

**COMMERCE COMMISSION**

**Regulation of Electricity Lines Businesses**

**Price-Quality Regulation**

**Reasons for Not Declaring Control**

**of the following Non-exempt Electricity Distribution Businesses:**

**Alpine Energy Limited, Centralines Limited, Eastland Network Limited, Horizon Energy Distribution Limited, Nelson Electricity Limited, Network Tasman Limited, Orion New Zealand Limited, OtagoNet Joint Venture, Powerco Limited, The Lines Company Limited, Top Energy Limited and Wellington Electricity Lines Limited**

**1 April 2011**



**COMMERCE COMMISSION**

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# INTRODUCTION

## Purpose and Scope

- 1 The purpose of this paper is to set out the reasons of the Commerce Commission (Commission) for not declaring control of the electricity lines services supplied by: Alpine Energy Limited, Centralines Limited, Eastland Network Limited, Horizon Energy Distribution Limited, Nelson Electricity Limited, Network Tasman Limited, Orion New Zealand Limited, OtagoNet Joint Venture, Powerco Limited, The Lines Company Limited, Top Energy Limited and Wellington Electricity Lines Limited. The breaches of the default price-quality path (DPP) by these suppliers of non-exempt electricity lines services (non-exempt EDBs) occurred in the assessment period ended 31 March 2010.

## Electricity Distribution Businesses Assessed

- 2 The Commission has assessed the 12 non-exempt EDBs identified in paragraph 1 against the DPP applying from 1 April 2009 to 31 March 2010 (2009/10 assessment period).<sup>1</sup> The results of the assessment are summarised below:

**Table 1: Breaches at the 31 March 2010 assessment date**

Non-exempt EDB	2009/10	
	Price	Quality
Alpine Energy Limited		Breach
Centralines Limited	Breach	
Eastland Network Limited	Breach	
Horizon Energy Distribution Limited	Breach	Breach
Nelson Electricity Limited	Breach	Breach
Network Tasman Limited		Breach
Orion New Zealand Limited	Breach	
OtagoNet Joint Venture	Breach	Breach
Powerco Limited		Breach
The Lines Company Limited	Breach	
Top Energy Limited	Breach	
Wellington Electricity Lines Limited	Breach	Breach

- 3 This paper contains the processes and analytical framework applied by the Commission for the 2009/10 assessment period as well as the Commission's reasons for not declaring control of the electricity distribution services supplied by these 12 non-exempt EDBs for breaches occurring during the 2009/10 assessment period.
- 4 The Commission's assessment of the individual non-exempt EDBs' respective breaches of the DPP, and its reasons for not declaring control, are set out for each non-exempt EDB from page 14, Decisions – Non-exempt Electricity Distribution Businesses.

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<sup>1</sup> The following five EDBs were found not to have breached the DPP during the 2009/10 assessment period: Aurora Energy Limited; Electricity Ashburton Limited; Electricity Invercargill Limited; Unison Networks Limited and Vector Limited.

## Statutory Framework

- 5 Part 4 of the Commerce Act 1986 (the Act) provides that all suppliers of electricity lines services (other than those supplied by Transpower New Zealand Limited) are subject to default/customised price-quality regulation unless they are exempt.<sup>2</sup>
- 6 Section 54J(2)(a) of the Act provides that on and after 1 April 2009, the thresholds for large electricity lines businesses that expired on 31 March 2009 are deemed to be s 52P determinations that apply those thresholds to each non-exempt supplier as if the thresholds were the DPP.
- 7 The Commission reset the thresholds under the now repealed Part 4A of the Act for all electricity distribution businesses for a five-year regulatory period from 1 April 2004. These reset thresholds were set by the *Commerce Act (Electricity Distribution Thresholds) Notice 2004* (the principal notice) published as a Supplement to the *New Zealand Gazette*, 31 March 2004, No. 37, page 927. In respect of non-exempt EDBs the application of the principal notice was extended for the 2009/10 assessment period.<sup>3</sup>
- 8 Section 54N of the Act provides for the transition from the Part 4A targeted control regime to price-quality regulation under Part 4. Part 4A continues to apply in connection with breaches of the DPP that occur before 1 April 2010. The Commission may take action in relation to a breach as if the Commerce Amendment Act 2008 (which repeals Part 4A) had not been enacted, except that the purpose in s 52A must be taken to be the purpose of Part 4A.<sup>4</sup>
- 9 In respect of such a breach, the Commission may publish a notice of intention to declare control under Part 4A at any time before the expiry of 12 months after the end of the financial year in which the breach occurs.<sup>5</sup>
- 10 With respect to breaches identified at the 2009/10 assessment date, the Commission therefore has up to 31 March 2011 to publish an intention to declare control if necessary.
- 11 If the Commission publishes a notice of intention to declare control it has 12 months from the date on which it published the notice to make a control declaration or enter into an administrative settlement.<sup>6</sup>

### *Consumer-owned*

- 12 The Commission outlined the requirements for determining consumer-owned status for the period 1 April 2009 to 31 March 2010 in its paper *Treatment of Consumer-owned Electricity Distribution Businesses under the Initial Default Price-Quality Path – updated October 2009*, 16 October 2009.

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<sup>2</sup> See paragraph 13 for a list of exempt suppliers.

<sup>3</sup> *New Zealand Gazette, Commerce Act (Electricity Distribution Thresholds) Amendment Notice 2009*, 27 March 2009, No. 40, page 1029.

<sup>4</sup> Section 54N(4) of the Act.

<sup>5</sup> Section 54N(2)(b) of the Act.

<sup>6</sup> Section 54N(3) of the Act.

- 13 The following electricity distribution businesses (EDBs) were listed on the Commission's website as exempt from price-quality regulation for the period 1 April 2009 to 31 March 2010:<sup>7</sup>
- Buller Electricity Limited
  - Counties Power Limited
  - Electra Limited
  - Mainpower New Zealand Limited
  - Marlborough Lines Limited
  - Network Waitaki Limited
  - Northpower Limited
  - Scanpower Limited
  - The Power Company Limited
  - Waipa Networks Limited
  - WEL Networks Limited
  - Westpower Limited
- 14 All EDBs, irrespective of their status, are subject to information disclosure regulation. This requires the public disclosure of financial, pricing and reliability metrics, which the Commission (and interested persons, especially consumers) can use to assess an EDB's performance.

### **Process and Analytical Framework Applied**

- 15 The Act does not specify a process or analytical framework for the Commission to follow when identifying and assessing breaches of the DPP during the 2009/10 assessment period.
- 16 Section 54N(5) provides that the Commission may, but need not, apply input methodologies (IMs) in reaching a decision as to the appropriate action to take following a breach of the DPP. The Commission has taken IMs into account, to the extent practicable given available information, when assessing non-exempt EDB performance against the DPP.
- 17 Given the transitional nature of the 2009/10 assessment period the Commission has also taken into consideration the process and analytical framework applied under the targeted control regime when assessing EDBs' performance.
- 18 The Commission used its *Regulation of Electricity Lines Businesses Targeted Control Regime Assessment and Inquiry Guidelines* (2004 Guidelines) during the targeted control regime to inform interested parties of the Commission's broad process and analytical framework for assessing compliance and to undertaking post-breach inquiries under the targeted control regime.
- 19 The process for making decisions on declarations of control was set out in s 57H of Part 4A, as applied by s 54N, which provided that the Commission must:
- (a) assess large electricity lines businesses against the thresholds set under this subpart; and
  - (b) identify any large electricity lines business that breaches the thresholds; and
  - (c) determine whether or not to declare all or any of the goods or services supplied by all or any of the identified large electricity lines businesses to be controlled, taking into account the purpose of this subpart; and
  - (d) in respect of each identified large electricity lines business,—
    - (i) make a control declaration; or

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<sup>7</sup> This list is for information purposes only and has no legal effect.

- (ii) publish the reasons for not making a control declaration in the *New Zealand Gazette*, on the Internet, and in any other manner (if any) that the Commission considers appropriate.<sup>8</sup>

20 It follows that this combined process and analytical framework results in an approach that differs, in part, to that undertaken under the targeted control regime. The following paragraphs describe the process and analytical framework applied by the Commission for breaches of the DPP during the 2009/10 assessment period.

## Overview of the 2009/10 Assessment

### *Breaches of the Price Path*

- 21 Each non-exempt EDB is required to provide to the Commission a self-assessment against the DPP. Non-exempt EDBs must provide a written statement that confirms compliance or otherwise, with the DPP including all such information as is sufficient to enable the Commission to properly determine whether or not the DPP has been breached (compliance statement).<sup>9</sup>
- 22 The price path threshold is in the form of a CPI-X mechanism, which allows the non-exempt EDBs to raise prices by CPI less an efficiency factor, which is referred to as the X-factor. Compliance with the price path threshold is assessed by a notional revenue formula whereby the notional revenue is not to be greater than allowable notional revenue at the assessment date.
- 23 It is important to note that the thresholds only acted as screening mechanisms to identify whether the Commission could look more closely at an individual business's performance. Therefore, for the purpose of assessing non-exempt EDB performance, a breach of the price path during the 2009/10 assessment period does not necessarily provide an indication of whether a non-exempt EDB has extracted excessive profits (i.e. above normal returns) from consumers (refer s 52A(1)(d) of the Act).
- 24 Regulators face a challenge when estimating returns for regulated suppliers with natural monopoly characteristics, because the assessment will typically be over a time period shorter than the economic lifetimes of the assets utilised to supply regulated services. Different time profiles for capital cost recovery and for the recovery of tax costs imply significantly different revenue (and price) paths over time that are consistent with earning normal returns. Above-normal returns, however, can potentially be identified where a non-exempt EDB's disclosed annual return on investment (ROI) consistently exceeds the regulatory weighted average cost of capital (WACC) over time, and where high profits are not explained by superior performance.
- 25 The existing information disclosure requirements for EDBs, which were published in 2008, require each EDB to calculate and disclose its post-tax ROI annually.<sup>10</sup> Disclosed

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<sup>8</sup> Before making a declaration of control, the Commission is required under s 57I(1) of Part 4A (repealed) as applied by s 54N, to:

- (a) publish its intention to make a declaration and invite interested persons to give their views on the matter; and
- (b) give a reasonable opportunity to interested persons to give those views; and
- (c) have regard to those views.

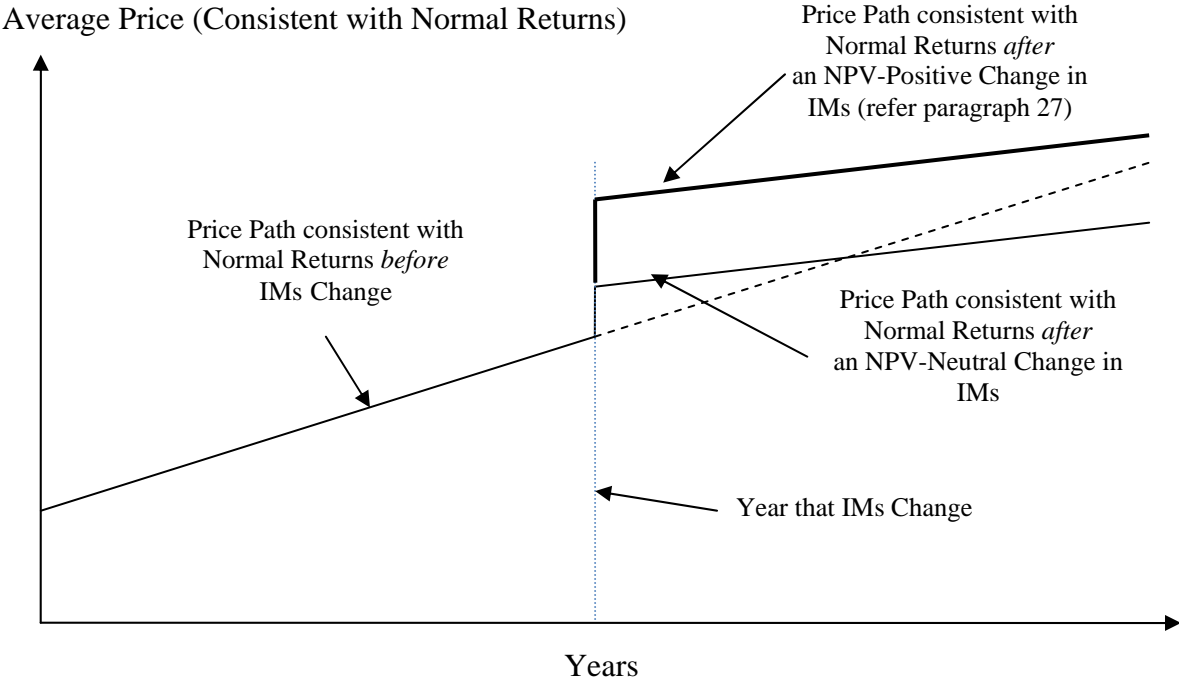
<sup>9</sup> The principal notice, at page 939.

<sup>10</sup> Commerce Commission, *Electricity Distribution (Information Disclosure) Requirements*, 31 October 2008 (2008 information disclosure requirements).

ROIs are calculated on the basis of implicit input methodologies rather than the IMs set out in the EDB IMs Determination.<sup>11</sup> The Commission is yet to consult on the information disclosure requirements for electricity lines services under Part 4 which will apply the IMs, or to consult on an appropriate annual ROI indicator for EDBs as part of that determination. The key ‘inputs’ to any ROI calculation under information disclosure have, however, been set out in the EDB IMs Determination.

- 26 The IMs differ from the implicit input methodologies under the existing information disclosure requirements, particularly in respect of the underlying assumptions about the time profile of capital cost recovery and tax cost recovery. For the same level of prices, an ROI calculated under the implicit input methodologies will differ from an ROI calculated based on the IMs (refer to Figure 1).
- 27 Where the changes to IMs are neutral in net present value (NPV) terms over time, a higher (or lower) level of prices will appear to be justified in the short to medium term. In the longer term, however, to ensure normal returns over time such higher (or lower) prices would need to be offset in the future by prices that are lower (or higher) than would otherwise have been the case under the previous implicit input methodologies. Although the time profile of cost recovery consistent with normal returns may justify a step change in prices, the prices before and after the change will both be consistent with earning normal returns over time.

**Figure 1: Effect on Prices Consistent with Normal Returns Due to a Change in IMs**



<sup>11</sup> Commerce Commission, *Commerce Act (Electricity Distributions Services Input Methodologies) Determination 2010*, Decision Number 710, 22 December 2010 (the Determination).

- 28 Table 2 below provides the disclosed ROI of eight non-exempt EDBs<sup>12</sup> that breached the price path under the following assumptions:
- disclosed 2009/10 ROIs under the existing information disclosure requirements, which are comparable to a post-tax WACC;
  - disclosed 2009/10 ROIs under the existing information disclosure requirements, adjusted to be consistent with a vanilla WACC (i.e., a ‘vanilla ROI’); and
  - estimated 2009/10 ROIs comparable with a vanilla WACC and applying the IMs, to the extent practicable given available information.
- 29 The disclosed ROIs for the eight non-exempt EDB for the year ended 31 March 2010 can be found in the first column of Table 2 below. These ROIs are disclosed on a post-tax basis. The Commission has also recalculated the disclosed ROIs on a vanilla ROI basis and compared them to the vanilla WACC, which under the IMs is the applicable WACC for any DPP starting price adjustments results are shown in the second column of Table 2 below.
- 30 When the disclosed ROI and the vanilla ROI results are compared against the corresponding WACC estimates applicable to electricity distribution services (7.60% on a post-tax WACC basis and 8.77% on a vanilla WACC basis), five of the eight breaching non-exempt EDBs have ROIs higher than the WACC (as is shown by the highlighted cells of Table 2 below).<sup>13</sup>

**Table 2: ROI of eight non-exempt EDBs that breached the price path during 2009/10**

Electricity Distribution Business	Disclosed ROI 2008 information disclosure requirements	Disclosed ROI comparable to a vanilla WACC	Estimated ROI comparable to a vanilla WACC & applying IMs
Centralines Limited	6.23%	6.89%	6.07%
Eastland Network Limited	8.16%	8.82%	8.17%
Horizon Energy Distribution Limited	9.44%	10.10%	9.66%
Nelson Electricity Limited	8.62%	9.28%	8.99%
Orion New Zealand Limited	8.60%	9.26%	8.35%
OtagoNet Joint Venture	9.40%	10.07%	8.77%
The Lines Company Limited	6.02%	6.69%	6.47%
Top Energy Limited	4.72%	5.38%	4.69%
<b>75<sup>th</sup> Percentile Post-Tax WACC</b>	<b>7.60%</b>		
<b>75<sup>th</sup> Percentile Vanilla WACC</b>		<b>8.77%</b>	<b>8.77%</b>

- 31 As noted earlier, the disclosed ROIs were calculated on the basis of the implicit input methodologies under the 2008 information disclosure requirements rather than the explicit IMs. The explicit IMs have resulted in a number of NPV-neutral changes to the

<sup>12</sup> Wellington Electricity Lines Limited breached the price path by \$141,244 (or 0.2%) . The Commission considered the company’s breach of the price path to be minor and accordingly decided that no further action would be taken.

<sup>13</sup> The 75th percentile estimate of **post-tax WACC** is applied in this context as an approximate comparison only. This WACC estimate was determined by the Commission on 3 March 2011 by the Determination. This WACC is determined to commence from the first day of disclosure year 2011 (i.e. **1 April 2010**). Therefore the disclosure year ROI and the WACC estimate are not perfectly aligned. To better align the point of comparison the Commission compared the vanilla ROI with the 75th percentile estimate of **vanilla WACC** under the Determination that applies from **1 September 2009**.



inputs of an annual ROI calculation, including applying a deferred tax approach rather than the tax payable approach under the existing information disclosure requirements, and treating capital contributions as an increment to the value of the regulatory asset base (RAB) rather than as income. Capital contributions are currently treated as income under the existing information disclosure requirements. Because these changes are NPV-neutral over time, prices that previously appeared to be generating above-normal returns in any particular year may now appear justified under the IMs.

- 32 The final column in Table 2 shows estimates of the disclosed vanilla ROIs adjusted for the change in tax approach and the change in treatment for capital contributions under the IMs. The vanilla ROIs adjusted for these IM changes are below the vanilla WACC estimate for six of the eight non-exempt EDBs (the two outliers are shown by the highlighted cells).
- 33 However, just because higher prices are now justified under the IMs, does not mean that a previous conclusion of above-normal returns was incorrect. It simply means that, going forward, a higher level of prices is justified in the short term. As explained above, and as illustrated in Figure 1 on page 7, such higher prices ought, however, to be offset in the future by prices that are lower than would otherwise have been the case under the implicit input methodologies. Nevertheless, the analysis indicates that, even if excessive profits were being extracted prior to the change in IMs, there may be little benefit in declaring control, given that the price levels previously interpreted as generating above-normal returns may now be justifiable under the IMs.
- 34 Apart from the material, but NPV-neutral, changes to tax treatment and the treatment of capital contributions, the Commission also considered the effect on the vanilla ROI results by applying 5%, 10% and 15% increases to the regulatory investment value (RIV). The disclosed RIV is the opening value of the RAB plus half the capital additions during the disclosure year, and is the denominator of the ROI calculation under the existing information disclosure requirements. This sensitivity analysis is intended to reflect the possible uplift in the RAB value due to allowed adjustments to non-exempt EDBs' disclosed 2004 optimised deprival value (ODV) under the new IMs. The actual magnitude of this adjustment is unknown at this stage.
- 35 Unlike the other changes to the IMs, the adjustments to the 2004 ODV which affect the RAB value are NPV-*positive* adjustments. Where NPV-positive changes occur, higher prices in the short term will not necessarily be offset by lower prices in the future (as is also illustrated in Figure 1 on page 7).

**Table 3: Estimated ROI after 5%, 10% and 15% increases in the RIV (without applying other IMs)**

<b>Electricity Distribution Business</b>	<b>Vanilla ROI with a 5% increase to RIV</b>	<b>Vanilla ROI with a 10% increase to RIV</b>	<b>Vanilla ROI with a 15% increase to RIV</b>
Centralines Limited	6.56%	6.26%	5.99%
Eastland Network Limited	8.15%	7.78%	7.44%
Horizon Energy Distribution Limited	9.62%	9.18%	8.79%
Nelson Electricity Limited	8.84%	8.44%	8.07%
Orion New Zealand Limited	8.96%	8.55%	8.18%
OtagoNet Joint Venture	9.59%	9.15%	8.75%
The Lines Company Limited	6.37%	6.08%	5.81%
Top Energy Limited	5.13%	4.89%	4.68%
<b>75<sup>th</sup> Percentile Vanilla WACC</b>	<b>8.77%</b>	<b>8.77%</b>	<b>8.77%</b>

- 36 First, the analysis adjusted disclosed vanilla ROIs for a higher RIV only, and not for the change in treatment of tax and for capital contributions. The analysis found that should the RIV increase by as little as 5%, four of the non-exempt EDBs' estimated ROI results exceed the WACC point estimate (refer to the highlighted cell in the first column in Table 3). Should the RIV increase be around 10%, two of the non-exempt EDBs' estimated ROI results would exceed the WACC estimate (refer to the highlighted cells in the second column of Table 3). However, should the RIV increase by as much as 15%, all but one of the non-exempt EDBs would be below the WACC estimate (refer to the third column in Table 3).
- 37 Second, the Commission considered the estimated ROI result by applying the change in IMs for tax and capital contributions treatment as well as an increase to the RIV. The results are shown in Table 4 below.

**Table 4: Estimated ROI after 5%, 10% and 15% increases in the RIV and applying IMs**

Electricity Distribution Business	Vanilla ROI applying IMs and 5% increase to RIV	Vanilla ROI applying IMs and 10% increase to RIV	Vanilla ROI applying IMs and 15% increase to RIV
Centralines Limited	5.56%	5.10%	4.67%
Eastland Network Limited	7.60%	7.09%	6.62%
Horizon Energy Distribution Limited	9.01%	8.42%	7.88%
Nelson Electricity Limited	8.30%	7.67%	7.10%
Orion New Zealand Limited	7.78%	7.25%	6.78%
OtagoNet Joint Venture	8.16%	7.62%	7.11%
The Lines Company Limited	5.96%	5.49%	5.06%
Top Energy Limited	4.29%	3.92%	3.58%
<b>75<sup>th</sup> Percentile Vanilla WACC</b>	<b>8.77%</b>	<b>8.77%</b>	<b>8.77%</b>

- 38 The analysis found that where the key changes due to IMs are estimated and the RIV increases by as little as 5%, all but one of the non-exempt EDBs' estimated ROI results would be below the WACC point estimate (refer to the highlighted cell in the first column of Table 4). In each instance should the RIV value increase by as much as either 10% or 15% the non-exempt EDBs' estimated ROI result would be below the WACC estimate (refer to the second and third columns).
- 39 This indicates that while above-normal returns may have been disclosed under the thresholds, if the RAB was to increase by as much as 15%, then those returns, and current average price levels, might be considered reasonable under both the implicit input methodologies in the 2008 information disclosure requirements and the recently determined IMs.
- 40 The Commission is of the view that strong evidence that excessive profits are being made (thereby indicating a sustained problem) would need to exist before making an intention to declare control. Such strong evidence does not appear to exist based the analysis above, particularly in light of the uncertainty about the extent of the uplift in the value of the RAB.
- 41 As non-exempt EDBs are now subject to default price-quality regulation under Part 4, the Commission is of the view that any 2009/10 price path breach can potentially be more cost effectively resolved in the future through regulation under Part 4 than by declaring control under the transitional provisions. The Commission is currently consulting on

applying starting price adjustments from 1 April 2010, to take effect from 1 April 2012, and the possible application of claw-back.

- 42 Accordingly, that Commission has decided to take no further action with regard to breaches of the price path by the eight non-exempt EDBs listed in Table 2.

### *Breaches of the Quality Threshold*

- 43 Performance against the quality standards is measured using two internationally recognised reliability indicators, System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).<sup>14</sup> The reliability thresholds that were in place during the targeted control regime (and subsequently the quality standards at the 2009/10 assessment date) were set as an average of each EDB's five-year performance (1994/95 to 2003/04).
- 44 In its *Supplementary Guidelines for Investigating Breaches of the Reliability Criterion of the Quality Threshold*, 7 November 2007 (the *Supplementary Guidelines*), the Commission set out its decision to adopt the 2.5 Beta Method, as described by the Institute of Electronics and Electrical Engineers, for assessing whether one or more 'extreme events' contributed to a breach of the reliability criterion. The 2.5 Beta Method is based on SAIDI data exhibiting a log-normal distribution, and is used to identify major events days (MEDs) that are considered to include an extreme event.
- 45 The non-exempt EDBs provided high-level explanations of the causes of the respective breaches of the quality standards through their compliance statements. The Commission found the explanations helpful, and noted in some instances consistencies with explanations provided concerning earlier breaches under the targeted control regime. To gain a full understanding of the causes underlying each breach the Commission sought further information from six non-exempt EDBs,<sup>15</sup> including individual outage information for the period 1 April 2008 to 31 March 2010.<sup>16</sup>
- 46 For the 2009/10 assessment period the Commission undertook to normalise the non-exempt EDBs performance by identifying MEDs and replacing any extreme event with the boundary value.<sup>17</sup> If the Commission is satisfied after extreme events identified by the 2.5 Beta Method have been normalised, that where a non-exempt EDB no longer exceeds the quality standards (SAIDI and SAIFI), the Commission will take no further action in respect of that breach (referred to as safe harbour).

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<sup>14</sup> SAIDI is the average outage duration for each customer served, and is calculated as the sum of all customer duration interruptions divided by the total number of customers served. SAIFI is the average number of interruptions that a customer experiences and is calculated as the total number of customer interruptions divided by the total number of customers served.

<sup>15</sup> Alpine Energy Limited, Horizon Energy Distribution Limited, Nelson Electricity Limited, OtagoNet Joint Venture, Powerco Limited and Wellington Electricity Lines Limited

<sup>16</sup> The Commission had collected data for the periods 1999/95 to 2007/08 during the 2009 Thresholds Reset.

<sup>17</sup> A boundary value is calculated as being 2.5 standard deviations away from the mean. Where the cumulative effect of individual outages per day exceeds the boundary value these days are deemed MEDs. These days are normalised by replacing each MED with the boundary value. On this basis, where the Commission is satisfied that, after MEDs have been removed and replaced by the boundary value, and the EDB no longer exceeds the reliability criterion, the *Supplementary Guidelines* state that the Commission will take no further action in relation to that breach ('safe harbour').

- 47 The Commission found that of the six non-exempt EDBs<sup>18</sup> that provided additional information, four identified MEDs during 2009/10. The safe harbour principle was only invoked for Powerco Limited during 2009/10. While MEDs were identified for Alpine Energy Limited, Nelson Electricity Limited and OtagoNet Joint Venture in each instance the normalised performance exceeded the quality standards and so safe harbour does not apply. No MEDs were identified for Horizon Energy Distribution Limited or Wellington Electricity Lines Limited.
- 48 As 2009/10 is the first period of the DPP, the Commission looked to performance during the targeted control regime upon which to base its observations. Under the 2004 Guidelines where a non-exempt EDB's normalised performance is still above the allowable SAIDI and/or SAIFI levels, the Commission may choose to take no further action based on considerations such as the closeness of the normalised performance to allowable SAIDI and SAIFI levels and the historical performance of the non-exempt EDB.
- 49 During the targeted control regime concerns were raised that the thresholds were not an effective means of screening EDBs for control. In particular EDBs were concerned that because the threshold is set as a five-year average an EDB could expect a 50% probability of breaching the threshold each year. The Commission held the view that given the propensity for variability in actual performance on a year-by-year basis, it was appropriate to observe a sustained deterioration in reliability performance before the Commission would take further action.
- 50 One course of action among others the Commission may choose under the 2004 Guidelines for treatment of breaches of the reliability criterion of the quality threshold is to carry out an onsite engineering review without initiating a post-breach inquiry. In certain circumstances however, the Commission may consider it more appropriate to initiate a post-breach inquiry beforehand.
- 51 The Commission has, in previous years, undertaken a number of engineering reviews in response to breaches of the quality threshold both with and without first initiating a post-breach inquiry.
- 52 Addressing the performance issues and recommendations from engineering reviews can take time to implement and the corresponding improvements to performance may be masked by the normal variability in performance results. As such, where an non-exempt EDB's network has been reviewed within the last three years the Commission has taken into consideration the findings of that review when making its decision in respect of quality breaches at the 2009/10 assessment date.
- 53 The Commission has considered the performance trend of those non-exempt EDBs that breached the quality standards during the 2009/10 assessment period and is of the view that the trends do not yet provide comprehensive evidence of a sustained problem with reliability.
- 54 However, the Commission does have some concerns around Alpine Energy Limited's overall performance trend. The Commission intends to undertake an onsite engineering review of its network to gain a full understanding of the nature and extent of the breaches, and to understand Alpine Energy Limited's specific business needs, circumstances, and

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<sup>18</sup> Network Tasman breached the price path by 1 SAIDI minute (or 1%). The Commission considered the breach to be minor and accordingly, decided that it would take no further action with regards to the company's breach of the quality standard..

future intentions. Detailed discussion of Alpine Energy's performance under the DPP and the Commission's decision can be found below at paragraphs 57 to 71.

55 The Commission is of the view that any further inquiries into the breach of quality standards during the 2009/10 assessment period are not necessary for the following non-exempt EDBs:

- Horizon Energy Distribution Limited
- Nelson Electricity Limited
- OtagoNet Joint Venture
- Powerco Limited
- Wellington Electricity Lines Limited

56 Accordingly, the Commission considers that it is appropriate not to publish an intention to declare control of any non-exempt EDB that breached the quality standards for the 2009/10 assessment period.

## DECISIONS – NON-EXEMPT ELECTRICITY DISTRIBUTION BUSINESSES

### Alpine Energy Limited

57 Alpine Energy Limited (Alpine Energy) operates its electricity distribution network in South Canterbury. The network supplies electricity to approximately 30,600 individual connection points (ICPs), through 4,106 kilometres of lines and has a total RAB value of \$119 million.<sup>19</sup>

#### *Price Path*

58 Alpine Energy complied with the requirements of its price path during the 2009/10 assessment period.

#### *Quality Standards*

59 Alpine Energy breached both the allowable SAIDI and SAIFI levels of the quality standards during the 2009/10 assessment period. Alpine Energy's SAIDI result of 328 minutes exceeded the quality standard by 240 minutes and was nearly three times the allowable SAIDI level. Its SAIFI result of 2.1 interruptions exceeded the quality standard by 1.0 interruption and was nearly double the allowable SAIFI level.

60 Alpine Energy attributed its non-compliance to the very strong load growth in recent years having affected network reliability in two ways: an increased number of planned interruptions were required to allow for expansion and strengthening of the network; and increasing numbers of unplanned interruptions resulting from an overloading of components of the network.

61 In its compliance statement Alpine Energy noted the effect of a fire at the Timaru Substation on its overall quality performance. Alpine Energy's outage data for the period 1 April 2009 to 31 March 2010, indicated the fire contributed some 169 SAIDI minutes and 0.6 SAIFI interruptions to Alpine Energy's overall performance. This event was identified as a MED under the Commission's Supplementary Guidelines. However, Alpine Energy's normalised performance exceeded the allowable SAIDI level by 96 minutes or 109% and the allowable SAIFI level by 0.7 interruptions or 67%.

62 The Commission considered Alpine Energy's breach of the quality standards during the 2009/10 assessment period, by having regard to its normalised reliability performance in conjunction with its performance over the regulatory period from 1 April 2004 to 31 March 2010. Alpine Energy complied with the allowable SAIDI and allowable SAIFI levels in the 2003/04 assessment period. However it has breached the allowable SAIDI level every period since the 2005/06 assessment period and the allowable SAIFI level since the 2004/05 assessment period.

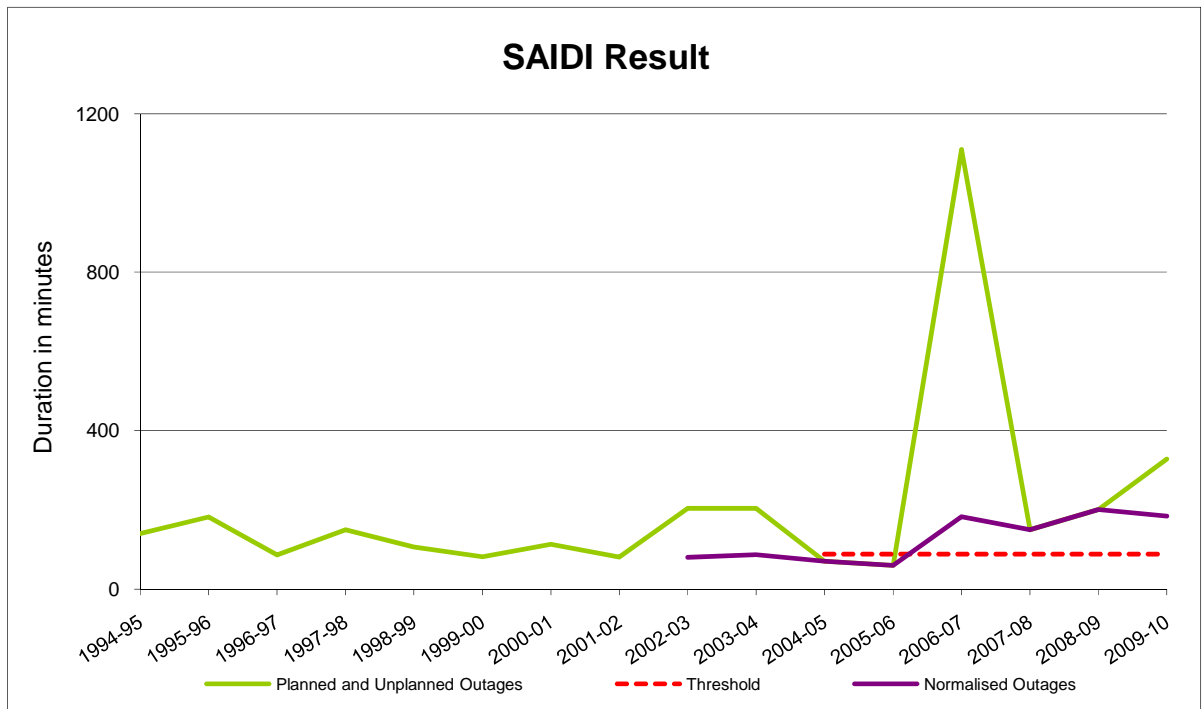
63 Figure 2 and Figure 3 (over page) show Alpine Energy's SAIDI and SAIFI performance respectively over a 15-year period from 1994/95 to 2009/10. The performance trend can

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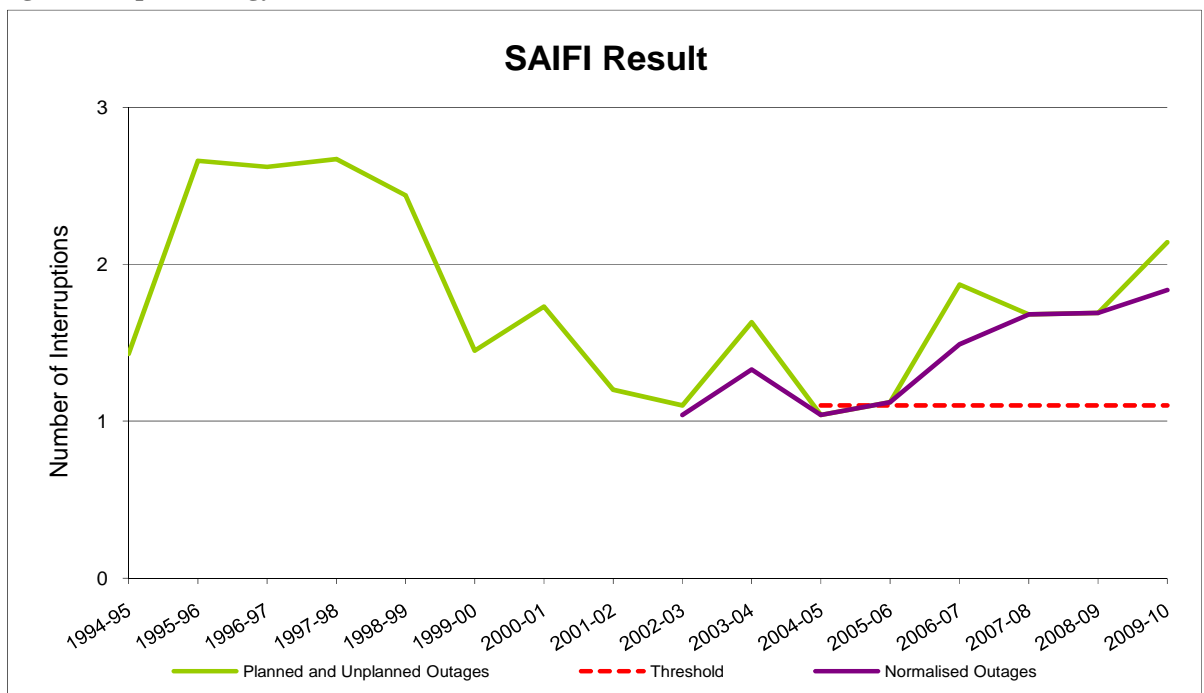
<sup>19</sup> Statistics are consistent with the Measurement Performance Information available under the 2010 information disclosure requirements for the year ended 31 March 2010.

be seen before the targeted control regime (period 1994/95 to 2003/04) and after the introduction of quality standards (2004/05 to 2009/10).

**Figure 2: Alpine Energy SAIDI Result 1995 - 2010**



**Figure 3: Alpine Energy SAIFI Result 1995 - 2010**



64 The Commission is concerned about Alpine Energy’s performance trend as it suggests worsening performance. The peak in outages in 2006/07 was attributable to an extreme

snow event (documented in meteorological records as being the largest snow fall in 60 years) which accounted for some 927 SAIDI minutes and 0.40 SAIFI interruptions.<sup>20</sup>

- 65 Of particular concern to the Commission is that when performance is normalised for this event and for the fire in 2009/10, normalised SAIDI and SAIFI still trend upwards. However, this observation is based solely on historical outage data and given the variability in actual performance on a year-by-year basis the Commission is unwilling to reach a finding of sustained quality deterioration without further investigating the nature and underlying causes of the breach.
- 66 The Supplementary Guidelines provide for qualitative assessment and make reference to the Commission carrying out onsite engineering reviews without initiating a post-breach inquiry. During the targeted control regime the Commission did in fact carry out several onsite engineering reviews and subsequently opened a number of post-breach inquiries which in turn informed decisions to publish an intention to declare control.
- 67 As discussed previously, Alpine Energy, as a non-exempt EDB, is currently subject to price-quality regulation under the DPP. Should Alpine Energy breach the quality standards in future assessment periods the Commission can take action under Part 4, including working with Alpine Energy to submit a CPP that facilitates an improvement in reliability performance.
- 68 The Commission does not consider there to be any advantage in publishing an intention to declare control of Alpine Energy before it has carried out an onsite engineering review. The findings of the review can be used to facilitate an improvement in reliability performance under the DPP and any ongoing quality issues can be dealt with under Part 4.
- 69 The Commission intends to carry out an onsite engineering review with a view to completing the review and publishing its findings by 31 March 2012.
- 70 Accordingly, the Commission considers that it is appropriate not to publish an intention to declare control of Alpine Energy.

#### *Decision Not to Declare Control*

- 71 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Alpine Energy, for its breach of the quality standards. The Commission considers it would be more appropriate to address its concerns with Alpine Energy's quality performance by conducting an engineering review of its network and addressing any future issues under Part 4

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<sup>20</sup> This single event accounted for some 84% of Alpine Energy's overall SAIDI performance and 20% of its overall SAIFI performance in 2006/07. This event was identified as a MED under the Commission's Supplementary Guidelines. However, Alpine Energy's normalised performance continued to exceed the allowable SAIDI level by 95 minutes or 107% and the allowable SAIFI level by 0.4 interruptions or 35%.



## Centralines Limited

72 Centralines Limited (Centralines) operates its electricity distribution network in Central Hawke's Bay. The network supplies electricity to approximately 7,900 ICPs, through 1,837 kilometres of lines and has a total RAB value of \$43 million.<sup>21</sup>

### *Price Path*

73 Centralines breached its price path during the 2009/10 assessment period by \$2.2 million or approximately 31% of its allowable notional revenue.

74 In its 2009/10 compliance statement Centralines stated that the breach was caused by a one-off transmission price decrease in 2005/06 and Centralines' decision to keep prices at the level prior to the 2005/06 reduction in transmission charges 'to move the company to more commercially viable rates of return.'<sup>22</sup>

75 The Commission considered the price path breach in light of Centralines' disclosed ROI as reported under the 2008 information disclosure requirements. Centralines' disclosed ROI for the period ended 31 March 2010 was 6.23%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result suggests Centralines has not earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.

76 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

77 Centralines complied with the requirements of its quality standards during the 2009/10 assessment period.

### *Decision Not to Declare Control.*

78 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Centralines, for its breach of the price path, as Centralines' disclosed ROI does not suggest that the company earned above-normal returns during the 2009/10 assessment period.

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<sup>21</sup> Supra n 19.

<sup>22</sup> Centralines, *Threshold Compliance Statement for the period ending 31 March 2010*, 20 May 2010, page.3.

## Eastland Network Limited

- 79 Eastland Network Limited (Eastland Network) operates its electricity distribution network on the East Coast of the North Island. The network supplies electricity to approximately 25,400 ICPs, through 3,662 kilometres of lines and has a total RAB value of \$114 million.<sup>23</sup>

### *Price Path*

- 80 Eastland Network breached its price path during the 2009/10 assessment period by \$4.0 million or approximately 21% of its allowable notional revenue.
- 81 In its cover letter to its 2010 compliance statement Eastland Network stated that:
- In June 2008, we ... outlined our strategy going forward to address the issues of increased capital expenditure on an aging network together with delivering a reasonable [ROI]. Since then, Eastland Network has acted in a manner that is consistent with this strategy and we have **implemented prices that while breaching the price threshold, provides a reasonable ROI** and therefore the incentives to continue to invest in the network.<sup>24</sup> [emphasis added]
- 82 The Commission considered the price path breach in light of Eastland Network's disclosed ROI as reported under the 2008 information disclosure requirements. Eastland Network's disclosed ROI for the period ended 31 March 2010 was 8.16%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result may suggest Eastland Network earned above-normal returns during the 2009/10 assessment period.
- 83 As discussed earlier at paragraphs 21 to 42 the Commission also considered the effect on Eastland Networks estimated ROI result of applying the IMs without an increase to the RIV. The analysis found that if the IMs were applied then Eastland Network's vanilla ROI would be 8.17%. When compared to 75th Percentile Vanilla WACC of 8.77%, this result suggests Eastland Network may not have earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.
- 84 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

- 85 Eastland Network complied with the requirements of its quality standards during the 2009/10 assessment period.

### *Decision Not to Declare Control*

- 86 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Eastland Networks, for its breach of the price path, as Eastland Networks' disclosed ROI results do not suggest that the company earned above-normal returns during the 2009/10 assessment period.

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<sup>23</sup> Supra n 19.

<sup>24</sup> Eastland Network, Threshold Compliance for the assessment period ending 31 March 2010, 26 May 2010

## Horizon Energy Distribution Limited

87 Horizon Energy Distribution (Horizon Energy) operates its electricity distribution network on the East Coast of the North Island. The network supplies electricity to approximately 24,500 ICPs, through 2,359 kilometres of lines and has a total RAB value of \$90 million.<sup>25</sup>

### *Price Path*

88 Horizon Energy breached its price path during the 2009/10 assessment period by \$1.6 million or approximately 9% of its allowable notional revenue.

89 In its 2009/10 compliance statement Horizon Energy stated that of the total breach: \$1.2 million was caused by actual volumes being less than the base volumes, due to plant closure and subsequent load reduction by a major customer; \$102,569 was due to Transpower costs being lower than budgeted; and \$166,684 was the result of a lower CPI than that forecast.<sup>26</sup>

90 Horizon Energy advised that it would pass back the loss constraint payments received during the 2009/10 assessment period directly to electricity retailers and major user customers. Rebates, received under embedded generation committed supply agreements, by reducing transmission pass through costs within its 2010/11 distribution charges. The Commission has received confirmation that \$94,520 in loss constraint payments were passed back to customers and that the 2010/11 pass through costs have been reduced by \$382,137 to reflect the value of the rebates.

91 The Commission considered the price path breach in light of Horizon Energy's disclosed ROI as reported under the 2008 information disclosure requirements. Horizon Energy's disclosed ROI for the period ended 31 March 2010 was 9.44%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result may suggest Horizon Energy earned above-normal returns during the 2009/10 assessment period.

92 As discussed earlier at paragraphs 21 to 42 the Commission considered the effect on Horizon Energy's estimated ROI result of applying the IMs without an increase to the RIV. The analysis found that if the IMs were applied then Horizon Energy's vanilla ROI would be 9.66%. When compared to the 75th Percentile Vanilla WACC of 8.77%, this result suggest Horizon Energy may still have earned above-normal returns during the 2009/10 assessment period.

93 The Commission also considered the effect on the estimated ROI results of applying IMs together with the 5%, 10% and 15% increases to the RIV. The Commission found that if Horizon Energy's RIV was to increase by 5%, its estimated ROI result would be 9.01% and with an increase of 10%, its estimated ROI result would be 8.42%, which would be below the 75th Percentile Vanilla WACC of 8.77%.

94 These results suggest that Horizon Energy may have earned above-normal returns under the thresholds. However, if the IMs are applied and its RIV value was to increase by up to 10%, then those returns might be determined reasonable.

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<sup>25</sup> Supra n 19.

<sup>26</sup> Horizon Energy Distribution Limited, *Threshold Compliance Statement for the Assessment Date, 31 March 2010, 21 May 2010*, page 3.

- 95 The Commission is considering whether to apply starting price adjustments from 1 April 2010, to take effect from 1 April 2012. The Commission will be considering each non-exempt EDB's starting price under the principle of normal returns. If Horizon Energy is found to have made above-normal returns after 1 April 2010 the Commission may adjust prices (possibly combined with claw-back from 1 April 2010 to 1 April 2012) to ensure that above-normal returns are not made under the DPP.
- 96 Imposing control under Part 4 at this time could only reset prices from 1 April 2010. There is no claw-back mechanism for any over-recovery in the 2009/10 year. Therefore the Commission does not consider there is benefit in declaring control of Horizon Energy following the breach of its price path during the 2009/10 assessment period.
- 97 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

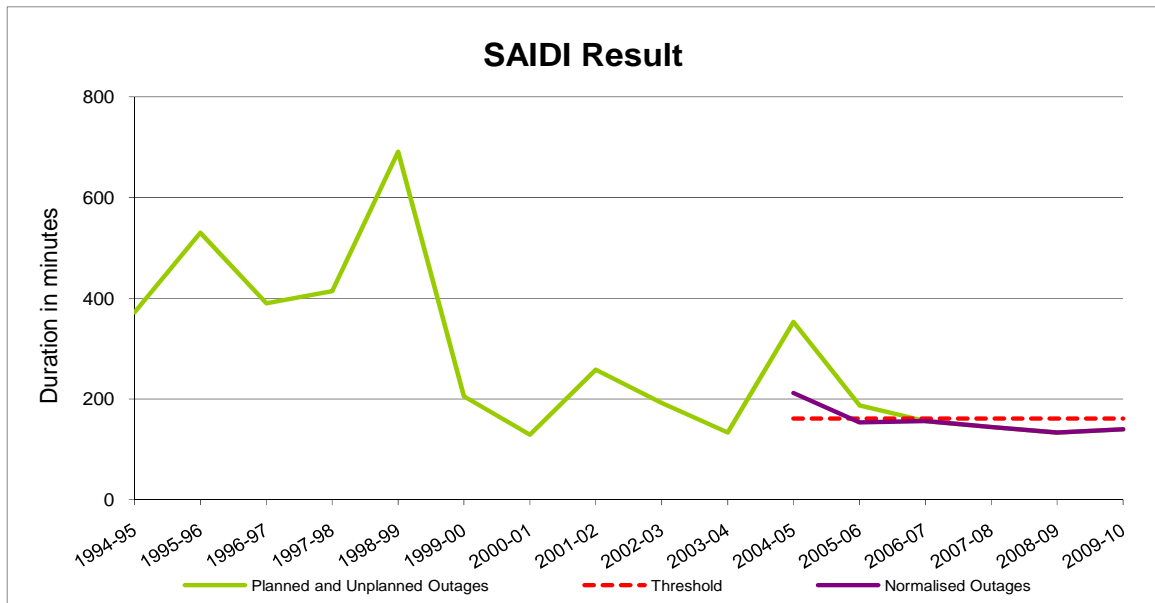
### *Quality Standards*

- 98 Horizon Energy breached its allowable SAIFI level of the quality standards during the 2009/10 assessment period by 0.5 interruptions or approximately 26%.
- 99 In its 2009/10 compliance statement Horizon Energy claims that two events significantly impaired its overall performance. The first was the result of the load on a circuit being 'overlooked' during works that required one of two main 33kV feeders to be removed from service. Towards the end of the outage the loads increased and the second circuit which was not being monitored tripped. The second was a fault that occurred in a section of the network that is currently being supplied by a backup 33kV circuit due to a fault with the embedded generator's normal bulk supply point.<sup>27</sup>
- 100 The Commission obtained from Horizon Energy its outage data for the period 1 April 2009 to 31 March 2010. Normalisation of Horizon Energy's SAIFI performance for MEDs reduces its SAIFI level by 0.1 interruptions, but this remains above the allowable SAIFI level by 0.4 interruptions or 23%.
- 101 The Commission considered Horizon Energy's breach of the allowable SAIFI level during the 2009/10 assessment period by having regard to its normalised reliability performance over a six year period from 1 April 2004 to 31 March 2010. Horizon Energy has complied with the allowable SAIDI levels since the 2004/05 assessment date but has breached the allowable SAIFI level during four out of six assessment periods.
- 102 and Figure 5 (over page) show Horizon Energy's SAIDI and SAIFI respectively performance over a 15-year period from 1994/95 to 2009/10. The performance trend can be seen before the targeted control regime (period 1994/1995 to 2003/04) and after the introduction of quality standards (2004/05 to 2009/10).
- 103 Horizon Energy's normalised SAIDI performance has remained better than allowable levels since 2005/06. Its downward slope suggests that performance continued to improve after its only breach and in 2004/05. Normalised SAIFI has varied, with Horizon Energy breaching during four out of six assessment periods (2004/05, 2005/06, 2008/09 and 2009/10).

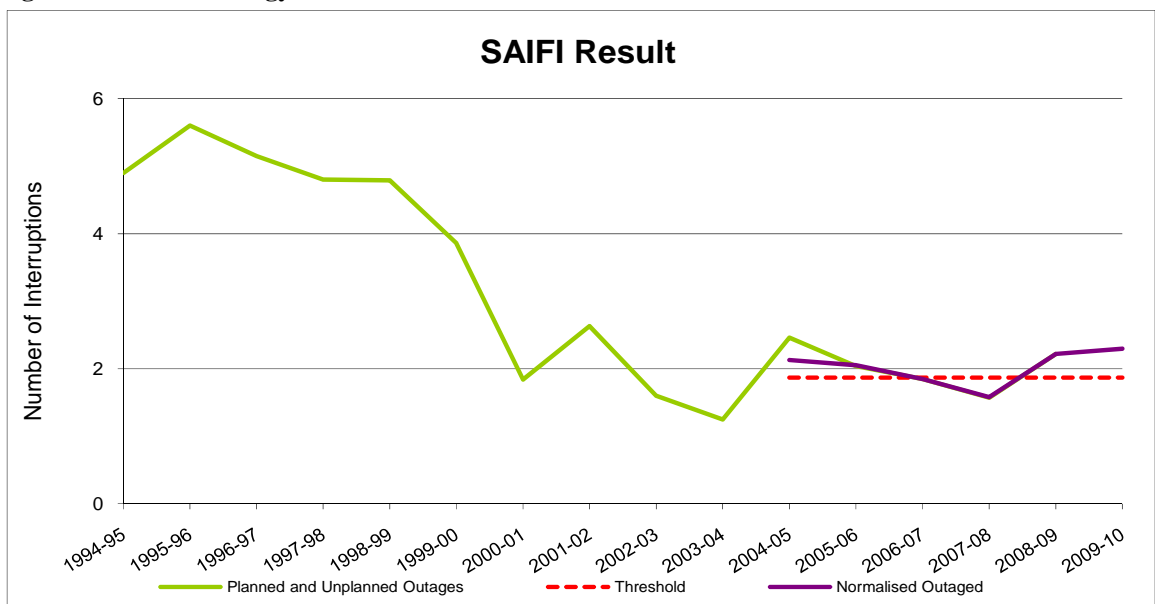
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<sup>27</sup> Supra n 26, page 8.

**Figure 4: Horizon Energy SAIDI Result 1995 - 2010**



**Figure 5: Horizon Energy SAIFI Result 1995 - 2010**



104 In April 2008 the Commission conducted a review of Horizon Energy’s 2004/05 and 2005/06 quality threshold breaches to investigate the potential of a deterioration of its reliability trend over the previous four years. The Commission engaged Parsons Brinckerhoff Associates (PBA) to analyse the network reliability figures over a four year period and to conduct an onsite visit to carry out a preliminary review of the network’s reliability performance.

105 PBA’s overall conclusion was that there was no evidence that the quality threshold breaches were the result of poor network management, maintenance or operation practices, or inadequate response to outages. In addition, there was clear evidence of more recent improvements, increases in resource levels and current and planned

expenditure on network improvements. PBA concluded that the threshold breaches in 2004 and 2005 were not indicative of a general deterioration in network reliability.<sup>28</sup>

- 106 The Commission published a decision not to declare control based in part on the findings of the review.<sup>29</sup>
- 107 The Commission is of the view that although Horizon Energy has exceeded its allowable SAIFI level during its two most recent assessment periods its overall performance trend has shown a marked improvement over the longer term. This suggests that the recent breaches are not indicative of sustained deterioration in reliability performance.
- 108 Horizon Energy has also been compliant with its allowable SAIDI level since 2005/06 suggesting that the company has responded appropriately to outages. This view is supported by the PBA report that found that the breaches of the threshold were not the result of inadequate responses to outages.
- 109 Accordingly, no further inquiry into the quality standards breach during the 2009/10 assessment period is considered necessary.

#### *Decision Not to Declare Control*

- 110 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Horizon Energy, for its breaches of the price path and quality standards, for the following reasons:
- Analysis of Horizon Energy's ROI suggested that the company may have earned above-normal returns during the 2009/10 assessment period. However, imposing control under Part 4A at this time could only reset prices from 1 April 2010. There is no claw-back mechanism for any over-recovery in the 2009/10 year. Such a reset is now provided for by the starting price adjustment process under Part 4. Price levels that are found to be too high under the DPP applying from 1 April 2010 can be corrected through this process. While any such adjustment still does not correct any over-recovery during the 2009/10 assessment period, it will ensure that such over-recovery does not continue into the future; and
  - Horizon Energy's quality standards breach during the 2009/10 assessment period does not yet provide clear evidence of a sustained deterioration in reliability performance.

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<sup>28</sup> Parsons Brinckerhoff Associates, *Horizon Energy Distribution Limited: Review of Factors Contributing to Quality Threshold Breaches over the 2004-2007 period*, 14 April 2008, page 5.

<sup>29</sup> Commerce Commission, *Commerce Act (Decision not to Declare Control - 8 August 2001 to 31 March 2007) Notice 2008*, New Zealand Gazette, 4 August 2008 - Issue 121, pp 3169 – 3172.

## Nelson Electricity Limited

111 Nelson Electricity Limited (Nelson Electricity) operates its electricity distribution network in the city of Nelson. The network supplies electricity to approximately 9,000 ICPs, through 248 kilometres of lines and has a total RAB value of \$24 million.<sup>30</sup>

### *Price Path*

112 Nelson Electricity breached its price path during the 2009/10 assessment period by \$640,626 or approximately 10% of its allowable notional revenue.

113 In its 2009/10 compliance statement Nelson Electricity stated that it had increased line charges by 7.5% as at 31 March 2010, compared to the line charges set at 1 April 2009, to help fund a two year increased step in capital expenditure.<sup>31</sup>

114 The Commission considered the price path breach in light of Nelson Electricity's disclosed ROI as reported under the 2008 information disclosure requirements. Nelson Electricity's disclosed ROI for the period ended 31 March 2010 was 8.62%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result may suggest Nelson Electricity earned above-normal returns during the 2009/10 assessment period.

115 As discussed earlier at paragraphs 21 to 42 the Commission considered the effect on Nelson Electricity's estimated ROI result of applying the IMs without an increase to the RIV. The analysis found that if the IMs were applied then Eastland Network's vanilla ROI would be 8.99%. When compared to 75th Percentile Vanilla WACC of 8.77%, this result still suggests Nelson Electricity may have earned above-normal returns during the 2009/10 assessment period despite having breached the price path.

116 The Commission also considered the effect of applying 5%, 10% and 15% increases to the RIV without applying other IMs. The analysis found that if the company's RIV was to increase by 10% Nelson Electricity's vanilla ROI would be 8.44%. When compared to 75th Percentile Vanilla WACC of 8.77%, this result suggests Nelson Electricity may not have earned above-normal returns during the 2009/10 assessment period despite having breached the price path.

117 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Threshold*

118 Nelson Electricity breached its allowable SAIDI level of the quality standards during the 2009/10 assessment period by 18 minutes or approximately 29%.

119 In its 2009/10 compliance statement Nelson Electricity attributed the breach to an increased level of planned outages to replace substation assets as a result of identified safety and operational risks.<sup>32</sup>

120 Figure 6 and Figure 7 (over page) show Nelson Electricity's SAIDI and SAIFI respectively performance over a 15-year period from 1994/95 to 2009/10. The

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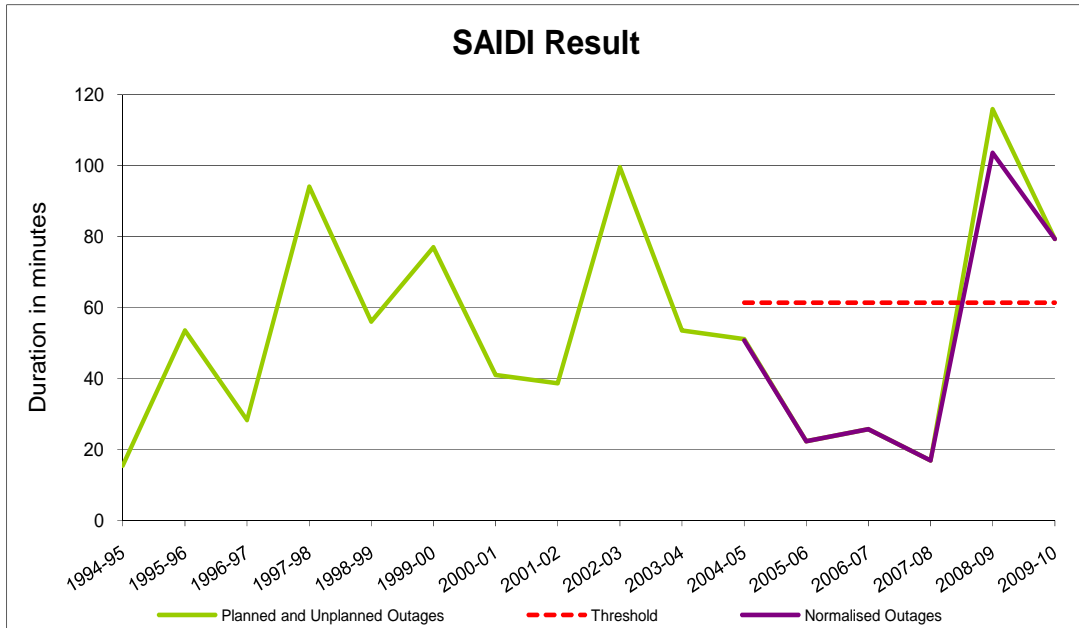
<sup>30</sup> Supra n 19.

<sup>31</sup> Nelson Electricity Limited, *Threshold Compliance Statement for the assessment date 31 March 2010*, 21 May 2010, page 1.

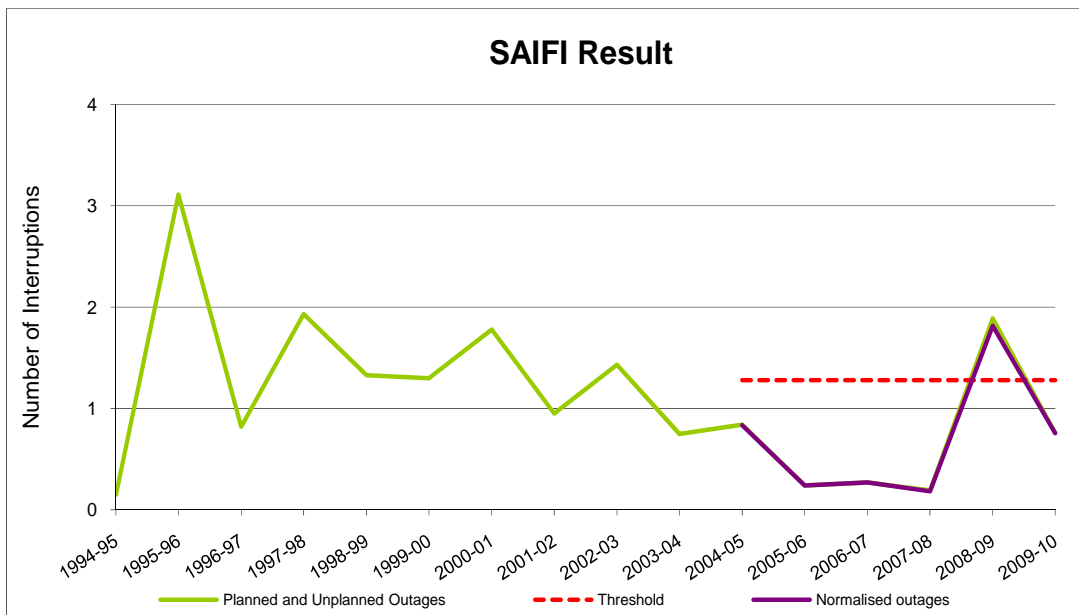
<sup>32</sup> Supra n 31, page 6.

performance trend can be seen before the targeted control regime (period 1994/1995 to 2003/04) and after the introduction of quality standards (2004/05 to 2009/10).

**Figure 6: Nelson Electricity SAIDI Result 1995 – 2010**



**Figure 7: Nelson Electricity SAIFI Result 1995 – 2010**



- 121 The Commission obtained from Nelson Electricity its outage data for the period from 1 April 2009 to 31 March 2010. The Commission found that some 76% of the total outages during 2009/10 were planned outages and no MEDs were identified.
- 122 Nelson Electricity’s performance trend has remained well below the quality standard during four out of six assessment periods. The 2009/10 assessment period was only the second breach of the allowable SAIDI level over six assessment periods. Nelson Electricity did not breach its allowable SAIFI level during the 2009/10 assessment period.



- 123 Nelson Electricity explained that the deterioration in reliability shown by a sharp increase in both the duration and frequency of outages in 2008/09 was caused by the higher than usual number of outages experienced in that year. The corresponding improvement in 2009/10 appears to support Nelson Electricity's position that 2008/09 was an unusual year.
- 124 The slope of the SAIDI result indicates that while SAIDI performance did not return to allowable levels, performance the network is not experiencing prolonged poor performance. Rather the breach is the result of the increased number of planned outages holding the SAIDI result above an allowable level.
- 125 The Commission is of the view that Nelson Electricity's breach during the 2009/10 assessment period does not provide evidence of a sustained deterioration in reliability performance.
- 126 Accordingly, no further inquiry into the quality standards breach during the 2009/10 assessment period is considered necessary.

*Decision Not to Declare Control*

- 127 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Nelson Electricity, for its breaches of the price path and quality standards, for the following reasons:
- Nelson Electricity's disclosed ROI results suggest Nelson Electricity may not have earned above-normal returns during the 2009/10 assessment period; and
  - Nelson Electricity's quality threshold breaches during the 2009/10 assessment period do not yet provide clear evidence of a sustained problem.

## **Network Tasman Limited**

128 Network Tasman Limited (Network Tasman) operates its electricity distribution network in the northwestern corner of the South Island. The network supplies electricity to approximately 36,200 ICPs, through 3,348 kilometres of lines and has a total RAB value of \$147 million.<sup>33</sup>

### *Price Path*

129 Network Tasman complied with the requirements of its price path during the 2009/10 assessment period.

### *Quality Standards*

130 Network Tasman breached its allowable SAIDI level of the quality standards during the 2009/10 assessment period by 1 minute or approximately 0.6%.

131 The Commission considers the breach of the quality standard to be minor and on 24 August 2010, notified Network Tasman that no further action would be taken with regards to the breach.

### *Decision Not to Declare Control*

132 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Network Tasman, for its breach of the quality standards, as Network Tasman's quality threshold breach during the 2009/10 assessment period does not yet provide evidence of a significant problem.

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<sup>33</sup> Supra n 19.

## Orion New Zealand Limited

133 Orion New Zealand Limited (Orion) operates its electricity distribution network in central Canterbury on the central South Island. The network supplies electricity to approximately 192,200 ICPs, through 10,707 kilometres of lines and has a total RAB value of \$775 million.<sup>34</sup>

### *Price Path*

134 Orion breached its price path during the 2009/10 assessment period by \$629,032 or approximately 0.6% of its allowable notional revenue.

135 In its 2009/10 compliance statement Orion informed the Commission that it had implemented a significant change to its pricing structure, which in Orion's view required it to adopt an alternative approach to assess compliance with the price path.<sup>35</sup>

136 The Commission's analysis indicated that the alternative approach that Orion had adopted did not enable it to demonstrate that it has complied with the substance of the price path requirement, as is generally required by clause 5(5) of the *Commerce Act (Electricity Distribution Thresholds) Notice 2004*. Rather, by Orion's calculations the alternative approach had merely reduced the materiality of the breach.

137 The Commission considered the price path breach in light of Orion's disclosed ROI as reported under the 2008 information disclosure requirements. Orion's disclosed ROI for the period ended 31 March 2010 was 8.60%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result may suggest Orion earned above-normal returns during the 2009/10 assessment period.

138 As discussed earlier at paragraphs 21 to 42 the Commission also considered the effect on Orion's estimated ROI result of applying the IMs without an increase to the RIV. The analysis found that if the IMs were applied then Orion's vanilla ROI would be 8.35%. When compared to 75th Percentile Vanilla WACC of 8.77%, this result suggests Orion may not have earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.

139 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

140 Orion complied with the requirements of its quality standards during the 2009/10 assessment period.

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<sup>34</sup> Supra n 19.

<sup>35</sup> Orion explained that it was not possible for it to prove that the restructuring, of itself, had not created an increase in revenue as is required under clause 5(2) of the Notice as:

“[I]n relation to our restructuring of prices, in terms of clause 5(5) and clause 7(2)(a), we consider that clause 5(2) is “clearly meaningless” and we therefore offer the following alternative approach to demonstrate that we have complied with the substance of the price path requirement.”

For further details see pages 12 to 18 of Orion New Zealand Limited, *Default price-quality compliance statement, As at 31 March 2010*, 4 May 2010.

*Decision Not to Declare Control*

- 141 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Orion, for its breach of the price path as Orion's disclosed ROI results suggest that the company may not have earned above-normal returns during the 2009/10 assessment period.

## OtagoNet Joint Venture

142 OtagoNet Joint Venture (OtagoNet) operates its electricity distribution network throughout North, South, East and part of Central Otago. The network supplies electricity to approximately 14,700 ICPs, through 4,387 kilometres of lines and has a total RAB value of \$115 million.<sup>36</sup>

### *Price Path*

143 OtagoNet breached its price path during the 2009/10 assessment period by \$10.7 million or approximately 50% of its allowable notional revenue.

144 In its 2009/10 compliance statement OtagoNet provided the following reasons for the price path threshold breaches:

- OtagoNet's network assets are amongst some of the oldest in the country and there is a need to reinvest in the network assets in the long-term interests of stakeholders; and
- The level of ROI is unsustainably low given the planned level of reinvestment in the network and could result in the revenue streams being insufficient to sustain the value of the network.<sup>37</sup>

145 The Commission considered the price path breach in light of OtagoNet's disclosed ROI as reported under the 2008 information disclosure requirements. OtagoNet's disclosed ROI for the period ended 31 March 2010 was 9.40%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this may suggest that OtagoNet earned above-normal returns during the 2009/10 assessment period.

146 As discussed earlier at paragraphs 21 to 42 the Commission also considered the effect on OtagoNet's estimated ROI result of applying the IMs without an increase to the RIV. The analysis found that if the IMs were applied then OtagoNet's vanilla ROI would be 8.77%. The Commission also considered the effect of applying 5%, 10% and 15% increases to the RIV without applying other IMs. The analysis found that if the company's RIV was to increase by 15% then OtagoNet's estimated ROI result would be 8.75%. When compared to 75th Percentile Vanilla WACC of 8.77%, these results suggest OtagoNet may not have earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.<sup>38</sup>

147 The Commission also considered the effect on the estimated ROI results of applying IMs together with 5%, 10% and 15% increases to the RIV. The Commission found that if OtagoNet's RIV was to increase by 5%, its estimated ROI result would be 8.16%, which is below the 75th Percentile Vanilla WACC of 8.77%.

148 Given that the price levels that led to the breaches may be justified under the DPP applying from 1 April 2010, the Commission considers there is likely little benefit in declaring control of OtagoNet following its breach of its price path during the 2009/10 assessment period. Price levels that are found to be too high under the DPP from 1 April

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<sup>36</sup> Supra n 19.

<sup>37</sup> OtagoNet Joint Venture, *Threshold Compliance Statement for the Assessment Date 31 March 2010*, 21 May 2010, page 2.

<sup>38</sup> The ROI result would be 9.59% with a 5% increase of the RIV and 9.15% with a 10% increase. This result may indicate that the company earned above-normal returns during 2009/10.

2010 can be addressed through starting price adjustments allowed under Part 4. Although this does correct for any over-recovery during the 2009/10 assessment period, it will ensure that such over-recovery does not continue into the future.

149 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

150 OtagoNet breached both its allowable SAIDI and SAIFI levels of the quality standards during the 2009/10 assessment period. OtagoNet exceeded the allowable SAIDI level by 83 minutes or approximately 33%, and exceeded the allowable SAIFI level by 0.9 interruptions or approximately 37%.

151 In its 2009/10 compliance statement OtagoNet attributed the breaches to:

- the significant increase in the level of planned outages required to meet the level of renewal and replacement activities when compared to the five-year period 1998/99 to 2002/03 (upon which the thresholds were based and the DPP for the 2009/10 assessment period is based); and
- a number of unplanned interruptions caused by interference from birds, wind, snow and trees including two incidents where customers felled trees into radial 33 kV lines and did not report the events, resulting in an extended fault location time for a large number of customers.<sup>39</sup>

152 The Commission obtained from OtagoNet its outage data for the period 1 April 2009 to 31 March 2010. When OtagoNet's performance is normalised to take account of MEDs, it still exceeds the allowable SAIDI level by 80 minutes or 32% and the allowable SAIFI level by 0.8 interruptions or 35%.

153 In 2006 the Commission opened a post-breach inquiry into the distribution services provided by OtagoNet. The Commission engaged Strata Engineering Group in September 2008 to:

- identify whether or not concerns exist regarding network condition, network management and operational practices; and
- identify whether or not robust systems and processes were in place in order to appropriately manage routine and unplanned events; and examine the particular circumstances of extreme events.

154 Figure 8 and Figure 9 (over page) show OtagoNet's SAIDI and SAIFI performance over a 15-year period from 1994/95 to 2009/10. The performance trend can be seen before the targeted control regime (period 1994/1995 to 2003/04) and after the introduction of quality standards (2004/05 to 2009/10).

155 The Commission has considered OtagoNet's breach of the quality standards during the 2009/10 assessment period, by having regard to its normalised reliability performance in conjunction with its performance over the regulatory period from 1 April 2004 to 31 March 2010.

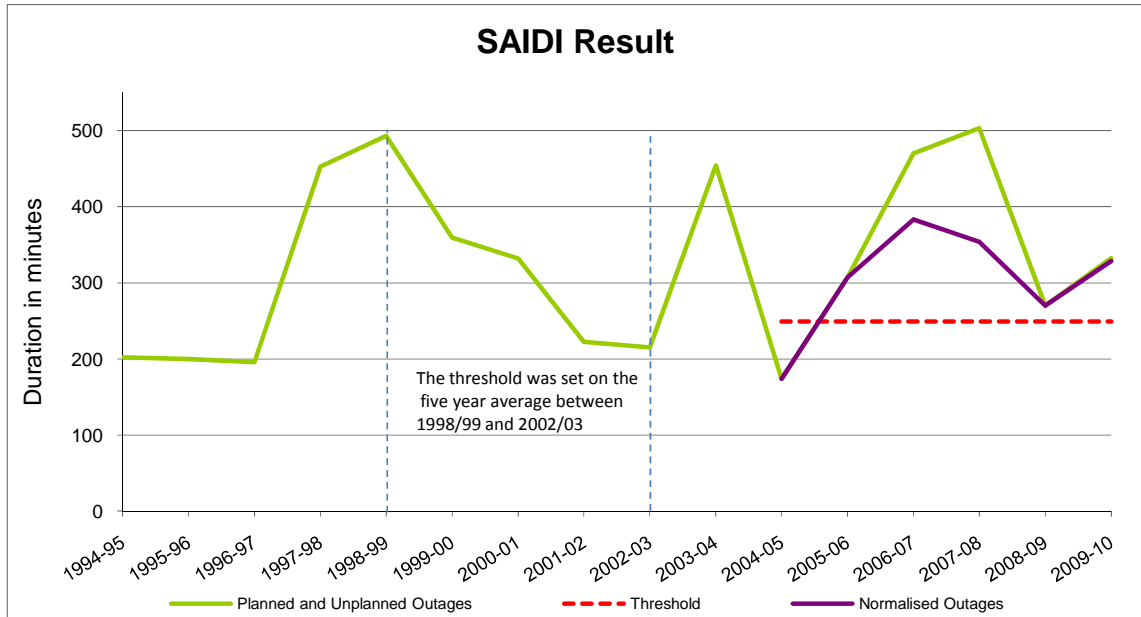
156 OtagoNet's normalised performance has breached the quality standards consistently over a five-year period with performance being within the allowable SAIDI and SAIFI levels

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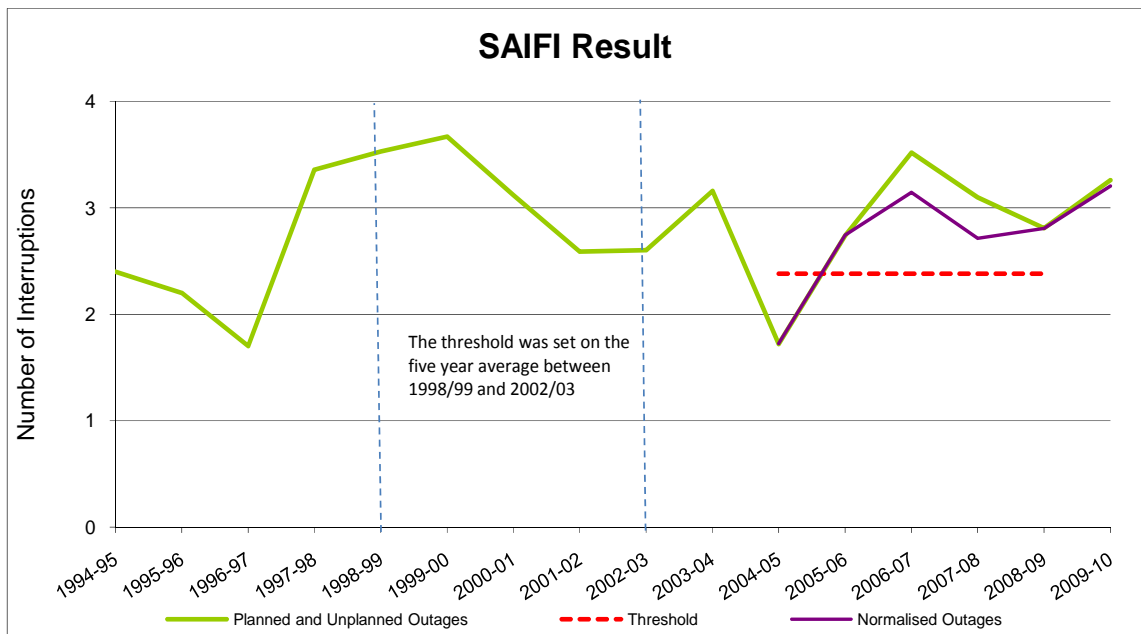
<sup>39</sup> Supra n 37, Appendix D.

at only one assessment date, 2004/05. Its performance has exhibited significant variability since 1996/97.

**Figure 8: OtagoNet SAIDI Result 1995 – 2010**



**Figure 9: OtagoNet SAIFI Result 1995 – 2010**



- 157 The post-breach inquiry found that the threshold was set using a period of improving reliability performance and that the volume of renewal and replacement activities during the period required a higher number of planned outages than that allowed for under the thresholds.<sup>40</sup>
- 158 The Commission first considered the period over which the thresholds were set. Figure 8 show that SAIDI reliability did improve significantly after 1998/99 and continued to

<sup>40</sup> Strata Engineering Group, *Report on the Quality Performance of OtagoNet*, 20 October 2008

improve until 2003/04 when SAIDI rose above 450 minutes. Figure 9 shows that SAIFI reliability improvement while less dramatic, can be clearly seen to have occurred between 1999/00 and 2002/03.

- 159 The Commission then considered the data provided by OtagoNet and found that some 72% of outages were the result of planned outages during the 2008/09 assessment period and 68% during the 2009/10 assessment period. The analysis appears to support OtagoNet's claim that the 2009/10 breach of the quality standard is due to increased volume of renewal and replacement activities when compared to the threshold against which it is being assessed.
- 160 New quality standards will apply from 1 April 2010. The SAIDI and SAIFI levels against which non-exempt EDBs annual reliability performance is assessed will be based on normalised data from the period 1 April 2004 to 31 March 2009. The reliability limits will therefore be inclusive of OtagoNet's renewal and replacement activities. The Commission will monitor OtagoNet's performance against the reliability limits and any concerns identified at future assessment dates will be addressed under Part 4.
- 161 Accordingly, no further inquiry into the quality standards breach during the 2009/10 assessment period is considered necessary.

#### *Decision Not to Declare Control*

- 162 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by OtagoNet, for its breaches of the price path and quality standards, for the following reasons:
- OtagoNet's disclosed ROI results do not suggest that the company earned above-normal returns during the 2009/10 assessment period; and
  - OtagoNet's quality standard breaches during the 2009/10 assessment period do not provide evidence of a sustained problem.



## Powerco Limited

163 Powerco Limited (Powerco) operates its electricity distribution network in the upper-central, central and lower North Island. The network supplies electricity to approximately 317,500 ICPs, through 30,035 kilometres of lines and has a total RAB value of \$1.2 billion.<sup>41</sup>

### Price Path

164 Powerco complied with the requirements of its price path during the 2009/10 assessment period.

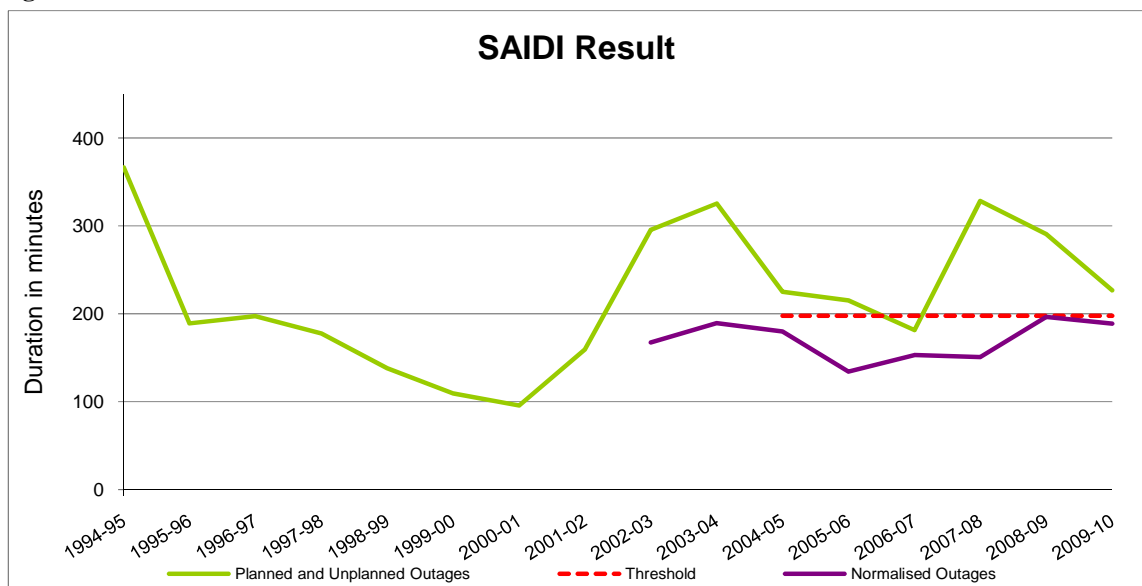
### Quality Standards

165 Powerco breached its allowable SAIDI level of the quality standards during the 2009/10 assessment period by 29 minutes or approximately 15%. The Commission obtained from Powerco its outage data for the period 1 April 2009 to 31 March 2010. After applying the 2.5 Beta Method and replacing identified MEDs with the boundary value, Powerco no longer exceeds its allowable SAIDI level. Thus Powerco is within the safe harbour for its 2009/10 breach.

166 The 2.5 Beta Method identified two MEDs for Powerco during the 2009/10 assessment period. The largest of these was a storm on 11 and 12 July 2010 (contributing 31 SAIDI minutes and 0.05 SAIFI interruptions). The other MED was due to a circuit breaker in Kopu being tripped by a vehicle accident on 7 October 2006 (contributing 14 SAIDI minutes and 0.05 SAIFI interruptions).

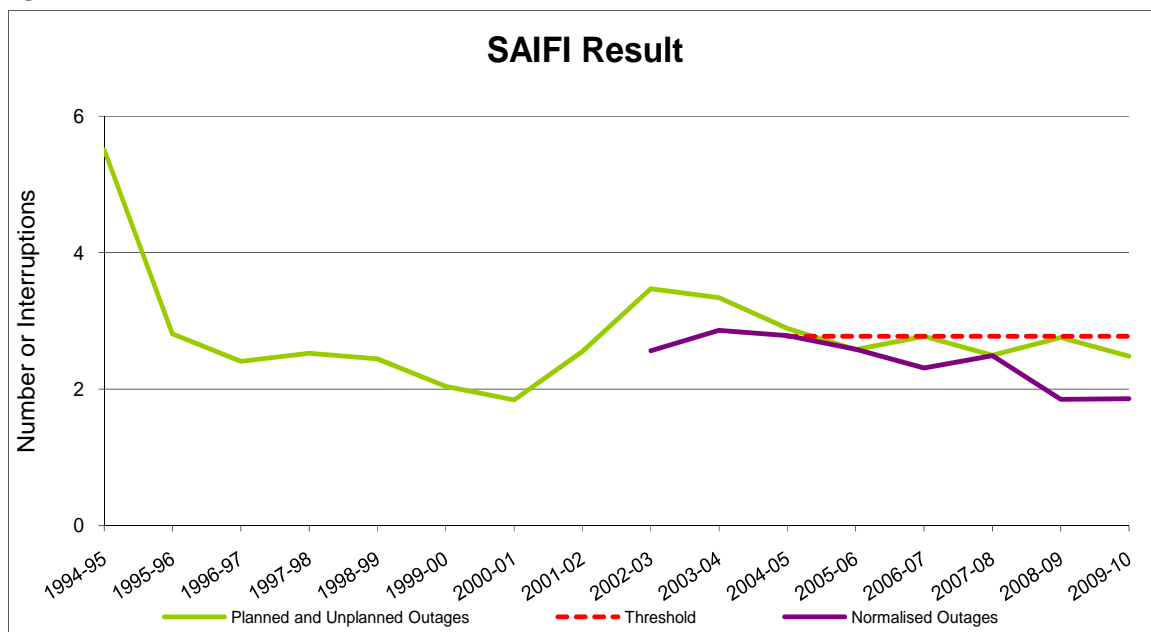
167 Figure 10 (below) and Figure 11 (over page) show Powerco's SAIDI and SAIFI performance over a 15-year period from 1994/95 to 2009/10. The performance trend can be seen before the targeted control regulation (period 1994/1995 to 2003/04) and after the introduction of quality standards (2004/05 to 2009/10).

**Figure 10: Powerco SAIDI Result 1995 – 2010**



<sup>41</sup> Supra n 19.

**Figure 11: Powerco SAIFI Result 1995 – 2010**



168 The Commission considered Powerco’s breach of the quality standards during the 2009/10 assessment period by having regard to its normalised reliability performance over a six year period 1 April 2004 to 31 March 2010.

169 Powerco has been compliant with the allowable SAIDI levels at each assessment date when normalised for MEDs and compliant against the allowable SAIFI levels at each assessment date. Further, when its SAIFI performance is normalised its trend lies well below the allowable SAIFI levels.

*Decision Not to Declare Control*

170 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Powerco, for its breach of the quality standards, as the allowable SAIDI level is no longer exceeded after applying the 2.5 Beta Method so safe harbour applies to Powerco during the 2009/10 assessment period.

## **The Lines Company Limited**

171 The Lines Company Limited (The Lines Company) operates its electricity distribution networks in the central North Island. The network supplies electricity to approximately 24,400 ICPs, through 4,491 kilometres of lines and has a total RAB value of \$141 million.<sup>42</sup>

### *Price Path*

172 The Lines Company breached its price path during the 2009/10 assessment period by \$5.3 million or approximately 20% of its allowable notional revenue.

173 In its 2009/10 compliance statement The Lines Company stated that the breach was caused by price increases which were necessary to gain funds for investment into the network given its historically low returns.<sup>43</sup>

174 The Commission considered the price path breach in light of The Lines Company's disclosed ROI as reported under the 2008 information disclosure requirements. The Lines Company's disclosed ROI for the period ended 31 March 2010 was 6.02%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result suggests The Lines Company has not earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.

175 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

176 The Lines Company complied with the requirements of its quality standards during the 2009/10 assessment period.

### *Decision Not to Declare Control.*

177 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by The Lines Company, for its breach of the price path, as The Lines Company's disclosed ROI results do not suggest that the company earned above-normal returns during the 2009/10 assessment period.

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<sup>42</sup> Supra n 19.

<sup>43</sup> The explanation was provided on 17 September 2010 following the Commission's further information request 25 August 2010.

## Top Energy Limited

178 Top Energy Limited (Top Energy) operates its electricity distribution network in the far north of the North Island. The network supplies electricity to approximately 30,800 ICPs, through 3,846 kilometres of lines and has a total RAB value of \$133 million.<sup>44</sup>

### *Price Path*

179 Top Energy breached its price path during the 2009/10 assessment period by \$5.4 million or approximately 24%. In its compliance statement Top Energy attributed \$1.5 million to the over-recovery of transmission charges. This amount (plus GST) was returned to consumers on 12 May 2010. \$678,459 was attributed to additional line revenue received in relation to the period 1 February to 31 March 2010, and \$3.2 million relates to notional additional line revenue that would have been received had Top Energy increased prices on 1 April 2009, rather than 1 February 2010.<sup>45</sup>

180 The Commission considered the price path breach in light of Top Energy's disclosed ROI as reported under the 2008 information disclosure requirements. Top Energy's disclosed ROI for the period ended 31 March 2010 was 4.72%. When compared to the 75th Percentile Post-tax WACC of 7.60%, this result suggests Top Energy has not earned above-normal returns during the 2009/10 assessment period, despite having breached the price path.

181 Accordingly, no further inquiry into the price path breach during the 2009/10 assessment period is considered necessary.

### *Quality Standards*

182 Top Energy complied with the requirements of its quality standards during the 2009/10 assessment period.

### *Decision Not to Declare Control.*

183 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Top Energy, for its breach of the price path, as Top Energy's disclosed ROI results do not suggest that the company earned above-normal returns during the 2009/10 assessment period.

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<sup>44</sup> Supra n 19.

<sup>45</sup> Top Energy Limited, *Threshold Compliance Statement for the assessment date 31 March 2010*, 21 May 2010, page 2.

## Wellington Electricity Lines Limited

184 Wellington Electricity Lines Limited (Wellington Electricity Lines) operates its electricity distribution network in the Wellington, Porirua and the Hutt Valley regions. The network supplies electricity to approximately 164,000 ICPs, through 4,609 kilometres of lines and has a total RAB value of \$468 million.<sup>46</sup>

### *Price Path*

185 Wellington Electricity Lines breached its price path during the 2009/10 assessment period by \$141,244 or approximately 0.2%.

186 The Commission considered the breach to be minor and on 25 August 2010, notified Wellington Electricity Lines that no further action would be taken with regards to the breach of its price path during the 2009/10 assessment period.

### *Quality Standards*

187 Wellington Electricity Lines breached both its allowable SAIDI and SAIFI levels of the quality standards during the 2009/10 assessment period. Wellington Electricity Lines exceeded the allowable SAIDI level by 11 minutes or approximately 37%, and exceeded the allowable SAIFI level by 0.1 interruptions or approximately 34%.

188 Wellington Electricity Lines attributed the breach to a series of weather events: a period of eight days (15 to 23 May 2009) where the network sustained periods of gale force winds; and a severe weather event on 12 March 2010.<sup>47</sup>

189 The Commission obtained from Wellington Electricity Lines its outage data for the period 1 April 2009 to 31 March 2010. When the 2.5 Beta Method was applied to the data, no MEDs were identified for the 2009/10 period.

190 Wellington Electricity Lines included with its 2009/10 compliance statement a Summary Report which provided a comprehensive explanation of the major contributors to the breach of the quality standard and outlined the longer term strategies to address its performance trend and improve performance within target levels. The Commission considered the report in its investigation of the breach.

191 In making its assessment the Commission notes that 2009/10 is only the second assessment period for which Wellington Electricity Lines has been required to submit a compliance statement. The Commission is of the view that it is appropriate that it give Wellington Electricity Lines time to assess and address the needs of its network and to implement appropriate works programmes to improve performance as outlined by the Summary Report.

192 Figure 12 and Figure 13 (over page) show Wellington Electricity Lines' SAIDI and SAIFI respectively performance respectively over an eight year period from 2002/03 to 2009/10.<sup>48</sup>

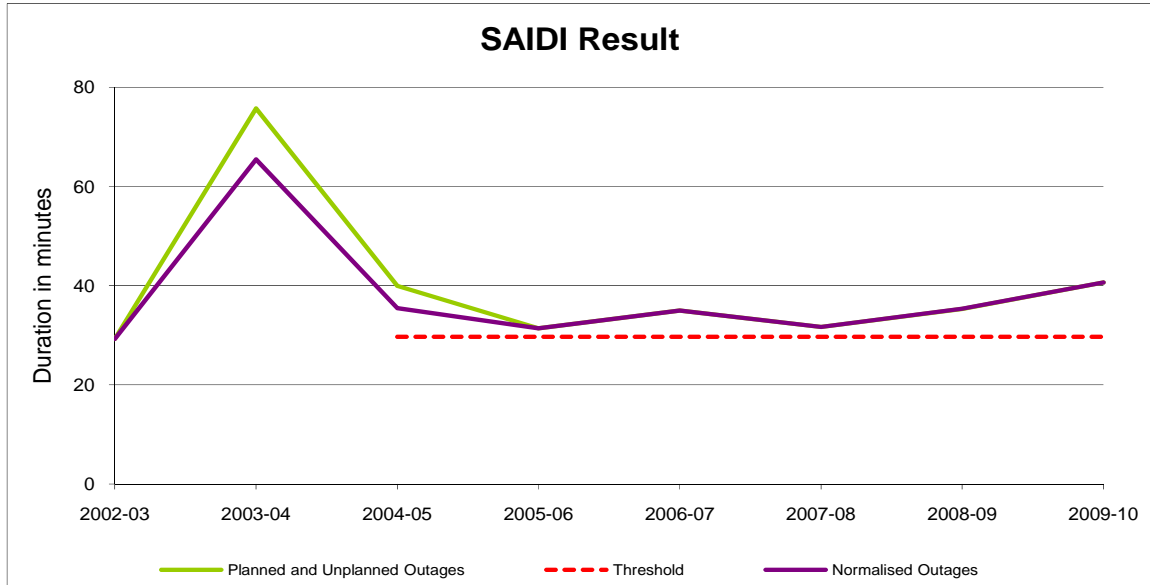
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<sup>46</sup> Supra n 19.

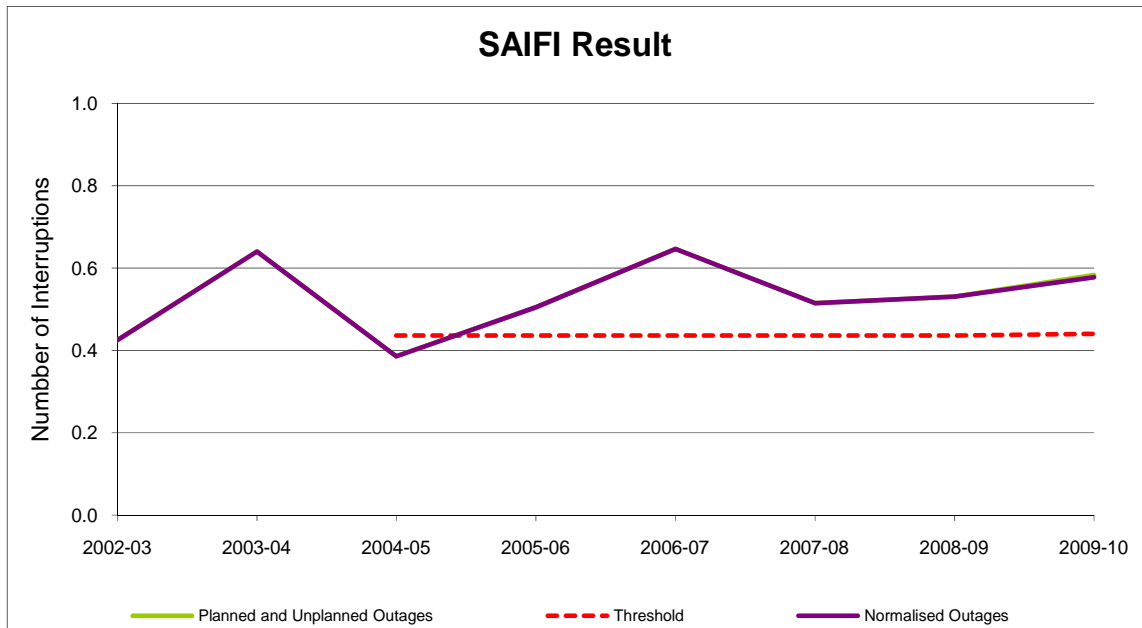
<sup>47</sup> Wellington Electricity Lines Limited, *Summary Report to the Commerce Commission on the 2009-10 Quality Threshold Breach*, 21 May 2010, pages 12 to 15 (Summary Report).

<sup>48</sup> The Commission collected performance data for the period 1 April 2003 to 31 March 2010 (rather than from 1 April 2008 as was the case for the other five EDBs) from Wellington Electricity Lines as the performance

**Figure 12: Wellington Electricity Lines SAIDI Result 2003 – 2010**



**Figure 13: Wellington Electricity Lines SAIFI Result 2003 – 2010**



- 193 Wellington Electricity Lines' performance will be monitored under the DPP and should it breach at a future compliance date the Commission would be able to assess the circumstances surround the breach and if necessary address any performance concerns under Part 4.
- 194 Accordingly, no further inquiry into the quality standards breach during the 2009/10 assessment period is considered necessary.

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data it had for the Wellington network had been collected from Vector Lines Limited the previous owners of the network.

*Decision Not to Declare Control*

195 The Commission has determined that it would be consistent with s 52A of the Act not to make a declaration of control under Part 4A, in respect of electricity distribution services supplied by Wellington Electricity, for its breaches of the quality standards, as Wellington Electricity's breach during the 2009/10 assessment period does not yet provide evidence of a sustained problem.