

# The Lines Company

## **DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT**

**FOR THE ASSESSMENT DATE 31 MARCH 2013**

*Pursuant to the Commerce Act (Electricity Distribution Default Price-  
Quality Path) Determination 2010*

10 June 2013

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### **Contents**

- 1) Compliance with the Price Path (Clause 11.1(a))
- 2) Compliance with the Quality Standards (Clause 11.1(a))
- 3) Director Certification (Clause 11.1(c))
- 4) Auditor's Report (Clause 11.2)

### **Supporting Information (Clause 11.1(b))**

APPENDIX A	Price Path Compliance Calculations
APPENDIX B	Price and Quantity Schedules
APPENDIX C	Pass Through Costs
APPENDIX D	Quality Standard Compliance Calculations
APPENDIX E	Policies and Procedures for Recording SAIDI and SAIFI

**1) Compliance with the Price Path (Clause 11.1(a))**

The Lines Company does comply with the price path at the assessment date, 31 March 2013, as specified in the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010*.

**Clause 8.4** - The notional revenue (NR<sub>t</sub>) of a Non-exempt EDB at any time during the Assessment Period must not exceed the allowable notional revenue (R<sub>t</sub>) for the Assessment Period.

Compliance is demonstrated in the following tables. The first table demonstrates that notional revenue derived using posted prices at the end of the Assessment Period is less than allowable notional revenue. The second table demonstrates that the maximum notional revenue during the Assessment Period does not exceed allowable notional revenue thus illustrating that at no time during the Assessment Period is the price path breached.

**Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010  
Assessment Against the Price Path  
for the Assessment Date 31 March 2013**

**Clause 8.4** The notional revenue (NR<sub>t</sub>) of a Non-exempt EDB at 31 March 2013 must not exceed the allowable notional revenue (R<sub>t</sub>) for the Assessment Period such that:

Test:	$\frac{NR_{2013}}{R_{2013}} \leq 1$
NR <sub>2013</sub> :	\$ 27,798,552
R <sub>2013</sub> :	\$ 29,748,135
Result:	0.9345 < 1
Result:	<i>Price Path has not been breached</i>

**Clause 8.4** The notional revenue (NR<sub>t</sub>) of a Non-exempt EDB at any time during the Assessment Period must not exceed the allowable notional revenue (R<sub>t</sub>) for the Assessment Period such that:

Test:	$\frac{NR_{Max}}{R_{2013}} \leq 1$
NR <sub>Max</sub> :	\$ 27,798,552
R <sub>2013</sub> :	\$ 29,748,135
Result:	0.9345 < 1
Result:	<i>Price Path has not been breached</i>

Supporting evidence is presented in Appendices A, B and C.

## 2) Compliance with the Quality Standards (Clause 11.1(a))

The Lines Company does comply with all requirements of the quality standards at the assessment date, 31 March 2013, as specified in the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010*.

**Clause 9.2** - A Non-exempt EDB's Assessed Values for an Assessment Period must not exceed its Reliability Limits for that Assessment Period.

Compliance is demonstrated in the following tables.

### Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010 Assessment Against the Quality Standards for the Assessment Date 31 March 2013

#### 2013 Reliability Assessment (9.1(a))

**Clause 9.1(a) requires compliance with Clause 9.2:** A Non-exempt EDB's Assessed Values for an Assessment Period must not exceed its Reliability Limits for that Assessment Period

Test:	$\frac{SAIDI_{Assess\ 2013}}{SAIDI_{Limit}} \leq 1$	
SAIDI <sub>Assess 2013</sub>	199.57	
SAIDI <sub>Limit</sub>	307.69	
	0.6486	< 1
<b>Clause 9.1(a) Result:</b>	<i>Does not Exceed Limit</i>	

Test:	$\frac{SAIFI_{Assess\ 2013}}{SAIFI_{Limit}} \leq 1$	
SAIFI <sub>Assess 2013</sub>	2.32	
SAIFI <sub>Limit</sub>	4.15	
	0.5577	< 1
<b>Clause 9.1(a) Result:</b>	<i>Does not Exceed Limit</i>	

### Prior Period Reliability Assessment (9.1(b))

**Clause 9.1.(b) requires:** compliance with annual reliability assessments for the two immediately preceding extant Assessment Periods

SAIDI <sub>Assess 2012</sub>	311.88	SAIFI <sub>Assess 2012</sub>	3.99
SAIDI <sub>Limit</sub>	307.69	SAIFI <sub>Limit</sub>	4.15
1.0136	> 1	0.9596	< 1
<i>Exceeds Limit</i>		<i>Does not Exceed Limit</i>	

SAIDI <sub>Assess 2011</sub>	260.35	SAIFI <sub>Assess 2011</sub>	3.47
SAIDI <sub>Limit</sub>	307.69	SAIFI <sub>Limit</sub>	4.15
0.8461	< 1	0.8362	< 1
<i>Does not Exceed Limit</i>		<i>Does not Exceed Limit</i>	

### Compliance Summary

**Clause 9.1** A Non-exempt EDB must, in respect of each Assessment Period, either:

- (a) comply with the annual reliability assessment specified in clause 9.2; or
- (b) have complied with those annual reliability assessments for the two immediately preceding extant Assessment Periods

	SAIDI	SAIFI	Compliance
Compliance with 9.1(a)	Does not Exceed Limit	Does not Exceed Limit	<i>Complies</i>
or			
Compliance with 9.1(b)	Exceeded Limit	Did not Exceed Limit	<i>Does not Comply</i>
<b>Clause 9.1 Result:</b>	<b><i>Complies with Quality Standard</i></b>		

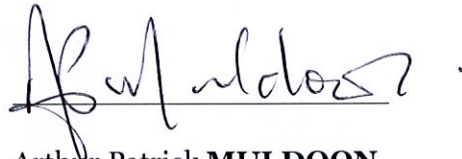
Supporting evidence is presented in Appendices D and E.

### 3) Director Certification (Clause 11.1(c))

We, Angus Malcolm Don and Arthur Patrick Muldoon, being directors of The Lines Company Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of The Lines Company Limited, and related information, prepared for the purposes of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010* are true and accurate.



Angus Malcolm **DON**  
Director



Arthur Patrick **MULDOON**  
Director

10 June 2013



## ***Independent Auditor's Report***

to the readers of the Annual Compliance Statement of The Lines Company Limited for the assessment period ended on 31 March 2013

The Auditor-General is the auditor of The Lines Company Limited (the Company). The Auditor-General has appointed me, Pip Cameron, using the staff and resources of PricewaterhouseCoopers, to provide an opinion, on her behalf, on The Lines Company Limited's Annual Compliance Statement for the assessment period ended on 31 March 2013 on pages 2 to 4 and 8 to 26 regarding compliance with the Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010.

We have completed the assurance engagement in respect of the attached Annual Compliance Statement prepared by The Lines Company Limited for the assessment period ended 31 March 2013 and dated 10 June 2013 for the purposes of clause 11 of the Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010 ("the Determination").

### ***Directors' Responsibilities***

The Directors of The Lines Company Limited are responsible for the preparation of the Annual Compliance Statement in accordance with the Determination and for such internal control as the Directors determine is necessary to enable the preparation of an Annual Compliance Statement that is free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibilities***

Our responsibility is to express an opinion on the Annual Compliance Statement based on our independent assurance procedures. We conducted our engagement in accordance with ISAE (NZ) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information and SAE 3100 *Compliance Engagements*. Those standards require that we comply with ethical requirements and plan and perform the engagement to obtain reasonable assurance about whether the Annual Compliance Statement complies with the Determination, in all material respects.

An independent assurance engagement involves performing procedures to obtain evidence about the amounts and disclosures in the Annual Compliance Statement. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the Annual Compliance Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the Annual Compliance Statement in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

In relation to the price path set out in clause 8 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 and 8 to 21 of the Annual Compliance Statement.

In relation to the SAIDI and SAIFI statistics for the Reference Period and the Assessment Period ended on 31 March 2013, including the calculation of the Reliability Limits and the Assessed Values, which are relevant to the quality standards set out in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 3 to 4 and 22 to 26 of the Annual Compliance Statement.



## ***Independent Auditors' Report***

The Lines Company Limited

Our assurance engagement also included assessment of the significant estimates and judgments, if any, made by the Company in the preparation of the Annual Compliance Statement and whether adequate information has been disclosed in accordance with clause 11.1(b) of the Determination.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### ***Use of this Report***

This independent auditor's report has been prepared solely for the Directors of The Lines Company Limited and the Commissioners of the New Zealand Commerce Commission in accordance with the Determination. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Directors of The Lines Company Limited and the Commissioners, or for any purpose other than that for which it was prepared.

### ***Inherent Limitations***

Because of the inherent limitations in evidence gathering procedures, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout the assessment period and the procedures performed in respect of the Company's compliance with the Determination are undertaken on a test basis, our engagement cannot be relied on to detect all instances where the Company may not have complied with the Determination. Our opinion has been formed on the above basis.

### ***Independence***

We have no relationship with, or interests in the Company, other than as the auditors of the annual financial statements and disclosure information on behalf of the Office of the Auditor-General. We are not aware of any relationships between our firm and The Lines Company Limited that, in our professional judgment, may reasonably be thought to impair our independence.

### ***Opinion***

In our opinion, the Annual Compliance Statement of The Lines Company Limited for the Assessment Period ended on 31 March 2013, has been prepared, in all material respects, in accordance with the Determination.

Our assurance engagement was completed on 11 June 2013 and our opinion is expressed as at that date.

A handwritten signature in blue ink, appearing to read 'Pip Cameron'.

Pip Cameron  
On behalf of the Auditor-General  
Auckland, New Zealand

The PricewaterhouseCoopers logo, written in a cursive, handwritten style.

PricewaterhouseCoopers

## Appendix A – Price Path Compliance Calculations (Clause 11.1(b)(i))

### Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010

#### Price Path Inputs and Calculations for the Assessment Date 31 March 2013

##### Clause 8.4

Notional Revenue for the year ending March 2013		
Term	Description	Value \$
$P_{2013} * Q_{2011}$	Prices at 31 March 2013 multiplied by 31 March 2011 Base Quantities	34,049,527
$K_{2013}$	Transmission Charges for year ending 31 March 2013	4,790,939
	Avoided Transmission Charges for year ending 31 March 2013	1,200,036
	Rates for year ending 31 March 2013	147,541
	Electricity Authority Levies for year ending 31 March 2013	45,180
	Commerce Act Levies for year ending 31 March 2013 + 1/5 of Commerce Act Levies for year ending 31 March 2010	67,280
$NR_{2013}$	Notional Revenue for the year ending 31 March 2013	27,798,552

Supported by P\*Q schedules presented in Appendix B



Maximum Notional Revenue for the year ending March 2013		
Term	Description	Value \$
$P_{Max} * Q_{2011}$	Maximum Prices between 1 April 2012 and 31 March 2013 multiplied by 31 March 2011 Base Quantities	34,049,527
$K_{2013}$	Transmission Charges for year ending 31 March 2013	4,790,939
	Avoided Transmission Charges for year ending 31 March 2013	1,200,036
	Rates for year ending 31 March 2013	147,541
	Electricity Authority Levies for year ending 31 March 2013	45,180
	Commerce Act Levies for year ending 31 March 2013 + 1/5 of Commerce Act Levies for year ending 31 March 2010	67,280
$NR_{Max}$	Notional Revenue for the year ending 31 March 2013	27,798,552

Supported by P\*Q schedules presented in Appendix B

**Clause 8.4**

Allowable Notional Revenue 2013		
Term	Description	Value \$
$P_{2012} * Q_{2011}$	Maximum Prices between 1 April 2011 and 31 March 2012 multiplied by 31 March 2011 Base Quantities	33,117,377
$K_{2012}$	Transmission Charges for year ending 31 March 2012	4,356,335
	Avoided Transmission Charges for 2012	874,137
	Rates for year ending 31 March 2012	113,547
	Electricity Commission Levies for year ending 31 March 2012	48,568
	Commerce Act Levies for year ending 31 March 2012 + 1/5 of Commerce Act Levies for year ending 31 March 2010	45,110
$R_{2012} - NR_{2012}$	Revenue Differential for year ending 31 March 2012	762,692
$X$	X Factor	0
$(1 + \Delta CPI_{2013})$	Average change in Consumer Price Index	1.0459
$R_{2013}$	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2013	29,748,135

Supported by P\*Q schedules presented in Appendix B

$\Delta CPI_{2013}$			
Numerator		Denominator	
$CPI_{Dec2010}$	1137	$CPI_{Dec2009}$	1093
$CPI_{Mar2011}$	1146	$CPI_{Mar2010}$	1097
$CPI_{Jun2011}$	1157	$CPI_{Jun2010}$	1099
$CPI_{Sep2011}$	1162	$CPI_{Sep2010}$	1111
Total	4602	Total	4400
$\Delta CPI_{2013}$	4.59%		

Revenue Differential 2012		
Term	Description	Value \$
<i>R</i> <sub>2012</sub>	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2012	27,414,407
<i>NR</i> <sub>2012</sub>	Notional Revenue for the year ending 31 March 2012	26,651,715
<i>R</i> <sub>2012</sub> - <i>NR</i> <sub>2012</sub>	Allowable Notional Revenue less Notional Revenue for the year ending 31 March 2012	762,692

During the preparation of the March 2013 DPP Compliance Statement, it was identified that certain prices and quantities were incorrectly reported in the March 2012 DPP Compliance statement.

Had these prices and quantities been accurately reported in the March 2012 DPP Compliance Statement, Allowable Notional Revenue would have increased by \$1,111,529 and Notional Revenue would have increased by \$1,103,491. If applied retrospectively, the errors identified would not result in any breach in the March 2012 DPP Compliance Statement. The Revenue Differential for March 2012 as disclosed and shown above was \$762,692. This would be increased by \$8,037 to \$770,729 if retrospectively adjusted for the errors in the 2012 Allowable Notional Revenue and Notional Revenue detailed above. As the net impact of \$8,037 is not significant and has no impact on the compliance position, it was not considered necessary to amend the carry forward March 2012 amounts.

## Appendix B – Price and Quantity Schedules (Clause 11.1(b)(i))

SUMMARY OF REVENUES AND COSTS		
	31 March 2012	31 March 2013
<b>Revenue:</b>		
Large Customers	\$ 6,249,149	\$ 6,543,539
Network Charges	\$ 5,582,374	\$ 5,738,006
Load Charges	\$ 17,012,039	\$ 17,396,519
Dedicated Transformer Charges	\$ 2,493,832	\$ 2,556,097
Generators	\$ 442,699	\$ 455,626
Streetlights	\$ 587,187	\$ 601,867
Load Shifting	\$ 14,597	\$ 14,962
Connections	\$ 450,144	\$ 450,144
Relays	\$ 285,355	\$ 292,767
	<b>\$ 33,117,377</b>	<b>\$ 34,049,527</b>
<b>Less Recoverable Costs:</b>		
Transpower Charges	\$ (4,356,335)	\$ (4,790,939)
Avoided Transmission	\$ (874,137)	\$ (1,200,036)
	<b>\$ (5,230,472)</b>	<b>\$ (5,990,975)</b>
<b>Less Pass-through Costs:</b>		
Local Body Rates	\$ (113,547)	\$ (147,541)
Commerce Commission	\$ (45,110)	\$ (67,280)
Electricity Authority	\$ (48,568)	\$ (45,180)
	<b>\$ (207,225)</b>	<b>\$ (260,000)</b>
<b>Less Total Allowable Costs:</b>	<b>\$ (5,437,697)</b>	<b>\$ (6,250,975)</b>
	<b>\$ 27,679,680</b>	<b>\$ 27,798,552</b>

Large Customers	31-Mar-11		31-Mar-12		31-Mar-13		
	Quantity (Q)	Price (P) annual (disclosed)	Revenue (Q x P) gross 2012	Price (P) annual (disclosed)	Revenue (Q x P) gross 2012	Price (P) annual (disclosed)	Revenue (Q x P) gross 2012
<b>Dedicated Network</b>							
NZ Steel	1		1,500,000 \$		1,500,000 \$		1,537,500 \$
Universal Beef Packers	1		11,067 \$		11,067 \$		11,340 \$
McDonalds Otorohanga	1		9,312 \$		9,312 \$		9,545 \$
McDonalds Oparure	1		151,656 \$		151,656 \$		155,447 \$
Winstone Pulp	1		92,633 \$		92,633 \$		94,949 \$
RAL Whakapapa	1		473,471 \$		473,471 \$		485,308 \$
RAL Turoa	1		370,772 \$		370,772 \$		380,041 \$
Tongariro Rangipo Prison	1		55,334 \$		55,334 \$		56,717 \$
<b>Billing</b>	31	133.21	1,598.52	136.54	1,638.48	1,474.63	45,714
<b>Network Charge (kVA)</b>							
Waitomo	13,250	98.51	88.66 \$	100.97	1,174,732	90.87	1,204,067
Turangi	2,602	107.89	97.10 \$	110.59	252,657	99.53	258,980
Taumarunui	760	111.69	100.52 \$	114.48	76,396	103.03	78,304
11 kV	0	111.69	100.52 \$	114.48	-	103.03	-
33 kV	1,262	59.78	53.80 \$	61.27	67,896	55.14	69,590
Stepped	700	73.88	66.49 \$	75.73	46,544	68.16	47,710
Whakamaru	1,000	186.46	167.81 \$	191.12	167,814	172.01	172,008
National Park	1,200	143.60	129.24 \$	147.19	155,088	132.47	158,965
Ohakune	0	107.89	97.10 \$	110.59	-	99.53	-
Low voltage	240	103.95	93.56 \$	106.55	22,453	95.90	23,015
<b>Transpower Connection (kVA)</b>							
Waitomo	20,034	17.66	15.89 \$	18.58	318,420	16.72	335,009
Turangi	1,128	26.16	24.39 \$	25.06	27,512	7.15	8,061
Taumarunui	542	22.77	21.00 \$	25.06	11,382	22.55	12,224
Whakamaru	958	0.00	0.00 \$	0.00	-	0.00	-
National Park	3,243	38.48	36.71 \$	42.17	119,051	37.95	123,082
Ohakune	2,637	12.68	10.91 \$	11.90	28,770	10.71	28,242
<b>Transpower Demand (kVA)</b>							
Waitomo	13,042	49.55	44.60 \$	58.08	581,608	52.27	681,731
Turangi	1,128	44.50	40.05 \$	43.91	45,176	39.52	44,577
Taumarunui	542	60.71	54.64 \$	65.29	29,614	58.76	31,848
Whakamaru	958	21.41	19.27 \$	20.10	18,460	18.09	17,330
National Park	507	57.38	51.64 \$	67.95	26,182	61.16	31,006
Ohakune	0	52.49	47.24 \$	45.37	-	40.83	-
Demand Coincidental Transpower	100	86.77	78.09 \$	103.32	370,551	92.99	441,228
<b>Totals</b>			<b>\$ 6,249,149</b>		<b>\$ 6,543,539</b>		

Note: **PPD** described under Price (P) throughout the Price and Quantity schedules means prompt payment discount applicable for the relevant tariffs.

Network Charges		1-Mar-11			31-Mar-12			31-Mar-13		
		Quantity (Q) (kVA)	Price (P) monthly (disclosed)	Price (P) gross	net PPD	Revenue (Q x P)	monthly (disclosed)	Price (P) gross	net PPD	Revenue (Q x P)
<b>Standard</b>	<b>Code</b>									
Urban (High Density Low Voltage)										
Hangatiki	LVIHT	21,089	3.61	43.28	38.95	\$ 821,522	3.70	44.40	39.96	\$ 842,773
National Park	LVIHNP	2,842	4.32	51.89	46.70	\$ 132,726	4.45	53.40	48.06	\$ 136,574
Ohakune	LVIHOK	10,384	3.61	43.28	38.95	\$ 404,509	3.72	44.62	40.16	\$ 416,997
Ongarue	LVIHON	13,153	3.61	43.28	38.95	\$ 512,375	3.72	44.62	40.16	\$ 528,193
Turangi	LVIHTK	20,129	3.61	43.28	38.95	\$ 784,125	3.72	44.62	40.16	\$ 808,333
Whakamaru	LVIHWK	2,847	3.61	43.28	38.95	\$ 110,905	3.70	44.40	39.96	\$ 113,774
Urban (High Density High Voltage)										
Hangatiki	HVHIHT	11,650	1.69	20.29	18.26	\$ 212,731	1.73	20.79	18.71	\$ 217,952
National Park	HVHINP	652	2.03	24.35	21.91	\$ 14,287	2.09	25.09	22.58	\$ 14,723
Ohakune	HVHIOK	1,526	1.69	20.29	18.26	\$ 27,865	1.74	20.89	18.80	\$ 28,688
Ongarue	HVHION	3,391	1.69	20.29	18.26	\$ 61,920	1.74	20.89	18.80	\$ 63,749
Turangi	HVHITK	1,993	1.69	20.29	18.26	\$ 36,392	1.74	20.89	18.80	\$ 37,468
Whakamaru	HVHIWK	721	1.69	20.29	18.26	\$ 13,166	1.73	20.79	18.71	\$ 13,489
Rural (Low Density Low Voltage)										
Hangatiki	LVILOHT	5,946	6.95	83.37	75.03	\$ 446,144	7.12	85.49	76.94	\$ 457,464
National Park	LVILONP	4,097	6.41	76.98	69.28	\$ 283,832	6.60	79.23	71.30	\$ 292,136
Ohakune	LVILOOK	30	5.35	64.19	57.77	\$ 1,733	5.51	66.13	59.51	\$ 1,785
Ongarue	LVILOON	3,926	6.95	83.37	75.03	\$ 294,578	7.16	85.90	77.31	\$ 303,526
Turangi	LVILOTK	731	6.95	83.37	75.03	\$ 54,849	7.16	85.90	77.31	\$ 56,515
Whakamaru	LVILOWK	2,450	6.41	76.98	69.28	\$ 169,731	6.57	78.84	70.96	\$ 173,849
Rural (Low Density High Voltage)										
Hangatiki	HVLOHT	9,952	3.30	39.59	35.63	\$ 354,639	3.38	40.56	36.50	\$ 363,288
National Park	HVLONP	1,568	3.04	36.52	32.87	\$ 51,537	3.13	37.56	33.80	\$ 53,005
Ohakune	HVLOOK	84	2.54	30.50	27.45	\$ 2,305	2.62	31.44	28.30	\$ 2,377
Ongarue	HVLOON	4,587	3.30	39.59	35.63	\$ 163,458	3.40	40.80	36.72	\$ 168,435
Turangi	HVLOTK	303	3.30	39.59	35.63	\$ 10,797	3.40	40.80	36.72	\$ 11,126
Whakamaru	HVLOWK	13,389	3.04	36.52	32.87	\$ 440,073	3.12	37.44	33.70	\$ 451,156
<b>Low User (Q = No. of Installations)</b>										
Hangatiki										
National Park										
Ohakune	LU1	4,422	3.69	44.27	39.84	\$ 176,174	3.78	45.39	40.85	\$ 180,631
Ongarue										
Turangi										
Whakamaru										
<b>Totals</b>						<b>\$ 5,582,374</b>				<b>\$ 5,738,006</b>

Load Charges		1-Mar-11				31-Mar-12				31-Mar-13			
		Quantity (Q) (kw)	Price (P) gross	Revenue (Q x P)	net PPD	Quantity (Q) (kw)	Price (P) gross	Revenue (Q x P)	net PPD	Quantity (Q) (kw)	Price (P) gross	Revenue (Q x P)	net PPD
<b>Standard</b>	<b>Code</b>												
Hangatiki	FPHT	23,928	21.71	\$ 5,161,027	234.47	260.52	\$ 5,610,277	234.47	22.55	270.60	\$ 5,827,349	243.54	
National Park	FPNP	3,496	24.91	\$ 86,372	269.03	298.92	\$ 940,487	269.03	26.39	316.68	\$ 996,365	285.01	
Ohakune	FPOL	5,801	18.71	\$ 108,581	224.52	224.52	\$ 1,172,168	202.07	19.73	236.76	\$ 1,236,070	213.08	
Ongarue	FPON	11,057	23.54	\$ 260,248	254.23	282.48	\$ 2,810,972	254.23	24.18	290.16	\$ 2,887,396	261.14	
Turangi	FPTR	10,201	21.39	\$ 218,168	231.01	256.68	\$ 2,356,520	231.01	20.68	248.16	\$ 2,278,300	223.34	
Whakamaru	FPWK	8,843	23.45	\$ 207,245	253.26	281.40	\$ 2,239,581	253.26	23.60	283.20	\$ 2,253,906	254.88	
<b>Low User</b>													
Urban (High Density Low Voltage)		2,345	28.23	\$ 66,181	304.88	338.76	\$ 715,096	304.88	29.11	349.32	\$ 737,388	314.39	
Hangatiki	FPHTL	82	33.06	\$ 2,721	357.05	396.72	\$ 29,110	357.05	34.64	415.68	\$ 30,501	374.11	
National Park	FPNPL	309	25.22	\$ 7,800	272.38	302.64	\$ 84,175	272.38	26.33	315.96	\$ 87,880	284.36	
Ohakune	FPOLK	1,393	30.06	\$ 41,840	324.65	360.72	\$ 452,374	324.65	30.77	369.24	\$ 463,059	332.32	
Ongarue	FPONL	1,172	27.91	\$ 32,700	301.43	334.92	\$ 353,237	301.43	27.28	327.36	\$ 345,264	294.62	
Turangi	FPTRL	329	29.97	\$ 9,860	323.68	359.64	\$ 106,583	323.68	30.17	362.04	\$ 107,295	325.84	
Whakamaru	FPWKL												
Urban (High Density High Voltage)		248	23.87	\$ 5,898	257.80	286.44	\$ 63,853	257.80	24.72	296.64	\$ 66,127	266.98	
Hangatiki	FPHTLUT	19	27.85	\$ 529	300.78	334.20	\$ 5,688	300.78	29.35	352.20	\$ 5,994	316.98	
National Park	FPNPLUT	40	20.87	\$ 835	225.40	250.44	\$ 9,117	225.40	21.92	262.98	\$ 9,574	236.69	
Ohakune	FPOLUT	137	25.71	\$ 3,543	277.67	308.52	\$ 38,018	277.67	26.36	316.32	\$ 38,979	284.69	
Ongarue	FPONLUT	16	23.55	\$ 377	254.34	282.60	\$ 4,158	254.34	22.86	274.32	\$ 4,037	246.89	
Turangi	FPTRLUT	13	25.61	\$ 333	276.59	307.32	\$ 3,463	276.59	25.78	309.36	\$ 3,486	278.42	
Whakamaru	FPWKLUT												
Rural (Low Density Low Voltage)		3	35.82	\$ 107	386.86	429.84	\$ 1,342	386.86	36.76	441.12	\$ 1,378	397.01	
Hangatiki	FPHTLR	0	37.82	\$ 0	408.46	453.84	\$ 0	408.46	39.44	473.28	\$ 0	425.95	
National Park	FPNPLR	0	29.18	\$ 0	315.14	350.16	\$ 0	315.14	30.33	363.96	\$ 0	327.56	
Ohakune	FPOLR	10	37.65	\$ 377	406.62	451.80	\$ 4,054	406.62	38.46	461.52	\$ 4,141	415.37	
Ongarue	FPONLR	0	35.50	\$ 0	383.40	426.00	\$ 0	383.40	34.96	419.52	\$ 0	377.57	
Turangi	FPTRLR	4	36.35	\$ 146	392.58	436.20	\$ 1,590	392.58	36.60	439.20	\$ 1,601	395.28	
Whakamaru	FPWKLRL												
Rural (Low Density High Voltage)		14	27.53	\$ 387	297.32	330.36	\$ 4,023	297.32	28.41	340.92	\$ 4,151	306.83	
Hangatiki	FPHTLRT	3	30.15	\$ 90	325.62	361.80	\$ 1,006	325.62	31.69	380.28	\$ 1,058	342.25	
National Park	FPNPLRT	7	22.81	\$ 159	246.35	273.72	\$ 1,937	246.35	23.88	286.56	\$ 1,999	257.90	
Ohakune	FPOLRT	0	29.36	\$ 0	317.09	352.32	\$ 0	317.09	30.07	360.84	\$ 0	324.76	
Ongarue	FPONLRT	0	27.21	\$ 0	293.87	326.52	\$ 0	293.87	26.57	318.84	\$ 0	286.96	
Turangi	FPTRLRT	9	28.69	\$ 258	309.85	344.28	\$ 2,776	309.85	28.88	346.56	\$ 2,795	311.90	
Whakamaru	FPWKLRT												
<b>Totals</b>		<b>69,479</b>		<b>\$ 1,701,039</b>			<b>\$ 17,012,039</b>				<b>\$ 17,396,519</b>		

Dedicated Transformer Charges		1-Mar-11			31-Mar-12			31-Mar-13		
		Quantity (Q)	Price (P)		Price (P)		Price (P)			
Transformer Size (kVA)			monthly (disclosed)	gross	monthly (disclosed)	gross	monthly (disclosed)	gross	net PPD	Revenue (Q x P)
1,500	0	399.80	4,798	4,318	409.80	4,918	4,426			\$ -
1,250	0	355.13	4,262	3,835	364.01	4,368	3,931			\$ -
1,000	2	336.13	4,034	3,630	344.53	4,134	3,721			\$ 7,442
750	5	298.14	3,578	3,220	305.59	3,667	3,300			\$ 16,502
500	11	248.36	2,980	2,682	254.57	3,055	2,749			\$ 30,243
300	15	212.12	2,545	2,291	217.42	2,609	2,348			\$ 35,222
200	27	175.76	2,109	1,898	180.15	2,162	1,946			\$ 52,532
100	42	101.98	1,224	1,101	104.53	1,254	1,129			\$ 47,415
75	79	91.24	1,095	985	93.52	1,122	1,010			\$ 79,791
50	181	74.79	897	808	76.66	920	828			\$ 149,855
30	202	67.49	810	729	69.18	830	747			\$ 150,923
15	1,592	50.96	612	550	52.23	627	564			\$ 898,022
10	885	37.20	446	402	38.13	458	412			\$ 364,447
5	2,916	22.42	269	242	22.98	276	248			\$ 723,705
<b>Totals</b>		<b>5,957</b>								<b>\$ 2,493,832</b>
										<b>\$ 2,556,097</b>



<b>Relay Fees</b>	<b>1-Mar-11</b>	<b>31-Mar-12</b>		<b>31-Mar-13</b>		<b>Revenue (Q xP)</b>
	<b>Quantity (Q)</b>	<b>Price (P)</b> <i>monthly (disclosed)</i>	<b>Price (P)</b> <i>gross</i>	<b>Price (P)</b> <i>gross</i>	<b>Price (P)</b> <i>gross</i>	<b>Revenue (Q xP)</b>
Relay Charge	17,157	1.54	18.48	16.63	18.96	\$ 292,767
				<i>net PPD</i>	<i>net PPD</i>	
				1.58	17.06	
<b>Totals</b>	<b>17,157</b>					<b>\$ 285,355</b>
						<b>\$ 292,767</b>

Streetlights	1-Mar-11	31-Mar-12		31-Mar-13			
	<u>Quantity (Q)</u>	<u>Price (P)</u>		<u>Revenue (Q x P)</u>			
		<u>gross</u>	<u>net PPD</u>		<u>gross</u>	<u>net PPD</u>	
<b>Assets</b>				\$ 451,287		\$ 462,569	
<b>Mounting Service</b>							
Taupo	0	49.20	44.28	\$ -	50.43	45.39	\$ -
Ruapehu	959	51.25	46.13	\$ 44,234	52.53	47.28	\$ 45,340
Waitomo	553	41.00	36.90	\$ 20,406	42.03	37.82	\$ 20,916
Otorohanga	313	51.25	46.13	\$ 14,437	52.53	47.28	\$ 14,798
<b>Network - Streetlights kW</b>							
Taupo	76.50	97.13	87.42	\$ 6,687	99.56	89.60	\$ 6,854
Ruapehu	165	57.25	51.52	\$ 8,501	58.68	52.81	\$ 8,714
Waitomo	111	98.53	88.68	\$ 9,843	101.00	90.90	\$ 10,090
Otorohanga	65.85	98.53	88.68	\$ 5,840	101.00	90.90	\$ 5,986
Under Veranda kW	10.67	66.08	59.47	\$ 635	67.73	60.96	\$ 650
<b>Transmission Demand kW</b>							
Taupo	76.50	37.26	33.53	\$ 2,565	38.19	34.37	\$ 2,629
Ruapehu	165	54.29	48.86	\$ 8,063	55.65	50.09	\$ 8,264
Waitomo	111	46.10	41.49	\$ 4,606	47.26	42.53	\$ 4,721
Otorohanga	65.85	46.10	41.49	\$ 2,732	47.26	42.53	\$ 2,801
Under Veranda kW	10.67	63.40	57.06	\$ 609	64.98	58.48	\$ 624
<b>Transmission Connection kW</b>							
Taupo	76.50	27.43	24.69	\$ 1,888	28.11	25.30	\$ 1,936
Ruapehu	165	12.02	10.82	\$ 1,785	12.32	11.09	\$ 1,830
Waitomo	111	19.28	17.35	\$ 1,926	19.76	17.79	\$ 1,974
Otorohanga	65.85	19.28	17.35	\$ 1,143	19.76	17.79	\$ 1,171
<b>Load Plant Operation (Load Shifting)</b>					-		
Taupo	1460	2.56	2.31	\$ 3,367	2.63	2.36	\$ 3,451
Ruapehu	2190	2.56	2.31	\$ 5,051	2.63	2.36	\$ 5,177
Waitomo	1460	2.56	2.31	\$ 3,367	2.63	2.36	\$ 3,451
Otorohanga	730	2.56	2.31	\$ 1,684	2.63	2.36	\$ 1,726
Private light residual	400	3.13	2.82	\$ 1,128	3.21	2.89	\$ 1,157
<b>Totals</b>				<u>\$ 601,784</u>			<u>\$ 616,829</u>
<b>Split</b>							
Streetlighting				\$ 587,187			\$ 601,867
Load Shifting				\$ 14,597			\$ 14,962
				<u>\$ 601,784</u>			<u>\$ 616,829</u>

Connections		31-Mar-11	31-Mar-12		31-Mar-13	
		Quantity (Q)	Price (P) <i>gross</i>	Revenue (Q x P)	Price (P) <i>gross</i>	Revenue (Q x P)
<b>Urban</b>						
1A	<b>Disconnection/Reconnection:</b> requested by 2:00pm and executed next working day by 4:30pm	2,605	45.00	\$ 117,225	45.00	\$ 117,225
2A	<b>Reconnection:</b> requested after 2:00pm executed next working day by 4:30pm	70	50.63	\$ 3,544	50.63	\$ 3,544
3A	<b>Disconnection/Reconnection :</b> Requested for same working day before 3:00pm and executed that day	558	67.50	\$ 37,665	67.50	\$ 37,665
4A	<b>Reconnection:</b> from 3:00pm onwards. on any given weekday, weekend or public holiday before 10pm	148	112.50	\$ 16,650	112.50	\$ 16,650
5A	<b>Reconnection :</b> from 10:00pm requested for completion after 10pm on any given day including public holidays	1	225.00	\$ 225	225.00	\$ 225
7A	<b>Late cancellation fee:</b> Charged if payment is not received until after 2.00pm the day before disconnection or the site has been processed for disconnection (includes the day of disconnection)	-178	35.00	\$ (6,230)	35.00	\$ (6,230)
<b>Rural</b>						
1B	<b>Disconnection/Reconnection:</b> requested by 2:00pm and executed next working day by 4:30pm	1,035	56.25	\$ 58,219	56.25	\$ 58,219
2B	<b>Reconnection :</b> requested after 2:00pm executed next working day by 4:30pm	18	61.88	\$ 1,114	61.88	\$ 1,114
3B	<b>Disconnection/Reconnection :</b> Requested for same working day before 3:00pm and executed that day	166	78.75	\$ 13,073	78.75	\$ 13,073
4B	<b>Reconnection:</b> from 3:00pm onwards. on any given weekday, weekend or public holiday before 10pm	54	168.75	\$ 9,113	168.75	\$ 9,113
5B	<b>Reconnection:</b> from 10:00pm requested for completion after 10pm on any given day including public holidays	0	281.25	\$ -	281.25	\$ -
7B	<b>Late cancellation fee:</b> Charged if payment is not received until after 2.00pm the day before disconnection or the site has been processed for disconnection (includes the day of disconnection)	0	46.25	\$ -	46.25	\$ -
<b>Remote</b>						
1C	<b>Disconnection/Reconnection:</b> requested by 2:00pm and executed next working day by 4:30pm	884	168.75	\$ 149,175	168.75	\$ 149,175
2C	<b>Reconnection:</b> requested after 2:00pm executed next working day by 4:30pm	18	196.88	\$ 3,544	196.88	\$ 3,544
3C	<b>Disconnection/Reconnection :</b> Requested for same working day before 3:00pm and executed that day	129	253.13	\$ 32,654	253.13	\$ 32,654
4C	<b>Reconnection:</b> from 3:00pm onwards. on any given weekday, weekend or public holiday before 10pm	42	337.50	\$ 14,175	337.50	\$ 14,175
5C	<b>Reconnection :</b> from 10:00pm requested for completion after 10pm on any given day including public holidays	0	506.25	\$ -	506.25	\$ -
7C	<b>Late cancellation fee:</b> Charged if payment is not received until after 2.00pm the day before disconnection or the site has been processed for disconnection (includes the day of disconnection)	0	158.75	\$ -	158.75	\$ -
				<b>\$ 450,144</b>	<b>\$ 450,144</b>	

Generators	31-Mar-11			31-Mar-12			31-Mar-13		
	Quantity (Q)	Price (P) monthly (disclosed)	Price (P) gross	Revenue (Q x P) net PPD	Revenue (Q x P) gross	Price (P) monthly (disclosed)	Price (P) gross	Revenue (Q x P) net PPD	Revenue (Q x P) gross
Generation Common Cost Charge	14,000	3.65	3.65	3.28	\$ 45,920	3.74	3.74	3.37	\$ 47,180
Transpower Connection									
Ongarue	1	24,135			\$ 24,135		31,995		\$ 31,995
Tokaanu	1	34,966			\$ 34,966		27,203		\$ 27,203
Injection									
33kV	12,500	19.93	19.93	17.94	\$ 224,250	20.43	20.43	18.39	\$ 229,875
11kV	1,500	29.69	29.69	26.72	\$ 40,080	30.43	30.43	27.39	\$ 41,085
Load									
Hangatiki 33kV									
Connection	200	17.66	17.66	15.89	\$ 3,178	18.58	18.58	16.72	\$ 3,344
Demand	200	49.55	49.55	44.60	\$ 8,920	58.08	58.08	52.27	\$ 10,454
Network	200	98.51	98.51	88.66	\$ 17,732	100.97	100.97	90.87	\$ 18,174
National Park 11kV									
Connection	200	38.48	38.48	36.71	\$ 7,342	42.17	42.17	37.95	\$ 7,590
Demand	200	57.38	57.38	51.64	\$ 10,328	67.95	67.95	61.16	\$ 12,232
Network	200	143.60	143.60	129.24	\$ 25,848	147.19	147.19	132.47	\$ 26,494
<b>Totals</b>					<b>\$ 442,699</b>				<b>\$ 455,626</b>

## Appendix C – Pass Through Costs (Clause 11.1(b)(ii))

### Commerce Act (Electricity Distribution Default Price-Quality Path) Pass Through Costs for the Assessment Date 31 March 2013

Pass Through Costs for year ending March 2013				
K <sub>2013</sub>	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transmission	4,790,939	4,969,176	(178,237)	(3.7%)
Avoided Transmission	1,200,036	845,040	354,996	29.6%
Rates	147,541	115,260	32,281	21.9%
Electricity Authority Levies	45,180	65,004	(19,824)	(43.9%)
Commerce Act Levies	67,280	48,996	18,284	27.2%
Total Pass Through Costs	6,250,975	6,043,476	207,499	3.3%

Avoided transmission costs exceeded forecast due to the inclusion in 2013 of \$127,000 which relates to the year ending March 2012. This amount was identified and paid in July 2012, hence was not adequately included in developing the March 2013 forecast.

In addition, avoided transmission cost quantities were updated subsequent to the March 2013 forecast; hence the March 2013 forecast was undervalued.

## Appendix D – Quality Standard Compliance Calculations (Clause 11.1(b)(iv))

### Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010

#### Assessment Against the Quality Standards for the Assessment Date 31 March 2013

#### Reliability Data (Before Normalisation)

Year	SAIDI (Interruption Duration)			SAIFI (Interruption Frequency)		
	Class B	Class C	Total	Class B	Class C	Total
2005	92.61	171.93	264.54	0.50	2.97	3.47
2006	97.51	180.01	277.52	0.60	3.16	3.76
2007	101.24	232.60	333.84	0.52	2.73	3.25
2008	81.34	165.38	246.72	0.34	2.57	2.91
2009	57.71	237.41	295.12	0.81	3.88	4.69
	Reference Period Total SAIDI		<b>1,417.74</b>	Reference Period Total SAIFI		<b>18.08</b>
	Reference Period Average SAIDI		<b>283.55</b>	Reference Period Average SAIFI		<b>3.62</b>
2011	63.58	228.85	292.43	0.48	2.99	3.47
2012	71.70	252.83	324.53	0.51	3.48	3.99
2013	83.01	116.55	199.57	0.54	1.78	2.32

#### Reliability Limit Calculations (using Reference Period Dataset)

<b>SAIDI Boundary Calculations</b>		
$\alpha_{SAIDI}$	-1.2985	The average of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$\beta_{SAIDI}$	1.7497	The standard deviation of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5 \cdot \beta_{SAIDI})}$	21.6659	SAIDI Boundary Value

<b>SAIFI Boundary Calculations</b>		
$\alpha_{SAIFI}$	-5.7677	The average of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$\beta_{SAIFI}$	1.7797	The standard deviation of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5 \cdot \beta_{SAIFI})}$	0.2676	SAIFI Boundary Value

**Event Days exceeding SAIDI Boundary Value within the Reference Dataset**

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
12-Aug-04	24.1446	0.0331	21.6659	0.0331
24-Mar-06	28.4171	0.0572	21.6659	0.0572
12-Jun-06	75.9652	0.1585	21.6659	0.1585
14-Mar-07	24.6937	0.2821	21.6659	0.2676
26-Jul-08	38.9216	0.2352	21.6659	0.2352
			-	-
			-	-
			-	-
			-	-
			-	-

**SAIDI Limit**

$\mu_{SAIDI}$	270.1898	The average annual SAIDI Value in the Normalised Reference Dataset
$\sigma_{SAIDI}$	37.5023	The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIDI_{Limit} = \mu_{SAIDI} + \sigma_{SAIDI}$	307.69	SAIDI Limit Value
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**SAIFI Limit**

$\mu_{SAIFI}$	3.6722	The average annual SAIFI Value in the Normalised Reference Dataset
$\sigma_{SAIFI}$	0.4825	The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIFI_{Limit} = \mu_{SAIFI} + \sigma_{SAIFI}$	4.15	SAIFI Limit Value
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**Reliability Assessment Calculations (2013 Assessment Period)**

**Event Days exceeding SAIDI Boundary Value within the 2013 Assessment Dataset**

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
none			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

<b>Assessed SAIDI Value 2013</b>		
SAIDI <sub>2013</sub>	199.57	The sum of daily SAIDI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset

<b>Assessed SAIFI Value 2013</b>		
SAIFI <sub>2013</sub>	2.32	The sum of daily SAIFI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset

#### **Prior Period Assessed Values**

<b>Assessed SAIDI Value 2012</b>		
SAIDI <sub>2012</sub>	311.8821	The sum of daily SAIDI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset

<b>Assessed SAIFI Value 2012</b>		
SAIFI <sub>2012</sub>	3.9870	The sum of daily SAIFI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset

<b>Assessed SAIDI Value 2011</b>		
SAIDI <sub>2011</sub>	260.3500	The sum of daily SAIDI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset

<b>Assessed SAIFI Value 2011</b>		
SAIFI <sub>2011</sub>	3.4740	The sum of daily SAIFI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset

In 2013, The Lines Company's SAIDI and SAIFI assessed values were below the SAIDI and SAIFI limits. This means that The Lines Company has complied with the Quality Standards in 2013.

In 2012, The Lines Company's SAIDI assessed value exceeded its SAIDI limit value. This was not a breach of the DPP quality standard, as The Lines Company complied with both its SAIDI and SAIFI limits in the 2011 assessment period.

The reason The Lines Company's SAIDI assessed value exceeded its SAIDI limit value in 2012 was primarily due to an increase in unplanned interruptions. These unplanned interruptions had 2 principle drivers:

1. Additional data and the effect of this was highlighted upon comparison of the 2009/10 to the 2010/11 unplanned result;
2. Storm events, principally, the effect of the wind that occurred in March 2012. That resulted in plantation trees destroying 4 sections of line on the Central Plateau.



## **Appendix E – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.1(b)(v))**

TLC uses the BASIX computer programme which has a connectivity model for outage and performance recording and reporting. This includes SAIDI and SAIFI reports. The module connects various assets together and then runs a calculation that produces the regulatory performance indications. Customer numbers are transferred automatically from the billing system on a regular basis. The use of BASIX outage calculator has allowed TLC to collect more accurate outage data.

TLC has taken a conservative approach and where uncertain, has chosen to include rather than exclude events. This same approach has been undertaken historically, although over time the processes for recording outages have improved as intellectual understanding and systems have been developed. Listed below is more explanation regarding the judgements which have been made.

1. Single 11kV fuse operations (often supplying individual customers) have been included. These faults are often caused by low voltage events (faults not being cleared by LV fusing or no existing LV fuses) that force the 11kV fuse/s to operate. These have been included in the first DPP assessment (for 2010/11) and all subsequent DPP assessments. However they were not all included in the reference period used to set the DPP limits (2004-2009). The principle reason for improved reporting since the reference set was created has been an increased focus on the quality of faultman reports into the control room for hazard control reasons.
2. Single phase HV outages have been included; given customers will experience low voltage during these events that would generally not allow their equipment to operate. The causes of these faults vary widely and often the effects are widespread. Individual customer loadings at the time and the sizes of the distribution transformers in the areas affected will often impact on the voltages individual customers see. Determining the voltages individual ICP's will see is not possible at this time with the modelling tools available. All single phase HV outages have been included in the first DPP assessment (for 2010/11) and all subsequent DPP assessment. However they were not all included in the reference period used to set the DPP limits (2004-2009). TLC continues to operate a policy of capturing small events. The times recorded for these are improving in accuracy with better hazard control reporting as described previously.
3. Included in the calculation are outages which have been requested by customers that result in network isolations. These have been included in the first DPP assessment (for 2011/12) and all subsequent DPP assessment. However they were not all included in the reference period used to set the DPP limits (2004-2009). For example, faultman and inspectors often isolated sites with less than two customers and did not disclose this to the control room during the 2004 to 2009 period.
4. The time of a recorded circuit breaker tripping or the initial customer call to TLC call centre is taken as the time a fault occurred. The SCADA stamping of the tripping or the time the customer call was taken is used for the outage calculations. During the assessment period (2004-2009), contract call centres were used for

receiving after-hours calls. Due to customer requests, this function was taken back in-house during 2009. The main driver for the change was poor customer service - primarily the delay that came about in passing the calls onto TLC staff to attend faults. The quality of data as to when the first call was received was poor. This resulted in many outages during the assessment period being physically longer but recorded shorter than they actually were. An implication of this process change since 2009 is more accurate data, capturing the start time of the smaller events more precisely. This in turn adds additional time to many of the events since 2009 and as such further distorts comparisons with the assessment limit values.

5. The evolution of electricity sector legislation over time defines the sections of line which are customer and network owned. The boundary between customer ownership and network ownership is not consistent between network companies, and has been rolled forward in legislation in a way that adds complexity with many “shades of grey”. TLC’s terms and conditions of supply define the ‘Point of Connection’ that emanates from this legislation evolution. The implication is that customers are responsible for long lengths of HV lines that are often directly connected to TLC’s lines and when these lines fault, they cause network outages. The cause of many faults from the control room and faultman's perspective is often unknown. Segregating between interruption classes therefore is often subjective. TLC has managed this uncertainty by including all such outages in Class C data. All of these types of events were included in the first DPP assessment (for 2010/11 and all subsequent DPP assessments. However they were not all included in the reference period used to set the DPP limits (2004–2009).

There was a legacy practice within TLC to reclose HV fuses and reclosers/sectionalisers in remote locations without informing the control room. This practice was officially stopped at the beginning of 2004, but because of unofficial legacy tendencies, it was not fully complied with until 2009. The effect of this is that the results shown for the 2004 – 2009 period did not include events that since 2010 have been included in detail.

6. Quantifying the effects of 1 to 5 above, and excluding them from the comparison of 2004 to 2009 data with that from 2010 to present, is not possible. Some analysis can be done, but any adjustment of either the 2004 to 2009 data or the annual 2010/11 to 2012/13 data would be very subjective. As a consequence, TLC has not made any adjustments.
7. TLC deals directly with its customers and landowners. As a consequence, it maintains both a detailed customer and landowner database for the purpose of sending accounts. The charge structure includes dedicated asset charges (mostly for dedicated transformers and earthing systems). An implication of the dedicated asset charge is that TLC must maintain an accurate and detailed knowledge of the ICP connected to specific transformers. This has resulted in TLC having the information and data to use monthly customer numbers for the calculation of SAIDI and SAIFI. The system uses these figures, and then sums the monthly results to produce annual figures. This produces more accurate month to month results than an annual, beginning and end of year, average.