

Commerce Act (Electricity Distribution Thresholds) Notice 2004

# Threshold compliance statement

Fourth assessment (31 March 2006)

(issued 12 May 2006)





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## INTRODUCTION

- 1 Orion New Zealand Limited (*Orion*) owns and operates the electricity network in central Canterbury between the Waimakariri and Rakaia rivers. We transport electricity from nine Transpower grid exit points to more than 175,000 homes and businesses.
- 2 We charge electricity retailers on a wholesale basis for this delivery service. Retailers, in turn, include this cost in their retail electricity prices - our charges typically amount to less than 30 percent of a household's electricity bill.
- 3 As a monopoly service provider, Orion is subject to government regulation under part 4A of the Commerce Act 1986. Pursuant to the requirements of this Act, the Commerce Commission has set price and quality thresholds as a screening measure to identify distributors that warrant further investigation.
- 4 The price and quality thresholds, together with the information reporting requirements, are set out in the Commerce Act (Electricity Distribution Thresholds) Notice 2004, as amended by the Commerce Act (Electricity Distribution Thresholds) Amendment Notice 2006 (the *notice*).
- 5 This threshold compliance statement has been prepared to demonstrate Orion's compliance, or otherwise, with the thresholds in the notice.
- 6 Specifically, this statement covers the information requirements detailed in clause 7(1) of the notice in relation to the "price path threshold" and the "quality threshold" as at 31 March 2006, the fourth assessment date.
- 7 Orion considers that the information disclosed in this statement is complete and meaningful such that no alternative approach is required, and that the detail of this statement is not commercially sensitive. Therefore, clauses 7(2) and 7(4) of the notice do not apply to Orion.
- 8 This statement was prepared and issued on 12 May 2006.

#### **PRICE THRESHOLD STATEMENT**

9 Clause 5(1)(a) of the notice requires notional revenue at each assessment date to not exceed allowable notional revenue at that assessment date. Calculating these revenues in accordance with clause 5(1)(a) of the notice (as detailed below in the section headed *price threshold calculation*) as at 31 March 2006:

9.1 Orion's notional revenue was \$93,966.1k; and

9.2 Orion's allowable notional revenue was \$94,997.4k.

10 As Orion's notional revenue was less than its allowable notional revenue, Orion complies with the price path threshold prescribed in clause 5(1)(a).

11 Clause 5(1)(b) of the notice requires notional revenue during each assessment period to not exceed the greater of allowable notional revenue at the assessment date (31 March 2006) or allowable notional revenue at the previous assessment date (31 March 2005).

11.1 Orion's maximum notional revenue during the period occurred on 31 March 2006, and was \$93,966.1k; and

11.2 Orion's allowable notional revenue was greatest at 31 March 2006 and was \$94,997.4k.

12 As Orion's notional revenue at all points during the period was less than its allowable notional revenue at the end of the period, Orion complies with the price path threshold prescribed in clause 5(1)(b).

#### **QUALITY THRESHOLD STATEMENT**

##### **Reliability**

13 Clause 6(1)(a) of the notice sets out an interruption duration requirement, as measured by the system average interruption duration index (SAIDI), and clause 6(1)(b) sets out an interruption frequency requirement, as measured by the system average interruption frequency index (SAIFI).

14 In respect of both planned interruptions by Orion and unplanned interruptions originating within Orion's network, the threshold requires Orion's SAIDI and SAIFI for the year ending on the assessment date to not exceed the average SAIDI and SAIFI over the five year period ending on 31 March 2003.

- 15 Calculating these reliability indices in accordance with clause 6(1) of the notice (as detailed below in the section headed *quality threshold reliability information*):
- 15.1 Orion's SAIDI for the assessment period was 59.34, which is less than the 5 year average SAIDI to 31 March 2003 of 63.23; and
- 15.2 Orion's SAIFI for the assessment period was 0.74, which is less than the 5 year average SAIFI to 31 March 2003 of 0.76.
- 16 Orion therefore complies with the reliability thresholds in clauses 6(1)(a) and 6(1)(b).

**Customer communication**

- 17 Clause 6(1)(c) of the notice sets out customer communication requirements. The Commerce Commission's *Thresholds Decisions Paper*, dated 1 April 2004 details how lines businesses can demonstrate compliance with clause 6(1)(c). In particular, Orion is required to meaningfully engage with customers to determine demand for service quality with reference to the price-quality trade-offs available to customers, and reflect that demand in its asset management planning.
- 18 Orion frequently consults customers to ensure that service levels meet customers' long term needs. Orion uses various forms of customer consultation to determine customers' requirements.
- 19 Customer requirements are then incorporated into Orion's asset planning process. Both our asset management plan and our security of supply standard reflect customer requirements. We continually endeavour to provide quality of supply that meets customers' requirements while taking into consideration different customer categories.
- 20 Orion therefore complies with clause 6(1)(c) of the quality threshold. Our separate paper entitled *Threshold Compliance Statement Consumer Engagement* provides further detail of Orion's compliance with this requirement.

### PRICE THRESHOLD CALCULATION

- 21 Clause 5(1)(a) of the notice requires notional revenue at each assessment date,  $NR_t$ , to not exceed the allowable notional revenue at that assessment date,  $R_t$ , as expressed by the following condition:

$$\frac{NR_t}{R_t} \leq 1$$

#### *Notional revenue*

- 22 Using the definitions provided in clause 5(1)(a), notional revenue is evaluated as:

$$NR_t = \sum_i P_{i,t} Q_i - K_t$$

where  $t$  denotes the calendar year during which the assessment date occurs, that is 2006.

$$NR_{2006} = \sum_i P_{i,2006} Q_i - K_{2006}$$

where  $\sum_i P_{i,2006} Q_i$  is the sum of each ( $i^{\text{th}}$ ) price at the assessment date pertaining to every specified service, multiplied by the corresponding quantity for the year ending 31 March 2003. This expression is evaluated as \$135,840.6k in the worksheet on page 6 titled *notional charges calculation*, and

$K_{2006}$  is the sum of all pass-through costs for the assessment period ending on 31 March 2006. This expression is evaluated as \$41,874.5k in the worksheet on page 7 titled *pass-through costs*.

$$\begin{aligned} \therefore NR_{2006} &= \$135,840.6k - \$41,874.5k \\ &= \$93,966.1k \end{aligned}$$

#### *Allowable notional revenue*

- 23 Using the definitions provided in Clause 5(1)(a), allowable notional revenue is evaluated as:

$$R_t = R_{t-1}(1 + \Delta CPI_t)(1 - X)$$

where  $t$  denotes the calendar year during which the assessment date occurs, that is 2006, and  $X$  is the factor specified for each distribution business, 1% for Orion.

$$R_{2006} = R_{2005}(1 + \Delta CPI_{2006})(1 - 1\%)$$

where  $R_{2005}$  is the allowable notional revenue as at 31 March 2005, the previous assessment date. This is provided in Orion's previous threshold compliance statement as at 31 March 2005 (issued 20 May 2005) as \$93,125.9k, and

$\Delta\text{CPI}_{2006}$  is the average change in CPI (all groups index published by Statistics New Zealand) calculated as:

$$\begin{aligned}\Delta\text{CPI}_t &= \frac{\text{CPI}_{Q1,t-1} + \text{CPI}_{Q2,t-1} + \text{CPI}_{Q3,t-1} + \text{CPI}_{Q4,t-1}}{\text{CPI}_{Q1,t-2} + \text{CPI}_{Q2,t-2} + \text{CPI}_{Q3,t-2} + \text{CPI}_{Q4,t-2}} - 1 \\ \therefore \Delta\text{CPI}_{2006} &= \frac{\text{CPI}_{Q1,2005} + \text{CPI}_{Q2,2005} + \text{CPI}_{Q3,2005} + \text{CPI}_{Q4,2005}}{\text{CPI}_{Q1,2004} + \text{CPI}_{Q2,2004} + \text{CPI}_{Q3,2004} + \text{CPI}_{Q4,2004}} - 1 \\ &= \frac{1146 + 1156 + 1169 + 1177}{1115 + 1124 + 1131 + 1141} - 1 \\ &= 3.04\%\end{aligned}$$

$$\begin{aligned}\therefore R_{2006} &= \$93,125.9\text{k} (1 + 3.04\%)(1 - 1\%) \\ &= \$94,997.4\text{k}\end{aligned}$$

- 24 Substituting these values in the price threshold condition noted above gives:

$$\frac{NR_t}{R_t} \leq 1$$

$$\frac{\$93,966.1\text{k}}{\$94,997.4\text{k}} = 0.989$$

- 25 Therefore, as the price threshold condition is satisfied, Orion complies with the price threshold specified in clause 5(1)(a) of the notice.

## PRICE THRESHOLD SUPPORTING INFORMATION

### Notional charges calculation

- 26 This worksheet shows the quantities, prices, and corresponding charges used in Orion's calculation of  $\sum_i P_{i,2006} Q_i$  above. Published price schedules with supporting prices are provided in appendix A.

Price components for specified services	Base Quantities ( $Q_i$ ) year to 31 March 2003	Assessed delivery prices ( $P_{i,2006}$ ) as at 31 March 2006	Notional annual delivery charges ( $P_{i,2006} \times Q_i$ , \$000)
<b>General connections</b>			
<b>Fixed Component</b>			
Outside lighting (per connection)	36,750 connections	11.30 ¢/conn/day	\$1,515.8
<b>Peak</b>			
Zone A (applied during winter only)	390,200 kVA	135.00 \$/kVA/yr	\$52,677.0
Zone B (applied during summer only)	59,700 kVA	135.00 \$/kVA/yr	\$8,059.5
<b>Capacity</b>			
Zone A			
7:00am - 9:00pm on working weekdays	780,934 MWh	5.26 ¢/kWh	\$41,077.1
9:00pm - 7:00am and on weekends or public holidays	974,000 MWh	0.65 ¢/kWh	\$6,331.0
Zone B			
During winter			
7:00am - 9:00pm on working weekdays	44,785 MWh	5.26 ¢/kWh	\$2,355.7
9:00pm - 7:00am and on weekends or public holidays	60,281 MWh	0.65 ¢/kWh	\$391.8
During summer	245,000 MWh	2.51 ¢/kWh	\$6,149.5
<b>Irrigation</b>			
Transitional Irrigation Package	10,137 kW	179.00 \$/kW/yr	\$1,814.5
- refund (capacity)	45,000 MWh	(2.51) ¢/kWh	(\$1,129.5)
- refund (peak)	12,000 kVA	(135.00) \$/kVA/yr	(\$1,620.0)
PF correction rebate	14,000 kVA	(23.50) \$/kVA/yr	(\$329.0)
Interruptibility rebate	1,563 kW	(5.86) \$/kW/yr	(\$9.2)
<b>Major customer connections</b>			
Fixed (standard connections)	330 connections	500.05 \$/conn/yr	\$165.0
Fixed (secondary connections)	20 connections	266.30 \$/conn/yr	\$5.3
Control Period Demand	103,500 kVA	100.80 \$/kVA/yr	\$10,432.8
Assessed capacity - distribution	184,300 kVA	24.40 \$/kVA/yr	\$4,496.9
Assessed capacity - transmission	199,500 kVA	17.70 \$/kVA/yr	\$3,531.2
<b>Export credits</b> (distribution part only)			
Real power component	2,912 kW	(63.27) \$/kW/yr <sup>1</sup>	(\$184.3)
Reactive power component	1,577 kVA	(20.59) \$/kVA/yr <sup>1</sup>	(\$32.5)
<b>Miscellaneous</b>			
Monthly invoice charge	42 invoices/mth	20.00 \$/invoice	\$10.1
Builders' temporary supplies <sup>2</sup>	813 connections	44.44 ¢/conn/day	\$131.9
<b>Total notional charges (\$000)</b> $\sum_i P_{i,2006} Q_i$			<b>\$135,840.6</b>

#### Notes

- 1 The prices for embedded generation differ from those published in Orion's schedule, *Export prices for distributed generation*, as per note 7 of that schedule. Orion credits 4.38% of its real export and 0.56% of its reactive export on the new prices. For the purpose of this threshold assessment, the weighted average credit price is used, calculated as follows:

	Historic basis	New price	Weighted average	
Real component	95% x 66.40 = 63.08	67.50	63.27	\$/kW/year
Reactive component	31% x 66.40 = 20.58	22.00	20.59	\$/kVA/yr

Orion does not pay any credits for medium generators. Small generators are accommodated under a net billing approach, where export quantities offset import quantities, and Orion only charges for net import.

Only the distribution part of export credits is included in the calculation of notional charges. The transmission part is excluded from the calculation, and instead the actual amounts credited are included as an avoided transmission charge (refer to following section headed *pass-through costs*).

- 2 The builders' temporary supply price relates to administration, electricity supply and electricity delivery. Refer also to excluded services below.
- 3 All prices and revenues exclude GST.

**Pass-through costs**

- 27 Pass-through costs include transmission charges (including charges payable to Transpower and M-co for transmission services, and avoided transmission charges), rates payable to territorial local authorities, and levies payable to the Electricity Commission.
- 28 Transmission charges for the year ended 31 March 2006 are calculated as Transpower charges plus avoided transmission charges, less the component of Transpower charges passed on transparently to electricity retailers, as follows:

	(\$000)	(\$000)
<b>Transpower and System Operator charges</b>		
Connection	7,220.8	
Interconnection	36,631.3	
EV adjustment	(3,975.6)	
New investment	69.1	
Voltage support	0.1	
Loss and constraint rebates	<u>(7,181.5)</u>	
		<b>32,764.2</b>
<b>plus Avoided transmission charges</b>		
Transmission component of amounts paid to exporting embedded generators		
In Zone A	76.3	
In Zone B	<u>14.4</u>	
		<b>90.7</b>
<b>less Transparent "pass on" charges (payments) to retailers</b>		
Voltage support	0.0	
Loss and constraint rebates	<u>(7,181.5)</u>	
		<b>(7,181.5)</b>
		<hr/>
<b>gives Transmission charge</b>		<b>40,036.4</b>

- 29 Combined with rates paid to local and regional Councils in respect of system fixed assets, and levies paid to the Electricity Commission, these costs represent Orion's pass-through deduction for the period:

	(\$000)
Transmission charge	40,036.4
Local authority rates	1,589.7
Electricity Commission levies	<u>248.4</u>
	<b>41,874.5</b>

### **PRICE THRESHOLD EXCLUDED SERVICES**

- 30 Clause 3 of the notice defines *specified services* that are included in the price threshold assessment. The definition permits certain lines business activities to be excluded from the assessment where there is effective competition for those services.
- 31 Orion has included all delivery service charges for conveying electricity in the calculation of notional revenue. Orion has also included associated service charges where they meet the definition of specified services, and where they are not provided in effective competition with other providers.
- 32 Orion directly charges customers for very few services, and makes extensive use of external contractors rather than maintaining contracting staff in-house. Customers requiring electrical work are generally referred to their own electrical contractor, or to a number of Orion-approved contractors for major work. Customers then pay the contractor directly.
- 33 Other services are provided by Orion at no charge. A description follows of the various types of services which are offered and/or provided by Orion, and the reason for their exclusion from the price threshold calculation.
- New connections and network extensions*
- 34 The value of assets vested in Orion by customers in the form of capital contributions is excluded. Orion takes into accounts the average economic value of customer-driven network reinforcement and extensions (including new subdivisions), and in most situations, Orion covers a portion of the cost of new assets. Where appropriate, Orion encourages the customer to select and directly employ independent contractors to design and build network extensions that comply with the requirements of Orion's published network design standards and specifications.
- Disconnections and reconnections*
- 35 Disconnections and reconnections of customers' premises to Orion's network are mostly undertaken directly by electrical contractors who are employed by the electricity retailers. Some retailer-requested disconnections and reconnections are also performed by Orion's contractors. Orion then recharges the costs of undertaking the work to the retailer who requested the work. As there is effective competition for this service it has been excluded from the price threshold assessment.

*Demolitions*

- 36 Orion does not charge for disconnecting a property for demolition purposes provided that adequate notice is given. Where adequate notice is not given, Orion either passes on the charges of an Orion-approved contractor, or charges for an Orion operator at the rate that would be charged by an Orion-approved contractor (without margin).

*Dedicated equipment charges to major customers*

- 37 Orion charges major customers for electricity delivery equipment that is dedicated to these customers. Dedicated equipment is owned and maintained by Orion, and includes items such as transformers, switchgear, protection devices, ripple relays and metering interface equipment. Many major customers elect to provide their own equipment or use an alternate provider. As there is effective competition for this service it has been excluded from the price threshold assessment.

*Replacement of fuses (pole and boundary box)*

- 38 Failed fuses are replaced by an Orion-approved contractor, or an Orion operator. There is no charge to the customer for the first visit within a six month period. Orion charges the customer for subsequent visits at the rate billed by the contractor, without adding any margin.

*Builders' temporary supplies*

- 39 Orion administers small capacity, generally single phase, builders' temporary supplies, and also owns a pool of temporary supply boxes which are offered for use by builders. The service is divided into three parts:
- 39.1 Installation and removal is carried out by any one of three Orion-approved contractors. Orion is billed by the contractor, and recharges this in turn to the customer without specifically adding any margin. On this basis, this service is excluded from the calculation of notional revenue.
- 39.2 Administration (including tracking and billing), electricity and electricity delivery is provided only by Orion, and is included in the calculation of notional revenue.
- 39.3 The actual temporary supply boxes are provided by competing suppliers. Orion charges separately for this optional part of the service and excludes this revenue on the basis of the active competition between suppliers.

- 40 Orion does not receive revenue in respect of the provision of larger capacity three-phase temporary supplies (other than through standard delivery charges which are included in the calculation of notional revenue).

*Other services*

- 41 Through arrangements with contractors, Orion organises a number of other services including high load escorts, relocation of overhead mains for bargeboard or fascia replacement, isolation for painting or tree trimming, resetting circuit breakers and switches, rewiring central supply fuses and repairs on customer premises.
- 42 These services are performed by a number of electrical contractors, and in most cases the customer is invoiced directly by the contractor.

### QUALITY THRESHOLD RELIABILITY INFORMATION

- 43 Clauses 6(1)(a) and 6(1)(b) of the notice require that reliability measures in relation to *duration* and *frequency* of planned (class B) and unplanned (class C) interruptions in the assessment period do not exceed the average over the five year period ending on 31 March 2003. The notice also requires this statement to include a description of the policies and procedures Orion uses to record these statistics during the year ending on the assessment date.

#### Recording reliability information

- 44 Orion records interruptions on its network in a control centre log. The details recorded include:
- 44.1 district substation;
  - 44.2 feeder;
  - 44.3 switching device where isolation occurred;
  - 44.4 asset type affected;
  - 44.5 cause of interruption;
  - 44.6 time/date off;
  - 44.7 time/date for each restored section;
  - 44.8 number of consumers affected in each restored section; and
  - 44.9 explanatory notes.
- 45 The number of consumers whose power is restored at each restoration stage is calculated by a network-trace of connected consumers on Orion's GIS network model.
- 46 This information is then loaded in a *reliability* database and reliability statistics are queried from this database as required.
- 47 Finally, the total number of connected consumers on the network is obtained from Orion's *connections* database. Orion maintains details of all connections on this database and regularly undertakes reconciliations with the Electricity Commission Registry.

**Interruption duration**

48 This assessment is based on the System Average Interruption Duration Index (SAIDI). Clause 6(1)(a) of the notice requires that:

$$SAIDI_{2006} \leq \frac{SAIDI_{1999} + SAIDI_{2000} + SAIDI_{2001} + SAIDI_{2002} + SAIDI_{2003}}{5}$$

Orion's SAIDI results are:

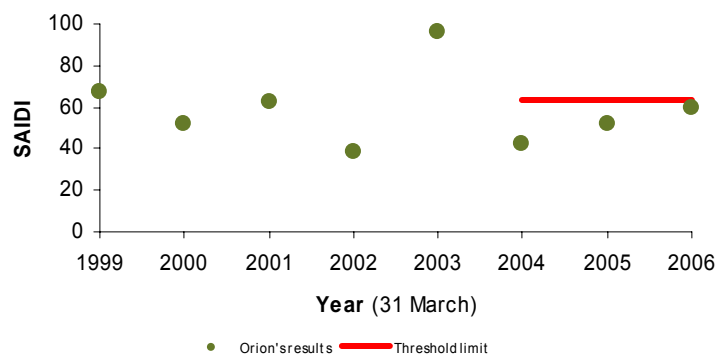
SAIDI (minutes per connection per year)		Year ending 31 March							
		1999	2000	2001	2002	2003	2004	2005	2006
SAIDI for all interruptions (classes B & C)		67.71	51.83	62.25	38.20	96.18	42.42	51.65	59.34
SAIDI for interruptions within each interruption class (= a/b)	Class B	17.55	6.44	3.13	4.91	10.59	6.50	7.68	5.98
	Class C	50.17	45.39	59.12	33.29	85.59	35.93	43.97	53.36
where -									
a = sum of interruption duration factors within each interruption class	Class B	2,784,242	1,047,025	521,074	826,268	1,806,095	1,124,417	1,352,439	1,071,448
	Class C	7,960,050	7,377,331	9,845,244	5,599,642	14,591,721	6,216,157	7,742,492	9,557,547
b = average number of connections		158,673	162,543	166,538	168,231	170,490	173,028	176,083	179,130

Substituting Orion's results, the right-hand side of the condition above becomes:

$$\frac{67.71 + 51.83 + 62.25 + 38.20 + 96.18}{5} = 63.23 \text{ minutes per year}$$

Orion's result for 2006 of 59.34 minutes satisfies the condition in the notice requirement.

SAIDI results during the reference period (1999 through 2003) and subsequent assessment periods are depicted graphically as follows:



**Interruption frequency**

49 This assessment is based on the System Average Interruption Frequency Index (SAIFI). Clause 6(1)(b) of the notice requires that:

$$SAIFI_{2006} \leq \frac{SAIFI_{1999} + SAIFI_{2000} + SAIFI_{2001} + SAIFI_{2002} + SAIFI_{2003}}{5}$$

Orion's SAIFI results are:

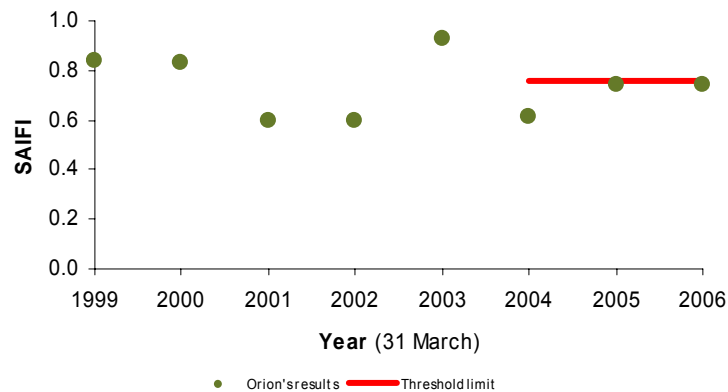
SAIFI (interruptions per connection per year)		Year ending 31 March							
		1999	2000	2001	2002	2003	2004	2005	2006
SAIFI for all interruptions (classes B & C)		0.84	0.83	0.60	0.60	0.93	0.62	0.74	0.74
SAIFI for interruptions within each interruption class (= a/b)	Class B	0.09	0.03	0.02	0.02	0.04	0.02	0.03	0.03
	Class C	0.75	0.80	0.58	0.58	0.89	0.59	0.71	0.72
where -									
a = sum of connections affected by each interruption within each interruption class	Class B	15,000	4,503	3,163	3,265	6,529	4,094	4,732	4,495
	Class C	118,249	130,525	96,795	97,462	151,227	102,631	125,187	128,203
b = average number of connections		158,673	162,543	166,538	168,231	170,490	173,028	176,083	179,130

Substituting Orion's results, the right-hand side of the condition above becomes:

$$\frac{0.84 + 0.83 + 0.60 + 0.60 + 0.93}{5} = 0.76 \text{ interruptions per year}$$

Orion's result for 2006 of 0.74 interruptions per year satisfies the condition in the notice requirement.

SAIFI results during the reference period (1999 through 2003) and subsequent assessment periods are depicted graphically as follows:



## **CONCLUSION**

- 50 The information provided above, issued together with Orion's *Threshold Compliance Statement Consumer Engagement*, demonstrates that Orion has complied with the price and quality thresholds set out in the Commerce Act (Electricity Distribution Thresholds) Notice 2004, as amended by the Commerce Act (Electricity Distribution Thresholds) Amendment Notice 2006.



**DIRECTORS' CERTIFICATE**

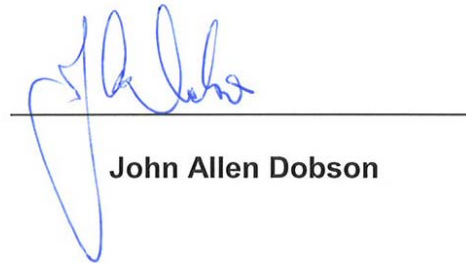
**ON THRESHOLD COMPLIANCE STATEMENT**

We, Craig David Boyce and John Allen Dobson, being directors of Orion New Zealand Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached threshold compliance statement of Orion New Zealand Limited, and related information, prepared for the purposes of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 complies with the requirements of that notice.



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**Craig David Boyce**



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**John Allen Dobson**

**Dated** 12 May 2006



## AUDIT REPORT

### TO THE READERS OF THE THRESHOLD COMPLIANCE STATEMENT OF ORION NEW ZEALAND LTD FOR THE ASSESSMENT PERIOD ENDED ON 31 MARCH 2006

We have audited the attached statement, prepared by Orion New Zealand Ltd for assessment as at 31 March 2006 and dated 12 May 2006. The attached statement is a threshold compliance statement in respect of the price path threshold and the quality threshold, for the purposes of information requirements set out in clause 7 of the Commerce Act (Electricity Distribution Thresholds) Notice 2004 ("the Notice"). In this report the attached statement is called "the threshold compliance statement".

#### Directors' responsibilities

Directors of Orion New Zealand Ltd are responsible for certification of the threshold compliance statement in accordance with the Notice.

#### Auditor's responsibilities

Section 15 of the Public Audit Act 2001 and clause 7(1)(b) of the Notice require the Auditor-General to audit the threshold compliance statement. It is the responsibility of the Auditor-General to express an independent opinion on the threshold compliance statement and report the opinion to you.

The Auditor-General has appointed me, Julian Tan, using the staff and resources of Audit New Zealand, to carry out the audit on his behalf.

#### Basis of opinion

We conducted the audit in accordance with the Auditor-General's Auditing Standards which include the Auditing Standards issued by the Institute of Chartered Accountants of New Zealand.

The audit included examining, on a test basis, evidence relevant to the amounts and disclosures contained on pages 1 to 14 of the threshold compliance statement and pages 1 to 36 of the threshold compliance statement: consumer engagement, which relate to:

- the price path threshold set out in clause 5 of the Notice;
- the SAIDI and SAIFI statistics for the assessment period ended on 31 March 2006 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice; and
- the customer communication part of the quality threshold set out in clause 6(1)(c) of the Notice.

It also included assessment of the significant estimates and judgments, if any, made by Orion New Zealand Ltd in the preparation of the threshold compliance statement and assessment of whether the basis of preparation has been adequately disclosed.

We planned and performed the audit so as to obtain all the information and explanations which we considered necessary. We obtained sufficient evidence to give reasonable assurance that the threshold compliance statement is free from material misstatements, whether caused by fraud or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the threshold compliance statement.

In relation to the SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice, we have undertaken procedures to provide reasonable assurance that:

- the amounts and disclosures in the threshold compliance statement relating to those statistics have been correctly taken from the information disclosed by Orion New Zealand Ltd in accordance with the Electricity (Information Disclosure) Regulations 1999; and
- those statistics have been calculated based on the source data provided to us. We have not performed audit procedures on the source data.

## **Independence**

Other than in our capacity as auditor acting on behalf of the Auditor-General, we have no relationship with or interests in Orion New Zealand Ltd.

## **Unqualified opinion**

We have obtained all the information and explanations we have required.

### ***Price path threshold***

In our opinion, having made all reasonable enquiry, to the best of our knowledge the amounts and details set out in the threshold compliance statement relating to the price path threshold set out in clause 5 of the Notice and related information have been prepared in accordance with the Notice, and give a true and fair view of the performance of Orion New Zealand Ltd against that threshold for the assessment period ended on 31 March 2006.

### ***Quality threshold: SAIDI and SAIFI statistics***

In our opinion, having made all reasonable enquiry, to the best of our knowledge:

- the SAIDI and SAIFI statistics for the assessment period ended on 31 March 2006 which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice and related information have been calculated and prepared in accordance with the Notice and in accordance with Orion New Zealand Ltd's policies and procedures for recording SAIDI and SAIFI statistics as disclosed in the threshold compliance statement, and give a true and fair view of the performance of Orion New Zealand Ltd for the assessment period ended on 31 March 2006;

- the SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003, which are relevant to those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice, have been correctly taken from the information disclosed by Orion New Zealand Ltd in accordance with the Electricity (Information Disclosure) Regulations 1999. Those statistics have been properly calculated based on the unaudited source data provided to us by Orion New Zealand Ltd; and
- the SAIDI and SAIFI statistics for the assessment period ended on 31 March 2006, together with the SAIDI and SAIFI statistics for the years ended 31 March 1999, 2000, 2001, 2002 and 2003, give a true and fair view of the performance of Orion New Zealand Ltd against those parts of the quality threshold that are set out in clauses 6(1)(a) and 6(1)(b) of the Notice for the assessment period ended on 31 March 2006.

### **Quality threshold: customer communication**

In our opinion, having made all reasonable enquiry, to the best of our knowledge the information set out in the threshold compliance statement relating to that part of the quality threshold that is set out in clause 6(1)(c) of the Notice has been prepared in accordance with the Notice, and gives a true and fair view of the performance of Orion New Zealand Ltd against that part of the quality threshold for the assessment period ended on 31 March 2006.

The audit was completed on 12 May 2006 and our opinion is expressed as at that date.



Julian Tan  
Audit New Zealand  
On behalf of the Auditor-General  
Christchurch, New Zealand

#### **Matters Relating to Electronic Presentation of the Audited Threshold Compliance Statement**

This audit report relates to the threshold compliance statement of Orion New Zealand Limited as at 31 March 2006 included on Orion New Zealand Limited's website. The Orion New Zealand Board is responsible for the maintenance and integrity of the Orion New Zealand Limited web site. We have not been engaged to report on the integrity of the Orion New Zealand website. We accept no responsibility for any changes that may have occurred to the threshold compliance statement since they were initially presented on the website.

The audit report refers only to the threshold compliance statements named above. It does not provide an opinion on any other information which may have been hyperlinked to/from this statement. If readers of this report are concerned with the inherent risk arising from electronic data communication they should refer to the published hard copy of the statement and related audit report dated 12 May 2006 to confirm the information included in the audited statement presented on this website.

Legislation in New Zealand governing the preparation and dissemination of statements may differ from legislation in other jurisdictions.



## APPENDIX A – DELIVERY, ASSOCIATED SERVICE AND EXPORT PRICE SCHEDULES



### Delivery prices

Applicable from 1 April 2005 to 31 March 2006  
(excluding GST)

General Connections	Distribution	Transmission	Delivery	
<b>Fixed</b>				
Outside Lighting (per connection)	11.30 <sup>6</sup>	-	11.30 <sup>6</sup>	c/day
<b>Peak<sup>3</sup></b>				
Both Zones	95.60	39.40	135.00	\$/kVA/yr
<b>Capacity<sup>3</sup></b>				
<b>Zone A all year and Zone B Winter<sup>4</sup>:</b>				
Nights, weekends & public holidays	0.50	0.15	0.65	c/kWh
Working weekdays	4.25	1.01	5.26	c/kWh
<b>Zone B Summer<sup>4</sup>:</b>				
Any time, any day	2.01	0.50	2.51	c/kWh
<b>Irrigation Connections</b>				
Transitional Irrigation Package (closed) <i>(Net effective price. For irrigation in zone B only. See document "Transitional Irrigation Package" for full details and conditions)</i>	121.70	57.30	179.00	\$/kW/yr
Irrigation Power Factor Correction Rebate <i>(See document "Irrigation Power Factor Correction Rebate" for full details and conditions)</i>	(23.50)	-	(23.50)	\$/kVA/yr
Irrigation Interruptibility Rebate <i>(Not available to connections on the Transitional Irrigation Package. For irrigation in zone B only. See document "Irrigation Interruptibility Rebate" for full details and conditions)</i>	(5.86)	-	(5.86)	\$/kW/yr
<b>Major Customer Connections</b>				
Fixed (Standard connections)	500.05	-	500.05	\$/yr
Fixed (Secondary connections)	266.30	-	266.30	\$/yr
Control period demand <sup>5</sup>	66.40	34.40	100.80	\$/kVA/yr
Assessed capacity - Line <sup>5</sup>	24.40	-	24.40	\$/kVA/yr
Assessed capacity - Transmission <sup>5</sup>	-	17.70	17.70	\$/kVA/yr
<b>Miscellaneous</b>				
Provision of Equipment - refer to Schedule B of the document "Electricity Delivery Pricing For Major Customer Connections"				
Charge to the purchaser of Delivery Services - Electricity Retailers and some Major Customers	20.00		20.00	\$/monthly invoice
Charges for associated services - refer to the document "Charges for Associated Services"				

### Notes

- GST is payable in addition to these prices.
- Orion's documents *Application of Electricity Delivery Prices* and/or *Electricity Delivery Pricing for Major Customer Connections* apply.
- Peak and Capacity prices for general connections are applied to peak loadings and volumes derived from measurements taken at Grid Exit Points. Zone A is the area supplied by Addington, Arthur's Pass, Bromley, Castle Hill, Coleridge, Islington and Papanui Grid Exit Points. Zone B is the area supplied by Hororata and Springston Grid Exit Points.
- Winter is defined as the period April - September inclusive, summer is October - March inclusive. Night is defined as the period from 9pm to 7am, day is the period from 7am to 9pm.
- Demand and Capacity prices for Major Customer Connections are applied to measurements taken at the connection.
- The fixed line price for Outside Lighting is effective from 1 July 2005. The price from 1 April 2005 through 30 June 2005 is 11.0 cents per day.
- The estimated number of (energised) connections to which these charges apply as at 1 February 2005 were:

Outside Lighting Connections	38,581
General Connections	174,504 (plus Outside Lighting connections)
Major Customers Connections	411 (including 20 secondary connections)



## Schedule of Charges for Associated Services

Issued 28 October 2004

The following charges apply to associated services as outlined in Schedule C of Orion's Delivery Service Agreement (DSA). Charges shown are inclusive of GST and are payable by the party requesting the service.

### Charges (including GST)

#### Permanent Connections - Enlivening and Decommissioning (effective 1 December 2005)

##### Connection

First-time enlivening of new properties - raise and terminat. Does not include metering or service line or installation of service line.

#### Temporary isolation and disconnection of overhead service mains in the urban area: (effective 7 August 2003)

Under this service, Orion will isolate, cover, relocate, disconnect and/or reconnect overhead mains to allow customers to safely trim trees or replace, repair or paint spouting and barge boards on the customer's premises.

Relocation of single phase overhead mains - service call charge	\$35.00 per trip (usually only one trip)
Isolation, covering, disconnection of single phase overhead mains - service call charge	\$35.00 per trip (usually two trips)
Disconnection or relocation of single phase overhead mains:	
Remove the lines, shackles from the barge board	\$36.00
Reconnect the lines, shackles to the barge board	\$26.00
Supply and install a new cleat, if required.	\$38.00
Replace existing mains entry box (if reusable) back on the new barge board, including two 16mm <sup>2</sup> tails to the overhead mains.	\$52.00
Supply of new mains entry box where existing box is unserviceable.	\$87.00

Notes: For this service, the urban area is defined as being within the following boundaries - Waimakariri River, Pegasus Bay, Lyttelton, Kennedys Bush Rd, Quaifes Rd, Marshes Rd, Pound Rd.

Extra charges may apply for work outside of normal business hours, for work outside the urban area, where more than one phase is involved, or where excess time on site is required.

#### Single Phase Temporary Connections (effective 1 December 2004)

This service covers the supply of small single phase temporary connections (generally for building and construction sites) adjacent to existing network reticulation, or where Orion is providing reticulation in the development of a permanent supply. Terms and conditions apply.

<i>Installation and Removal</i> Covers installation and removal of Orion-owned and non Orion-owned temporary supply boxes.	Urban: \$70 Rural: \$95 Remote: \$130
<i>Special Trip</i> Applies in addition to the installation and removal component where an additional trip is required, either because the site is not ready when the contractor first calls, or where the removal cannot be carried out in conjunction with the enlivening of a permanent supply at the same site.	Urban: \$55 Rural: \$80 Remote: \$115
<i>Administration and Electricity Supply</i> Applies to Orion-owned and non Orion-owned temporary supply boxes. Covers retail electricity, delivery, billing and administration.	\$0.50 per day
<i>Supply Box Hire</i> Applies in addition to the Administration and Electricity Supply component where an Orion-owned temporary supply box is installed.	\$1.50 per day

Notes: For this service, *urban* is within a 20km radius of Cathedral Sq, *rural* is between 20km and 40km from Cathedral Sq, and *remote* is beyond 40km. For the Banks Peninsula area, the Hilltop Hotel is designated as the 40km radius point.

Extra charges may apply where additional work is required (eg for a Certificate of Compliance).

#### High Load Escorting Service: (effective 7 August 2003)

Standard escort	\$60/hour plus \$1/km
Complex escort (requiring a tower truck and two lines staff)	Price on application



## Export prices for distributed generation

Applicable from 1 April 2004 to 31 March 2006

The prices below represent Orion's credit to Electricity Retailers reflecting the benefit to Orion from embedded generation. The credit does not represent the purchase of this electricity. The retailer receiving the credit is the retailer who has contracted to purchase the output from the generator. For pricing purposes, generators are grouped according to their generator output ratings in kilowatts (kW):

Distributed Generator Output Rating	Line	Transmission	Delivery	
<b>Small (0 - 5 kW) <sup>2</sup></b>	<i>Standard 'General Connection' delivery prices apply at all times</i>			
<b><i>During Chargeable Peak Periods Only</i></b>				
<b>Medium (5 - 30 kW) <sup>3</sup></b>	45.00	24.40	69.40	c/kWh
<b>Large (&gt; 30 kW) - Real Power <sup>3</sup></b>	67.50	36.60	104.10	\$/avg kW/yr
<b>Large (&gt; 30 kW) - Reactive Power <sup>3</sup></b>	22.00	11.90	33.90	\$/avg kVAr/yr

### Notes

1. GST is credited in addition to these prices.
2. For Small generators, export volumes are not included with a retailer's chargeable GXP volumes and are therefore not charged. This is effectively a credit to the retailer at the delivery prices applying to general connections.
3. For Medium and Large generators the prices relate to Orion's Chargeable Peak Period only, defined as complete half hour periods (beginning or ending on the hour) occurring while Orion is undertaking load management to control peak loading. If there are fewer than ten such half hours in a season, the difference will be made up using the half hours of highest loadings during the season.
4. The same prices apply in all of Orion's zones.
5. The retailer is responsible for ensuring that appropriate metering is in place to record the exported quantities, and for providing the quantities to Orion for Orion to apply the credits.
6. Minimum metering required is:
  - For Small generators - Import & export kWh meters with reverse stops or a combined import/export kWh meter that records import and export volumes separately (that is, 'net metering' is not permitted).
  - For Medium generators - As for small generators for low exported kWh volumes and/or where the retailer agrees. Otherwise, import/export half-hour recording kWh meter.
  - For Large generators with a capacity between 30 kW and 350 kW connected to Orion's low voltage network - Import/export half-hour recording kWh meter.
  - For Large generators where exported reactive power is to be considered, or where the capacity exceeds 350 kW, or where the generator is connected to Orion's high voltage network - 4-quadrant meter that records, for every half-hour:
    - Net real energy (kWh) imported or exported; and
    - Net reactive energy (kVArh) imported or exported.

Note that any net import of reactive power during the Chargeable Peak Period is charged at the prices above, rather than credited.
7. These prices do not apply to exporting generators in place prior to 31 March 2004 and electing to stay on the pricing basis described in section 10 of the document "Electricity Delivery Pricing for Major Customer Connections".
8. These prices apply to export from distributed generators of up to 1 megawatt output rating.