300	\$ 68,263
50-33kV Poles	\$ 6,810,026	\$ 2,245,440	\$ 6,810,026	\$ 2,245,440
11kV Poles	\$ 10,523,763	\$ 4,211,406	\$ 10,523,763	\$ 4,211,406
400V Lines	\$ 355,169	\$ 97,371	\$ 355,169	\$ 97,371
50-33kV Lines	\$ 3,661,011	\$ 1,449,312	\$ 3,661,011	\$ 1,449,312
11kV Lines	\$ 9,373,490	\$ 3,200,016	\$ 8,641,138	\$ 2,895,069
<b>Total</b>	<b>\$ 31,061,759</b>	<b>\$ 11,271,808</b>	<b>\$ 30,329,407</b>	<b>\$ 10,966,860</b>

■ **Table 14: Rugged multiplier changes: Movement in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Poles	\$ 150,205	\$ 30,309	\$ 150,205	\$ 30,309
50-33kV Poles	\$ 1,332,789	\$ 438,264	\$ 1,332,789	\$ 438,264
11kV Poles	\$ 2,065,449	\$ 819,244	\$ 2,065,449	\$ 819,244
400V Lines	\$ 157,695	\$ 43,863	\$ 157,695	\$ 43,863
50-33kV Lines	\$ 716,146	\$ 281,897	\$ 716,146	\$ 281,897
11kV Lines	\$ 1,822,864	\$ 621,905	\$ 1,678,329	\$ 562,026
<b>Total</b>	<b>\$ 6,245,148</b>	<b>\$ 2,235,482</b>	<b>\$ 6,100,613</b>	<b>\$ 2,175,602</b>



■ **Table 15: Rugged multiplier changes: Resulting Modified Value in RAB (\$ 2004)**

	RC	DRC	ORC	ODRC
400V Poles	\$ 488,505	\$ 98,571	\$ 488,505	\$ 98,571
50-33kV Poles	\$ 8,142,815	\$ 2,683,703	\$ 8,142,815	\$ 2,683,703
11kV Poles	\$ 12,589,212	\$ 5,030,650	\$ 12,589,212	\$ 5,030,650
400V Lines	\$ 512,864	\$ 141,234	\$ 512,864	\$ 141,234
50-33kV Lines	\$ 4,377,157	\$ 1,731,209	\$ 4,377,157	\$ 1,731,209
11kV Lines	\$ 11,196,354	\$ 3,821,922	\$ 10,319,467	\$ 3,457,095
<b>Total</b>	<b>\$ 37,306,907</b>	<b>\$ 13,507,290</b>	<b>\$ 36,430,020</b>	<b>\$ 13,142,463</b>

By way of illustrating the calculations taking place in the tables above, presented below is a summary of the 50-33kV poles replacement cost calculations. There are a total of 1,283 poles that have had the new remote multiplier applied to them, at an average replacement cost of \$4,264 per pole, and replacement cost of \$5,470,363. These poles also had an existing weighted average rugged multiplier of 1.2 already applied to them, and an existing weighted average remote multiplier of 1.037 applied to them producing a total replacement cost of \$6,710,026.

Applying the increased in value of the new remote multiplier of 0.244 to the replacement cost (without the existing rugged or remote multipliers included) produces an increase in replacement cost of \$1,332,789. This process ensures that the multiplier calculation is additive and not compounded in any way.

**Rugged Multiplier**

Quantity of Poles	1,283
Replacement Cost per Pole ex Rugged Multiplier	\$ 4,264
Weighted average Rugged Multiplier	1.200
Weighted average Remote Multiplier	1.037
Pure Replacement Cost of Poles	\$ 5,470,363
Plus Rugged & Remote Multipliers - Replacement Cost as shown	\$ 6,810,026
Pure Replacement Cost of Poles	\$ 5,470,363
Plus New Remote Multiplier @ 1.2	\$ 6,803,152
Movement in RAB due to Remote Multiplier	\$ 1,332,789
Resulting Modified Value	\$ 8,142,815



### **3.4. Re-apply Optimisation and/or Economic Value Test**

Reference EDB IM cl 2.2.1(2)(e). EDBs may reconsider the application of optimisation based on the network conditions during 2009.

Eastland has elected to make no changes to its optimisation on the basis there has been limited growth in its network in recent years, and this pattern of low growth is expected to continue.

Eastland has not proposed any EV adjustments on the basis that the 2004 ODV did not identify any network segments (feeders or spurs) that were suitable or material for EV testing. Eastland has stated that it does not consider that there have been any material changes to its feeders or spur lines.



## 4. Summary

Eastland's asset adjustment process has focused on five areas:

- adjusting for the allocation of load control relays;
- removing assets not owned by Eastland from the RAB;
- correcting the residual life calculation;
- adjusting the boundary for the remote multipliers application; and
- adjusting the rugged multiplier.

Table 16 below summarises the financial impact on Eastland's 2004 RAB arising from the asset adjustment process.

■ **Table 16: Summary of asset adjustment process (31 March 2004)**

	RC	DRC	ORC	ODRC	ODV
Opening RAB	\$ 187,619,091	\$ 87,598,915	\$ 184,685,056	\$ 86,184,325	\$ 86,184,325
Adjustments to Load Control Relays	\$ -	\$ -	\$ -	\$ -	\$ -
Correction for Privately Owned Assets	-\$ 6,250,819	-\$ 1,789,787	-\$ 6,246,811	-\$ 1,787,880	-\$ 1,787,880
Correction to Residual Life Calculation	\$ -	\$ 288,370	\$ -	\$ 288,497	\$ 288,497
Changes to Rugged Mutliplier	\$ 6,245,148	\$ 2,235,482	\$ 6,100,613	\$ 2,175,602	\$ 2,175,602
Changes to Remote Mutliplier Boundary	\$ 4,581,209	\$ 1,600,899	\$ 4,526,368	\$ 1,580,787	\$ 1,580,787
Closing RAB	\$ 192,194,629	\$ 89,933,879	\$ 189,065,225	\$ 88,441,332	\$ 88,441,332
Net Movement in RAB	\$ 4,575,538	\$ 2,334,964	\$ 4,380,170	\$ 2,257,007	\$ 2,257,007

# Appendix A Table Summary of Asset value Adjustments: Schedule A4

SCHEDULE A4: ASSET ADJUSTMENT PROCESS								
row		2004 *	2005	2006	2007	2008	2009	Ref
		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	
6	Summary of Engineer's Valuation Adjustments (at time asset enters regulatory asset register)							
7								
8	<b>Asset adjustment process - adjustments</b>							
9								
10	Include load control relays	-	-	-	-	-	1,950	2.2.1(2)(a)
11	Correct asset register errors for 2004 ODV assets							
12	Private Asset Adjustments	(1,788)						
13	Correction of Error in Residual Life Calculation	288						
14								
15		(1,499)						2.2.1(2)(b)
16	Correct asset register errors for 2005 – 2009 assets							
17	Load Control Relays (Non-System Fixed Assets)						(1,950)	
18								
19								
20			-	-	-	-	(1,950)	2.2.1(2)(b)
21	Re-apply an existing multiplier to 2004 ODV assets							
22	Remote Multiplier Adjustments	1,581						
23								
24								
25		1,581						2.2.1(2)(c)
26	Re-apply a modified multiplier to 2004 ODV assets							
27	Rugged Multiplier Adjustments	2,176						
28								
29								
30		2,176						2.2.1(2)(d)
31	Re-apply optimisation or EV tests to 2004 ODV assets							
32								
33								
34								
35		-						2.2.1(2)(e)
36								
37	<b>Total value of adjustments by disclosure year</b>	2,257	-	-	-	-	-	
38	* Includes assets which first entered the regulatory asset register in a disclosure year prior to 2004.							
39								



## **Appendix B Eastland's Instructions to Engineer**

7 April 2011

Richard Fairbairn  
Sinclair Knight Merz  
PO Box 9806  
Newmarket 1149  
Auckland

Dear Richard

**Engineering report in respect of the initial regulatory asset base**

Further to our recent discussions, Eastland Network Limited (Eastland) wishes to provide Sinclair Knight Merz (SKM) with written instructions that outline our requirements for the initial Regulatory Asset Base (RAB) review that we are undertaking.

Eastland recently received a notice to supply information to the Commerce Commission, issued under section 53ZD of the Commerce Act 1986. This notice requires Electricity Distribution Businesses (EDB) to provide to the Commerce Commission, among other things, an Engineer's report that compiles with the requirements specified in Schedule C of the notice if the EDB has elected to undertake the asset adjustment process as permitted by and outlined in clause 2.2.1 of the Commerce Act (Electricity Distribution Services Input Methodologies) Determination 2010. This work must be submitted to the Commerce Commission by 27 May 2011, along with Directors Certificates and an Independent Assurance Report.

Eastland has elected to undertake an asset adjustment, we are therefore is engaging SKM to assist with our review of the RAB and provide a report which compiles with Schedule C as noted above. Eastland expect that we will undertake the bulk of the database work which will include the identification of relevant assets, review of asset categorisation, review of multipliers and providing SKM with data that supports our proposed changes. SKM would then review and audit this work through on-site visits, inspections and discussions with the relevant staff and produce the Engineer's report.

We look forward to working on this project with you.

Yours sincerely



Ben Gibson  
**General Manager - Commercial**



## Appendix C Signed Statement by Engineer



Mr Ben Gibson  
General Manager - Commercial  
Eastland Network Ltd  
172 Carnarvon Street  
PO Box 1048  
Gisborne 4040  
New Zealand

27 June 2011

ZP01032

Dear Sir,

### **Statement Regarding Independent Engineer's Report on the Asset Adjustment Process of Eastland Network Ltd**

#### **Introduction**

Sinclair Knight Merz Ltd (SKM) was requested by Eastland Network Ltd (Eastland) to undertake an independent review of proposed adjustments to Eastland's regulatory asset base as at 31<sup>st</sup> March 2004. This review was undertaken to determine the appropriateness of the proposed adjustments in respect of the process set out in clause 2.2.1 of the "Commerce Act (Electricity Distribution Input Methodologies) Determination 2010", 22 December 2010 (EDB IM).

SKM's findings are set out in the enclosed report which has been prepared to comply with the requirements for the Independent Engineer's report in Schedule C of the Commerce Commission's "Notice to supply information to the Commerce Commission Section 53ZD of the Commerce Act 1986 (Section 53ZD Notice) dated 16 March 2011. This letter incorporates the signed statement required by the Section 53ZD Notice.

#### **Confirmation of Independence and Qualifications**

I, as a chartered professional engineer (as defined in section 6 of the Chartered Professional Engineers Act 2002), can confirm that:

- 1) SKM has acted independently with respect to Eastland and its subsidiaries and affiliates;
- 2) SKM has significant experience in New Zealand, Australia and the United Kingdom in relation to the valuation of electricity networks for both regulatory and financial reporting purposes. SKM's review and the preparation of the report have been undertaken by Dr Richard Fairbairn and Mr Stephen Wightman. Dr Fairbairn and Mr Wightman are professionally qualified and experienced in the type of work concerned and are familiar with the Eastland network;
- 3) the report is in writing and accessible in electronic (PDF file-type) format and includes a copy of the written instructions provided to SKM by Eastland (included as Appendix B to the enclosed report), including any subsequent variations or modifications;



- 4) the report includes a table summarising the various asset value adjustments corresponding to Schedule A4 of the Information Disclosure Notice Templates (please see Appendix A to the enclosed report);
- 5) the report provides the minimum information for each category of asset adjustment outlined in Table 1 of the Section 53ZD Notice, together with such additional information sufficient to allow a reader:
  - i. to understand the data, information, calculations and assumptions employed in respect of each category of asset adjustment;
  - ii. to understand the extent to which professional judgement was exercised by SKM and the effect of that judgement in deriving the resultant asset values;
  - iii. to verify the arithmetical accuracy of the asset adjustment calculations; and
- 6) the report may be publicly disclosed by Eastland pursuant to an information disclosure determination in relation to Eastland made by the Commission under section 52P of the Commerce Act (1986).

I can confirm that SKM is satisfied that:

- i. the ODV rules have been properly applied for assets which had not had an ODV valuation calculated originally, as required by clause 2.2.1 of the EDB IM;
- ii. where values under Generally Accepted Accounting Practice have been relied on, those values have been supplied or reviewed by an appropriately qualified party (e.g. accounting practitioner); and
- iii. the report meets the requirements of Schedule C of the Section 53ZD Notice.

**SIGNED** on behalf of Sinclair Knight Merz Limited by:

**Designated Engineer**

A handwritten signature in blue ink, appearing to read 'D. Smith', written over a light blue grid background.

D.C. Smith, MIPENZ, CPEng

**Assessors**

A handwritten signature in black ink, appearing to read 'R. Fairbairn', written over a light blue grid background.

R. Fairbairn, MIET  
Sinclair Knight Merz

A handwritten signature in black ink, appearing to read 'S. Wightman', written over a light blue grid background.

S. Wightman, MIPENZ  
Sinclair Knight Merz