

# **ORION NEW ZEALAND LIMITED**

## **Public Disclosures as required by the Electricity (Information Disclosure) Regulations 1999**

**For the period 1 April 1999 to 31 March 2000**

**July 2000**

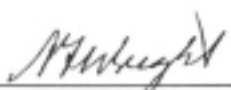
# ORION NEW ZEALAND LIMITED

The following public disclosures are made by Orion New Zealand Limited ("Orion") in accordance with the Electricity (Information Disclosure) Regulations 1999 (the "Regulations") and amendments to those Regulations.

The disclosures cover the period from 1 April 1999 to 31 March 2000 and provide comparatives for prior years where required by the Regulations.

## Regulation 6 - Financial Statement disclosure by line owners

For and on behalf of directors:

  
\_\_\_\_\_  
Director  
25 July 2000

  
\_\_\_\_\_  
Director  
25 July 2000

## STATEMENT OF FINANCIAL PERFORMANCE

<u>For the year ended 31 March</u>	<u>Notes</u>	<u>2000 \$000's</u>	<u>1999 \$000's</u>
Operating revenues	2	<u>143,379</u>	<u>141,683</u>
Operating surplus before taxation	3	57,647	51,510
Taxation expense	4	<u>21,222</u>	<u>19,044</u>
Net surplus after taxation		<u>36,425</u>	<u>32,466</u>

*The accompanying notes form part of and are to be read in conjunction with these financial statements*

## STATEMENT OF MOVEMENTS IN EQUITY

<u>For the year ended 31 March</u>	<u>Notes</u>	<u>2000 \$000's</u>	<u>1999 \$000's</u>
Equity at the start of the period	10	473,296	498,461
Net surplus		36,425	32,466
Decrease in revaluation reserves		<u>(41,634)</u>	<u>-</u>
Total recognised revenues and expenses for the period		(5,209)	32,466
Amendment to equity to reflect changes required by the new regulations and amendments		(18,045)	(51,470)
Distributions paid or provided to shareholders during the period		<u>(24,000)</u>	<u>(6,161)</u>
Equity at the end of the period	10	<u>426,042</u>	<u>473,296</u>

*The accompanying notes form part of and are to be read in conjunction with these financial statements*

## STATEMENT OF FINANCIAL POSITION

As at 31 March	Notes	2000 \$000's	1999 \$000's
<b>CURRENT ASSETS</b>			
Bank		742	1
Short term deposits		-	12,300
Accounts receivable	5	17,404	7,439
Inventories	6	28	12
Intercompany balances		-	4,169
		<hr/>	<hr/>
Total current assets		18,174	23,921
<b>NON-CURRENT ASSETS</b>			
Long term investments		-	-
Fixed assets	7	429,919	463,872
Other tangible assets		-	-
		<hr/>	<hr/>
		429,919	463,872
		<hr/>	<hr/>
Total tangible assets		448,093	487,793
<b>INTANGIBLE ASSETS</b>			
Goodwill		-	-
Other intangible assets		-	-
		<hr/>	<hr/>
Total intangible assets		-	-
		<hr/>	<hr/>
Total assets		<u>448,093</u>	<u>487,793</u>
<b>CURRENT LIABILITIES</b>			
Bank overdraft		-	41
Short term borrowings		-	-
Accounts payable and accruals	8	22,051	14,456
		<hr/>	<hr/>
		22,051	14,497
<b>NON-CURRENT LIABILITIES</b>			
	9	-	-
<b>SHAREHOLDERS' EQUITY</b>			
Mandatory subordinated convertible notes	10	-	76,000
Shareholders' equity	10	426,042	397,296
		<hr/>	<hr/>
Total liabilities and equity		<u>448,093</u>	<u>487,793</u>

*The accompanying notes form part of and are to be read in conjunction with these financial statements*

## STATEMENT OF CASH FLOWS

<b>For the year ended 31 March</b>	<b>Notes</b>	<b>2000 \$000's</b>	<b>1999 \$000's</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Cash was provided from:			
Cash receipts from customers		139,203	143,113
Interest received		10	2,386
		<u>139,213</u>	<u>145,499</u>
Cash was applied to:			
Non capitalised payments to suppliers and employees		60,373	72,215
Income tax paid (net of refunds)		27,021	19,131
Interest paid		284	5,926
		<u>87,678</u>	<u>97,272</u>
Net cash inflow from operating activities	12	<u>51,535</u>	<u>48,227</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Cash was provided from:			
Sale of fixed assets		1,217	202
Cash was applied to:			
Purchase of fixed assets		23,480	14,043
		<u>23,480</u>	<u>14,043</u>
Net cash outflow from investing activities		<u>(22,263)</u>	<u>(13,841)</u>

*The accompanying notes form part of and are to be read in conjunction with these financial statements*

## STATEMENT OF CASH FLOWS (CONTINUED)

For the year ended 31 March	Notes	2000 \$000's	1999 \$000's
CASH FLOWS FROM FINANCING ACTIVITIES			
Cash was applied to:			
Reclassifications as required by the new disclosure regulations and amendments		20,959	27,527
Decrease/(increase) in current accounts		(4,169)	4,169
Dividends paid		24,000	12,978
		<u>40,790</u>	<u>44,674</u>
Net cash outflow from financing activities		<u>(40,790)</u>	<u>(44,674)</u>
CASH FLOW SUMMARY AND RECONCILIATION			
Opening bank and short term investments		12,260	22,548
Inflow from operating activities		51,535	48,227
Outflow from investing activities		(22,263)	(13,841)
Outflow from financing activities		(40,790)	(44,674)
Closing bank and short term investments		<u>742</u>	<u>12,260</u>
REPRESENTED BY:			
Cash at bank and short term investments		742	12,301
Bank overdraft		-	(41)
		<u>742</u>	<u>12,260</u>

*The accompanying notes form part of and are to be read in conjunction with these financial statements*

# NOTES TO THE FINANCIAL STATEMENTS

## 1. STATEMENT OF ACCOUNTING POLICIES

### Reporting entity

Orion New Zealand Limited ("the Company") is a Company registered under the Companies Act 1993. The Company is a reporting entity for the purposes of the Financial Reporting Act 1993.

### Special purpose financial statements

These financial statements have been prepared for the purpose of complying with the requirements of the Electricity (Information Disclosure) Regulations 1999 ("*Regulations*"), and amendments to those Regulations.

Allocations of the costs, revenues, assets and liabilities of the Company have been made in accordance with the mandatory avoidable cost allocation methodology as required by the Regulations.

This approach defines the line business as the Company's core business, and makes an assessment of the costs, revenues, assets and liabilities that would be avoided by the line business if all non-core businesses were to cease operation. The costs, revenues, assets and liabilities that would be avoided are allocated to those non-core businesses. Costs, revenues, assets and liabilities that would not be avoided are allocated to the line business.

Although not required to do so, the Company has chosen to provide comparative information for all new disclosure requirements.

### Measurement base

The accounting principles recognised as appropriate for the measurement and reporting of financial performance, cash flows and financial position on an historical cost basis are followed by the Company, with the exception that certain fixed assets have been revalued.

### Specific accounting policies

The following specific accounting policies which materially affect the measurement of financial performance, cash flows and financial position are applied:

- (a) Line revenue  
Sales recognise actual amounts billed during the financial year, with an adjustment for assessed amounts due but not billed during the year.
- (b) Capital contributions  
Capital contributions which are refundable to customers are treated as current liabilities until refunded. Non-refundable contributions are credited to income when received.
- (c) Research and development costs  
Research and development costs are expensed in the period incurred. Development costs are deferred where future benefits are expected to exceed those costs, otherwise such costs are expensed in the period incurred. Deferred development costs are amortised over future periods in relation to expected future revenue. Unamortised costs are reviewed at each balance date to determine the amount (if any) that is no longer recoverable and any amounts, so identified, are expensed.
- (d) Distinction between capital and revenue expenditure  
Capital expenditure is defined as all expenditure incurred in the creation of a new asset and any expenditure which results in a significant restoration or increased service potential for existing assets. Constructed assets are included in fixed assets

as each becomes operational and available for use. Revenue expenditure is defined as expenditure which is incurred in the maintenance and operation of the fixed assets of the Company.

- (e) **Accounts receivable**  
Accounts receivable are valued at their expected realisable value. All known bad debts are written off during the financial year.
- (f) **Inventories**  
Stocks and inventories are valued at the lower of cost (FIFO or weighted average) and net realisable value, with additional allowances for obsolescence where necessary. Chargeable work in progress includes direct materials and labour and an allocation of overheads that directly relate to the contract.
- (g) **Depreciation**  
Depreciation has been provided on fixed assets using the straight line method at rates which amortise the cost or valuation less estimated residual value over their economic lives.

The main bases are periods not exceeding:

Electricity distribution system	70 years
Buildings	50 years
Cars and vans	5 years
Trucks	7 years
Plant and equipment	10 years
Computer equipment and software	3 years

The electricity distribution system economic lives have been set consistent with the Ministry of Commerce's revised ODV Handbook. The economic lives range from 15 - 70 years for the different components of the distribution system.

- (h) **Fixed assets**  
The group's fixed assets are revalued on a cyclic basis at least once every three years by independent valuers to net current value. Any subsequent fixed asset additions are initially recorded at cost until the next revaluation.
- (i) **Income tax**  
The income tax expense charged against the surplus for the year is the estimated liability in respect of that surplus and is calculated after allowance for permanent differences and timing differences not expected to reverse in future periods. This is the partial basis for the calculation of deferred tax.  
  
Tax effect accounting is applied on a partial basis using the liability method. A debit balance in the deferred tax account, arising from timing differences or income tax benefits from income tax losses, is only recognised if there is virtual certainty of realisation.
- (j) **Employee entitlements**  
Provision is made in respect of the Company's liability for annual and long service leave. The annual leave liability has been calculated on an actual entitlement basis at current rates of pay. The long service leave liability has been assessed on an actuarial basis.

### **Changes in Accounting Policies**

There have been no changes in accounting policies. The policies have been applied on bases consistent with those used in previous years.

2. OPERATING REVENUES

Operating revenues include the following items:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
AC rental rebates	2,451	4,460
Bad debts recovered	25	18
Changes in bad debt provisions	-	66
Dividends	-	-
Interest	-	2,386
Line revenue	139,871	137,669
Metering revenue reallocated	-	(4,714)
Other	1,032	1,798
	<hr/>	<hr/>
	<b>143,379</b>	<b>141,683</b>

3. OPERATING EXPENDITURE

Operating surplus before tax includes the following items:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Payment for transmission charges (prior to loss rental rebates)	44,489	43,087
AC loss-rental rebates (distribution to retailers) expense	2,451	4,460
<b>Transfer payments to the "other" business for:</b>		
- asset maintenance	5,352	4,605
- consumer disconnection/reconnection services	-	-
- meter data	-	-
- consumer-based load control services	-	12
- royalty and patent expenses	-	5
- avoided transmission charges on account of own generation	-	-
- other goods and services not listed	-	-
	<hr/>	<hr/>
<b>Total</b>	<b>5,352</b>	<b>4,622</b>
<b>Expense to entities that are not related parties for:</b>		
- asset maintenance	2,316	4,174
- consumer disconnection/reconnection services	-	-
- meter data	5	10
- consumer-based load control services	11	1

- royalty and patent expenses	-	-
<b>Total</b>	2,332	4,185
Employee salaries, wages and redundancies	7,719	6,282
Consumer billing and information system expense	835	2,352
<b>Depreciation on:</b>		
- system fixed assets	15,345	15,034
- other assets	1,794	1,719
<b>Total</b>	17,139	16,753
<b>Amortisation of:</b>		
- goodwill	-	-
- other intangibles	-	-
<b>Total</b>	-	-
Corporate and administration	803	569
Human resource expenses	712	587
Leasing and rental	59	58
Loss on sale of fixed assets	357	11
Marketing/advertising	110	185
Merger and acquisition expenses	-	-
Takeover defence expenses	-	-
Research and development expenses	-	-
Consultancy and legal expenses	1,506	938
Donations	36	13
Directors fees	210	196
<b>Auditors Fees:</b>		
- audit fees paid to principal auditors	42	55
- audit fees paid to to other auditors	-	-
- fees paid for other services provided by principal and other auditors	5	5
<b>Total</b>	47	60
<b>Cost of offering credit:</b>		
- bad debts written off	47	39
- increase in estimated doubtful debts	141	-
<b>Total</b>	188	39
Local authority rates expense	212	222
Rebates to consumers due to ownership interest	-	-
Subvention payments	-	-
Unusual expenses	-	-
Other expenditure not listed	1,175	(356)

<b>Total operating expenditure</b>	<u>85,732</u>	<u>84,263</u>
<b>Operating surplus before interest and income tax</b>	57,647	57,420
<b>Interest expense</b>		
- interest expense on borrowings	-	5,910
- financing charges related to finance leases	-	-
- other interest expense	-	-
<b>Total</b>	<u>-</u>	<u>5,910</u>
<b>Operating surplus before income tax</b>	<u>57,647</u>	<u>51,510</u>

#### 4. TAXATION

The taxation provisions are subject to Inland Revenue Department assessment.

	<b>2000 \$000's</b>	<b>1999 \$000's</b>
Surplus before taxation	<u>57,647</u>	<u>51,510</u>
Prima facie taxation at 33%	19,023	16,998
ADD/(LESS) taxation effect of :		
Timing differences	(460)	1,450
Permanent differences	2,641	12
Under/(over) provisions in prior years	<u>18</u>	<u>584</u>
Taxation as per Statement of Financial Performance	<u>21,222</u>	<u>19,044</u>

The Company has a deferred tax liability of \$33 million in respect of timing differences relating to the current and prior periods that are not recognised in the deferred tax account. This relates to potential tax depreciation recovered on the electricity distribution network. This liability would crystallise if these assets were sold at their carrying value.

5. ACCOUNTS RECEIVABLE

A summary of accounts receivable is as follows:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Trade receivables	5,996	1,985
Other receivables	11,221	5,417
Prepayments	502	204
Interest receivable	-	10
	<u>17,719</u>	<u>7,616</u>
Unearned interest on hire purchase debtors	-	(3)
Provision for doubtful debts	<u>(315)</u>	<u>(174)</u>
	<u><b>17,404</b></u>	<u><b>7,439</b></u>

6. INVENTORIES

A summary of inventories is as follows:

Chargeable WIP	<u>28</u>	<u>12</u>
	<u><b>28</b></u>	<u><b>12</b></u>

7. FIXED ASSETS

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
System fixed assets (at valuation)	397,913	448,140
System fixed assets (at cost) (includes works under construction)	9,759	23,203
Accumulated depreciation	-	(29,720)
	<u>407,672</u>	<u>441,623</u>
Land and buildings (at valuation)	18,154	18,151
Land and buildings (at cost)	212	337
Accumulated depreciation	-	(437)
	<u>18,366</u>	<u>18,051</u>
Consumer billing and information systems (at valuation)	1,226	1,397
Consumer billing and information systems (at cost)	-	1,368
Accumulated depreciation	-	(1,534)
	<u>1,226</u>	<u>1,231</u>
Office equipment (at valuation)	562	1,126
Office equipment (at cost)	-	353
Accumulated depreciation	-	(618)
	<u>562</u>	<u>861</u>
Motor vehicles and plant (at valuation)	1,164	930
Motor vehicles and plant (at cost)	-	703
Accumulated depreciation	-	(576)
	<u>1,164</u>	<u>1,057</u>
Other (at valuation)	929	416
Other (at cost)	-	861
Accumulated depreciation	-	(228)
	<u>929</u>	<u>1,049</u>
Total fixed assets	<u><u>429,919</u></u>	<u><u>463,872</u></u>

Capital work in progress included in fixed assets at balance date is as follows:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Capital works under construction (part of system fixed assets)	9,759	2,309
Plant	-	731
Information systems	-	135
Land and buildings	212	50
	<hr/>	<hr/>
	<b>9,971</b>	<b>3,225</b>
	<hr/>	<hr/>

#### Revaluation

The Company's electricity distribution system was revalued to net current value as at 31 March 2000. The valuation, on an optimised deprival value basis, was certified by independent valuers, Ernst and Young. Land, buildings and other equipment were revalued to net current value as at 31 March 2000 by the registered valuers, Ernst and Young.

Depreciation has been applied to the revalued assets for the year ended 31 March 2000 in accordance with the group's accounting policies.

#### 8. ACCOUNTS PAYABLE AND ACCRUALS

A summary of accounts payable and accruals is as follows:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Trade creditors	11,554	8,102
Accruals	9,323	5,030
Employee entitlements	1,174	1,040
Interest accrued on term liabilities	-	284
Dividends payable	-	-
Income tax payable	-	-
	<hr/>	<hr/>
	<b>22,051</b>	<b>14,456</b>
	<hr/>	<hr/>

#### 9. NON-CURRENT LIABILITIES

Non-current liabilities are as follows:

Payables and accruals	-	-
Borrowings	-	-
Deferred tax	-	-
Other	-	-
	<hr/>	<hr/>
	<b>-</b>	<b>-</b>
	<hr/>	<hr/>

10. EQUITY

Equity comprises:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Share capital	120,000	120,000
Retained earnings	75,369	4,989
Reserves	230,673	272,307
Mandatory convertible notes	-	76,000
	<hr/>	<hr/>
Total shareholders' equity	426,042	473,296
Minority interests	-	-
	<hr/>	<hr/>
Total equity	426,042	473,296
Capital notes	-	-
	<hr/>	<hr/>
Total capital funds	<u>426,042</u>	<u>473,296</u>

On 1 April 1999 the Mandatory Convertible Notes were reclassified as ordinary equity. No interest expense was assigned to the network business during the year ending 2000.

11. FINANCIAL INSTRUMENTS

The estimated fair values of the Company's financial instruments are as follows:

	<b>Carrying</b> <b>Amount</b> <b>2000</b> <b>\$000's</b>	<b>Fair</b> <b>Value</b> <b>2000</b> <b>\$000's</b>	<b>Carrying</b> <b>Amount</b> <b>1999</b> <b>\$000's</b>	<b>Fair</b> <b>Value</b> <b>1999</b> <b>\$000's</b>
Cash and short term investments	742	742	12,301	12,301
Bank overdraft	-	-	(41)	(41)
Interest rate swaps	-	-	-	(2,018)

The following methods and assumptions were used to estimate the fair value of each class of financial instrument:

*Cash, short term investments, bank overdraft and short term debt.* The carrying amounts of these balances are equivalent to their fair value.

*Interest rate swaps, forward rate agreements (FRA's) and options.* The fair value of interest rate swaps, FRA's and options, is estimated based on quoted market prices of those instruments and apportioned between the mandatory convertible notes (assigned to line business) and other debt (not assigned to line business).

12. RECONCILIATION OF SURPLUS AFTER TAXATION WITH NET CASH FLOW FROM OPERATING ACTIVITIES

	<b>2000 \$000's</b>	<b>1999 \$000's</b>
Net surplus from the Statement of Financial Performance	36,425	32,466
ADD/(LESS) non cash items:		
Depreciation	17,139	16,753
ADD/(LESS) movements in other working capital items:		
(Increase)/decrease in debtors	(9,975)	8,178
(Increase)/decrease in interest receivable	10	-
(Increase)/decrease in stocks	(16)	348
Increase/(decrease) in creditors	7,879	(9,513)
Increase/(decrease) in interest payable	(284)	(16)
ADD/(LESS) items classified as an investing activity:		
Loss on sale of fixed assets	357	11
	<hr/>	<hr/>
Net cash inflow from operating activities	<u>51,535</u>	<u>48,227</u>

13. CONTINGENT ASSETS AND LIABILITIES

There were no material contingent assets or contingent liabilities as at 31 March 2000.

14. COMMITMENTS

At balance date, capital commitments were as follows:

	<b>2000 \$000's</b>	<b>1999 \$000's</b>
Distribution system	2,484	847
Other	-	-
	<hr/>	<hr/>
	<u>2,484</u>	<u>847</u>

All of the above capital commitments are due to be met in the next financial year.

At balance date, lease commitments were as follows:

	<b>2000</b>	<b>1999</b>
	<b>\$000's</b>	<b>\$000's</b>
2000	-	50
2001	60	50
2002	56	50
2003	56	50
2004 and beyond (1999)	56	498
2005 and beyond (2000)	473	

Note: commitments which extend beyond the next four years have been assessed for a maximum period of 10 years.

## 15. RELATED PARTIES

### **Transactions with owners and directors**

Christchurch City Holdings Limited (CCHL) is an 87.625% shareholder in the Holding Company. CCHL is 100% owned by the Christchurch City Council (CCC).

Selwyn Council Trading Enterprises Limited (SCTEL) is a 10.725% shareholder in the Holding Company. SCTEL is 100% owned by the Selwyn District Council (SDC).

Banks Peninsula District Council (BPDC) is a 1.650% shareholder in the Holding Company.

The Company has been 100% owned by Orion Group Limited (the Holding Company) since 23 October 1998. Prior to that date its shares were owned in the above proportions by CCHL, SCTEL and BPDC.

The Company undertakes many transactions with the shareholders and their related parties, all of which are carried out on a commercial and arms length basis.

During the year no material transactions, other than the payment of dividends, were entered into with such parties.

During the year no material transactions were entered into with any of the directors, except for the following transactions with a subsidiary of the Carter Group Limited, relating to subdivision power reticulation:

Purchase	\$32,000
Liability at 31 March 2000	\$177,000

These transactions are conducted on an arms length commercial basis.

A summary of the related party transactions with the CCC is as follows:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
<b>TRANSACTIONS DURING THE YEAR</b>		
Purchases from CCC	325	270
Revenues from CCC	1,146	1,226
Dividend payments	21,030	11,372
MCN interest payments	-	5,179
<b>OUTSTANDING BALANCES AS AT</b> 31 MARCH		
Accounts payable to CCC	35	-
Accounts receivable from CCC	380	15
Dividends payable to CCHL	-	-

#### **Transactions with "other" businesses**

For the purposes of Regulation 9 of the Regulations, transactions taking place between the line business and "other" businesses must be identified.

The Company had considerable numbers of interactions with two wholly-owned subsidiaries during the year - Connetics Limited (a contracting Company) and Enersis Limited (an information technology Company).

A description of the intercompany transactions, revenue amounts and balances at 31 March 2000 and 1999 follows. Note that estimated data has had to be used in the determination and apportionment of costs for both Connetics and Enersis into the required categories.

#### **Connetics**

Connetics has provided construction and maintenance services to the line business for the period 1 April 1999 to 31 March 2000, and for a number of prior years.

These services follow the awarding of a contract based on a contested lowest-price conforming tender.

In virtually every case multiple parties were invited to tender for such work.

In the case of emergency maintenance, a contract comprising a negotiated schedule of rates has been agreed. A contract has also been negotiated for the management of system spares.

Contract variations and adjustments have been negotiated between the parties. No debts have been written off or forgiven during the year. Amounts are due the 20<sup>th</sup> of the month following date of invoice.

Services provided by Connetics:

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Asset maintenance		
- asset storage	150	99
- emergency work	1,637	1,599
- other asset maintenance	3,565	2,907
	<hr/>	<hr/>
	5,352	4,605
Asset construction		
- subtransmission assets	153	72
- zone substations	217	151
- distribution lines and cables	2,820	3,117
- medium voltage switchgear	656	979
- distribution transformers	134	-
- distribution substations	976	450
- low voltage lines and cables	1,385	1,053
- other system fixed assets	141	369
	<hr/>	<hr/>
	6,482	6,191
Other services provided to line business		
- meter data	-	-
- consumer-based load control	-	-
- disconnection/reconnection services	-	-
- avoided transmission charges	-	-
- other goods and services	-	-
	<hr/>	<hr/>
	11,834	10,796
	<hr/>	<hr/>
Balance outstanding at 31 March	2,285	1,757

The Company has provided directors and some specialised administrative support to Connetics. These have been charged on a commercial arms-length basis.

Some spare transformers have been sold to Connetics. These have been on a negotiated basis.

No debts have been written off or forgiven during the year. Amounts are due the 20<sup>th</sup> of the month following date of invoice.

Payments received from Connetics for services	80	52
Payments received from Connetics for transformers	65	68
Balance outstanding at 31 March	7	29

### **Energis**

Energis has provided information systems, communication systems and SCADA support and development to the Company during the period 1 April 1997 to 30 June 1999, at which stage it ceased operations with staff transferring to Orion.

This includes a facilities management agreement as well as various projects where staff time was charged to projects at rates varying between \$55 and \$100 per hour.

No debts have been written off or forgiven. Amounts are due the 20<sup>th</sup> of the month following date of invoice.

	<b>2000</b> <b>\$000's</b>	<b>1999</b> <b>\$000's</b>
Services provided by Enersis	200	780
Balance outstanding at 31 March	-	130

The Company has provided property rental, vehicle and equipment leasing services to Enersis as well as some administrative support.

No debts have been written off or forgiven. Amounts are due the 20<sup>th</sup> of the month following date of invoice.

Services provided to Enersis	-	69
Balance outstanding at 31 March	-	60

## Regulation 15

### Disclosure by line owners of financial and efficiency performance measures

#### *Financial performance measures as defined by the Electricity (Information Disclosure) Regulations 1999 and amendments*

	2000	1999	1998	1997
1 (a) Return on funds	13.21%	11.87%	*	*
(b) Return on equity	8.18%	8.03%	*	*
(c) Return on investment	(1.15%)	7.57%	*	*

Refer to Orion's Regulation 16 Disclosure for the derivation of these measures.

Excluding the impact of revaluation, the ROI for 2000 was 7.96%.

#### *Financial performance measures as defined by the Electricity (Information Disclosure) Regulations 1994*

	2000	1999	1998	1997
(a) Accounting return on total assets	*	*	9.0%	7.0%
(b) Accounting return on equity	*	*	5.9%	4.6%
(c) Accounting rate of profit	*	*	5.2%	30.6%

#### *Efficiency performance measures as defined by the Electricity (Information Disclosure) Regulations 1999*

	2000	1999	1998	1997
	\$	\$	\$	\$
(a) Direct line costs per kilometre:	1,057	1,007	1,158	1,082
(b) Indirect line costs per electricity customer:	58	37	138	127

\* Disclosure not required

SCHEDULE 1 - PART 7  
FORM FOR THE DERIVATION OF FINANCIAL PERFORMANCE MEASURES FROM FINANCIAL STATEMENTS

Derivation Table	Input and Calculations	Symbol in formula	ROF		ROE		ROI	
Operating surplus before interest and income tax from financial statements	57,647							
Operating surplus before interest and income tax adjusted pursuant to regulation 18 (OSBIT)	57,647							
Interest on cash, bank balances, and short-term investments (ISTI)	0							
OSBIT minus ISTI	57,647	a		57,647				57,647
Net surplus after tax from financial statements	36,425							
Net surplus after tax adjusted pursuant to regulation 18 (NSAT)	36,425	n				36,425		
Amortisation of goodwill and amortisation of other intangibles	0	g	add	0	add	0	add	0
Subvention payment	0	s	add	0	add	0	add	0
Depreciation of SFA at BV (x)	15,345							
Depreciation of SFA at ODV (y)	15,404							
ODV depreciation adjustment	-59	d	add	-59	add	-59	add	-59
Subvention payment tax adjustment	0	s*t			deduct	0	deduct	0
Interest tax shield	0	q					deduct	0
Revaluations	-41,634	r					add	-41,634
Income tax	21,222	p					deduct	21,222
Numerator				57,588		36,366		-5,268
				OSBIT <sup>ADJ</sup> = a + g + s + d		NSAT <sup>ADJ</sup> = n + g + s - s*t + d		OSBIT <sup>ADJ</sup> = a + g - q + r + s + d - p - s*t
Fixed assets at end of previous financial year (FA <sub>0</sub> )	463,872							
Fixed assets at end of current financial year (FA <sub>1</sub> )	429,919							
Adjusted net working capital at end of previous financial year (ANWC <sub>0</sub> )	-6,721							
Adjusted net working capital at end of current financial year (ANWC <sub>1</sub> )	-4,619							
Average total funds employed (ATFE)	441,226	c		441,226				441,226
	(or regulation 33 time-weighted average)							
Total equity at end of previous financial year (TE <sub>0</sub> )	473,296							
Total equity at end of current financial year (TE <sub>1</sub> )	426,042							
Average total equity	449,669	k				449,669		
	(or regulation 33 time-weighted average)							
WUC at end of previous financial year (WUC <sub>0</sub> )	2,309							
WUC at end of current financial year (WUC <sub>1</sub> )	9,759							
Average total works under construction	6,034	e	deduct	6,034	deduct	6,034	deduct	6,034
	(or regulation 33 time-weighted average)							
Revaluations	-41,634	r						
Half of revaluations	-20,817	r/2					deduct	-20,817
Intangible assets at end of previous financial year (IA <sub>0</sub> )	0							
Intangible assets at end of current financial year (IA <sub>1</sub> )	0							
Average total intangible asset	0	m			add	0		
	(or regulation 33 time-weighted average)							
Subvention payment at end of previous financial year (S <sub>0</sub> )	0							
Subvention payment at end of current financial year (S <sub>1</sub> )	0							
Subvention payment tax adjustment at end of previous financial year	0							
Subvention payment tax adjustment at end of current financial year	0							
Average subvention payment & related tax adjustment	0	v			add	0		
System fixed assets at end of previous financial year at book value (SFA <sub>bv,0</sub> )	439,315							
System fixed assets at end of current financial year at book value (SFA <sub>bv,1</sub> )	397,913							
Average value of system fixed assets at book value	418,614	f	deduct	418,614	deduct	418,614	deduct	418,614
	(or regulation 33 time-weighted average)							
System Fixed assets at year beginning at ODV value (SFA <sub>odv,0</sub> )	441,062							
System Fixed assets at end of current financial year at ODV value (SFA <sub>odv,1</sub> )	397,913							
Average value of system fixed assets at ODV value	419,488	h	add	419,488	add	419,488	add	419,488
	(or regulation 33 time-weighted average)							
Denominator				436,065		444,509		456,882
				ATFE <sup>ADJ</sup> = c - e - f + h		Ave TE <sup>ADJ</sup> = k - e - m + v - f + h		ATFE <sup>ADJ</sup> = c - e - ½r - f + h
Financial Performance Measure:				13.206		8.181		-1.153
				ROF = OSBIT <sup>ADJ</sup> /ATFE <sup>ADJ</sup> x 100		ROE = NSAT <sup>ADJ</sup> /ATE <sup>ADJ</sup> x 100		ROI = OSBIT <sup>ADJ</sup> /ATFE <sup>ADJ</sup> x 100

t = maximum statutory income tax rate applying to corporate entities    bv = book value    ave = average    odv = optimised deprival valuation    subscript '0' = end of the previous financial year  
subscript '1' = end of the current financial year    ROF = return on funds    ROE = return on equity    ROI = return on investment

## Regulation 16A

### Annual ODV Reconciliation Report (all figures in \$000's)

Year ending	1998	1999	2000
System fixed assets at ODV - end of previous year	477,567	477,987	448,457
Add system fixed assets acquired during the year at ODV <sup>1</sup>	14,064	14,156	15,426
Less system fixed assets disposed of during the year at ODV	(262)	(30,215)	(551)
Less depreciation on system fixed assets at ODV <sup>2</sup>	(16,456)	(15,405)	(15,404)
Add revaluations of system fixed assets	3,074	1,934	(50,015)
Equals system fixed assets at ODV - end of the financial year	<u>477,987</u>	<u>448,457</u>	<u>397,913</u>

<sup>1</sup> Spares of \$1,240,000 have been incorporated in the 31 March 2000 result. They are included in the fixed assets acquired category.

<sup>2</sup> Depreciation is based on the 1997 ODV revaluation and asset life assumptions. Following the revaluation in 2000, annual depreciation is forecast to be approximately \$14.5m as disclosed in Orion's Valuation Report dated 23 May 2000.

## Regulation 21

### Disclosure by line owners of energy delivery efficiency performance measures and statistics

	2000	1999	1998	1997
1 (a) Load Factor	57.7%	59.5%	58.4%	56.3%
(b) Loss Ratio	4.9%	4.9%	4.7%	5.5%
(c) Capacity Utilisation	36.0%	30.7%	32.3%	33.9%

2 (a) Sum of overhead and underground line circuit lengths:

Description	2000 Average (km)	1999 Average (km)	1998 Average (km)	1997 Average (km)
66kV	115	115	115	115
33kV	323	323	324	323
11kV	5,063	5,092	4,962	4,760
230/400V	2,836	2,800	2,762	2,723
230V Outside Lighting	2,204	2,177	2,148	2,115
Communications	980	971	963	962
Totals	11,521	11,478	11,274	10,998

(b) Overhead line circuit lengths:

Description	2000 Average (km)	1999 Average (km)	1998 Average (km)	1997 Average (km)
66kV	57	57	57	57
33kV	306	307	308	309
11kV	3,163	3,215	3,135	2,986
230/400V	1,506	1,506	1,506	1,507
230V Outside Lighting	912	918	923	927
Totals	5,944	6,003	5,929	5,786

(c) Underground line (cable) circuit lengths:

Description	2000 Average (km)	1999 Average (km)	1998 Average (km)	1997 Average (km)
66kV	58	58	58	58
33kV	17	16	16	15
11kV	1,900	1,877	1,827	1,774
230/400V	1,331	1,294	1,256	1,216
230V Outside Lighting	1,292	1,260	1,225	1,189
Communications	980	971	963	962
Totals	5,578	5,476	5,345	5,214

	2000	1999	1998	1997
(d) Transformer capacity at year end (kVA):	1,505,103	1,686,100	1,639,993	1,603,053
(e) Maximum demand (kW):	541,614	516,844	529,316	542,768
(f) Total electricity supplied from the system (kWh):	2,600,830,000	2,560,341,046	2,582,049,231	2,529,519,393
(g) Electricity conveyed on behalf of retailers/generators (kWh):				
Retailer A	2,346,344,539	1,744,974,597	*	*
Retailer B	109,939,646	756,238,810	*	*
Retailer C	82,134,705	52,879,656	*	*
Retailer D	72,682,725	32,897,023	*	*
Retailer E	42,738,828	28,504,294	*	*
Retailer F	34,182,383	24,776,951	*	*
Retailer G	20,186,567	19,682,224	*	*
Retailer H	20,079,757	13,189,456	*	*
Retailer I	7,064,732	7,959,007	*	*
Retailer J	65,134	4,966,687	*	*
Retailer K		3,369,241	*	*
Retailer L		2,941,050	*	*
Retailer M		319,033	*	*

**Performance measures as defined by the Electricity (Information Disclosure) Regulations 1999**

**Note that retailer ID's in 1999 are not necessarily the same as in 2000.**

(g) Total electricity from the system conveyed for independent retailers (kWh):	*	*	100,428,596	64,303,879
<i>Performance measures as defined by the Electricity (Information Disclosure) Regulations 1994</i>				
(h) Total number of customers (average for the year): ie currently occupied metered installations.	*	158,673	156,878	154,678
(h) Total number of consumers (average for the year)	162,543	*	*	*

*Note: 1. For 1999 and 2000 no adjustment has been able to be made for the impact of changes in the level of unbilled units. This may affect disclosures 1(b) and 2(f) above.*

*Note: 2. For 2000, privately owned transformers have been removed from the disclosed information. This affects 1(c) and 2(d) above.*

*Note: 3. Orion received incomplete sales volume information from the electricity retailers with customers connected to Orion's network during the year ending 31 March 2000. As the network loadings and volumes conveyed have not changed materially over recent years, this value of loss ratio from the previous year was considered reasonable.*

*\*Disclosure not required*

## Regulation 22

### Disclosure by line owners (other than Transpower) of reliability performance measures

1 Total number of interruptions:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	2000	1999	1998	1997
Orion	B	Planned Shutdowns	313	445	505	530
	C	Unplanned Cuts	545	484	553	611
Transpower	A	Planned Shutdowns	3	2	5	4
	D	Unplanned Cuts	1	0	-	31
<b>TOTAL</b>			862	931	1,063	1,176

Disclosure Regulation classes E, F and G do not apply to Orion and consequently results are all zero.

2 Target number of interruptions for the following financial year:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	2001
Orion	B	Planned Shutdowns	400
	C	Unplanned Cuts	560

3 Average interruption targets for the following financial year and the subsequent four financial years:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	2001 - 2005
Orion	B	Planned Shutdowns	370
	C	Unplanned Cuts	550

4 Proportion of Class C interruptions not restored within:

- (a) 3 hours 36%
- (b) 24 hours 1%

5(a) Total number of faults per 100 circuit-km of prescribed voltage electric line:

Line or Cable Voltage	2000	1999	1998	1997
66kV	1.7	1.7	*	*
33kV	4.3	3.1	*	*
11kV	10.0	8.7	*	*
All	9.5	8.2	9.7	11.2

(b) Total number of faults targeted for the following financial year per 100 circuit-km of prescribed voltage electric line:

Line or Cable Voltage	2001
66kV	2.0
33kV	4.0
11kV	12.9
All	12.1

(c) Average total number of faults targeted for the following financial year and the subsequent four financial years per 100 circuit-km of prescribed voltage electric line:

Line or Cable Voltage	2001 - 2005
66kV	2.0
33kV	4.0
11kV	11.9
All	11.2

6 Total number of faults per 100 circuit-km of underground prescribed voltage electric line:

Cable Voltage	2000	1999	1998	1997
66kV	0.0	-	-	-
33kV	0.0	-	-	-
11kV	2.9	2.0	2.3	2.4
All	2.8	1.9	2.2	2.3

7 Total number of faults per 100 circuit-km of overhead prescribed voltage electric line:

Line Voltage	2000	1999	1998	1997
66kV	3.5	3.5	-	-
33kV	4.6	3.3	2.9	1.0
11kV	14.3	12.6	14.7	18.1
All	13.3	11.7	13.5	16.2

\* Disclosure not required

8, 11,  
12, 15,  
16, 19 SAIDI, SAIFI and CAIDI by interruption class and in total for **1999/00**:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	SAIDI	SAIFI	CAIDI
			(minutes per connected consumer)	(interruptions per connected consumer)	(minutes per consumer interrupted)
Orion	B	Planned Shutdowns	6.4	0.028	232.5
	C	Unplanned Cuts	45.39	0.803	56.5
		Subtotal	51.8	0.831	62.4
Transpower	A	Planned Shutdowns	0.5	0.002	194.7
	D	Unplanned Cuts	0.0	0.016	1.0
		Subtotal	0.5	0.019	25.0
<b>TOTAL</b>			<b>52.3</b>	<b>0.849</b>	<b>61.6</b>

8, 11,  
12, 15,  
16, 19 SAIDI, SAIFI and CAIDI by interruption class and in total for **1998/99**:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	SAIDI	SAIFI	CAIDI
			(minutes per connected customer)	(interruptions per connected customer)	(minutes per customer interrupted)
Orion	B	Planned Shutdowns	17.5	0.095	185.6
	C	Unplanned Cuts	50.2	0.745	67.3
		Subtotal	67.7	0.840	80.6
Transpower	A	Planned Shutdowns	0.5	0.001	475.2
	D	Unplanned Cuts	1.2	0.086	14.0
		Subtotal	1.7	0.087	19.3
<b>TOTAL</b>			<b>69.4</b>	<b>0.927</b>	<b>74.9</b>

8, 11,  
12, 15,  
16, 19 SAIDI, SAIFI and CAIDI by interruption class and in total for **1997/98**:

Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	SAIDI	SAIFI	CAIDI
			(minutes per connected customer)	(interruptions per connected customer)	(minutes per customer interrupted)
Orion	B	Planned Shutdowns	28.8	0.172	167.5
	C	Unplanned Cuts	52.8	0.838	63.0
		Subtotal	81.6	1.010	80.7
Transpower	A	Planned Shutdowns	0.7	0.004	187.2
	D	Unplanned Cuts	0.0	0.000	0.0
		Subtotal	0.7	0.004	187.2
<b>TOTAL</b>			<b>82.3</b>	<b>1.014</b>	<b>81.1</b>

Disclosure Regulation classes E, F and G do not apply to Orion and consequently the results are all zero.

Note that these are Orion's overall reliability performance indices. Refer to Orion's 1999 Annual Report for the results by urban and rural areas.

9, 13  
& 17 SAIDI, SAIFI and CAIDI targets for the following financial year:

Network Owner	Disclosure Regulation Class	Classification of Interruptions	SAIDI	SAIFI	CAIDI
			TARGET 2001	TARGET 2001	TARGET 2001
Orion	B	Planned Shutdowns	10.0	0.100	100.0
	C	Unplanned Cuts	65.0	1.000	65.0

10, 14  
& 18 SAIDI, SAIFI and CAIDI targets:

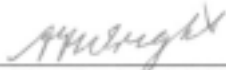
Network or Generation Owner	Disclosure Regulation Class	Classification of Interruptions	SAIDI	SAIFI	CAIDI
			AVERAGE TARGET 2001 - 2005	AVERAGE TARGET 2001 - 2005	AVERAGE TARGET 2001 - 2005
Orion	B	Planned Shutdowns	9.0	0.090	100.0
	C	Unplanned Cuts	60.0	0.906	66.3

**Regulation 32(2)  
Certification of Financial Statements, Performance Measures  
and statistics disclosed by line owners other than Transpower**

We, Sir Allan Frederick Wright and Christopher Stephen Laurie, directors of Orion New Zealand Limited certify that, having made all reasonable enquiry, to the best of our knowledge:

- (a) the attached audited financial statements of Orion New Zealand Limited prepared for the purposes of Regulation 6 of the Electricity (Information Disclosure) Regulations 1999, comply with the requirements of that regulation; and
- (b) the attached information, being the derivation table, financial performance measures, efficiency performance measures, energy delivery efficiency performance measures, statistics, and reliability performance measures in relation to Orion New Zealand Limited and having been prepared for the purposes of Regulations 15, 16, 21 and 22 of the Electricity (Information Disclosure) Regulations 1999, complies with the requirements of those regulations.

The valuations on which those financial performance measures are based are as at 31 March 2000.



Sir Allan Frederick Wright



Christopher Stephen Laurie

## **Regulation 32(6) Certification of valuation report of line owners**

We, Sir Allan Frederick Wright and Christopher Stephen Laurie, directors of Orion New Zealand Limited, certify that, having made all reasonable enquiry, to the best of our knowledge -

- (a) the attached valuation report of Orion New Zealand Limited, prepared for the purposes of regulation 20 of the Electricity (Information Disclosure) Regulations 1999, complies with the requirements of that regulation; and
- (b) the replacement cost of the line business system fixed assets of Orion New Zealand Limited is \$779,895,030; and
- (c) the depreciated replacement cost of the line business system fixed assets of Orion New Zealand Limited is \$402,895,997; and
- (d) the optimised depreciated replacement cost of the line business system fixed assets of Orion New Zealand is \$401,300,016; and
- (e) the optimised deprival valuation of the line business system fixed assets of Orion New Zealand Limited is \$397,912,519; and
- (f) the values in paragraphs (b) through to (e) have been prepared in accordance with the ODV Handbook.

These valuations are as at 31 March 2000.

  
\_\_\_\_\_  
Sir Allan Frederick Wright

  
\_\_\_\_\_  
Christopher Stephen Laurie



Audit New Zealand

**AUDITOR'S REPORT  
TO THE READERS OF THE FINANCIAL STATEMENTS  
OF ORION NEW ZEALAND LIMITED**

We have audited the accompanying financial statements of Orion New Zealand Limited on pages 2 to 20. The financial statements provide information about the past financial performance of Orion New Zealand Limited and its financial position as at 31 March 2000. This information is stated in accordance with the accounting policies set out on pages 7 and 8.

**Directors' Responsibilities**

The Electricity (Information Disclosure) Regulations 1999 require the Directors to prepare financial statements which give a true and fair view of the financial position of Orion New Zealand Limited as at 31 March 2000 and the results of its operations and cash flows for the year then ended.

**Auditor's Responsibilities**

It is the responsibility of the Audit Office to express an independent opinion on the financial statements presented by the Directors and report its opinion to you.

The Controller and Auditor-General has appointed J L Palmer, of Audit New Zealand, to undertake the audit.

**Basis of Opinion**

An audit includes examining, on a test basis, evidence relevant to the amounts and disclosures in the financial statements and performance information. It also includes assessing:

- the significant estimates and judgements made by the Board in the preparation of the financial statements; and
- whether the accounting policies are appropriate to Orion New Zealand Limited's circumstances, consistently applied and adequately disclosed.

We conducted our audit in accordance with generally accepted auditing standards, including the Auditing Standards issued by the Institute of Chartered Accountants of New Zealand. We planned and performed our audit so as to obtain all the information and explanations which we considered necessary. We obtained sufficient evidence to give reasonable assurance that the financial statements are 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 financial statements.

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

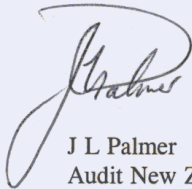
### **Unqualified Opinion**

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

In our opinion:

- proper accounting records have been kept by Orion New Zealand Limited as far as appears from our examination of those records; and
- the financial statements of Orion New Zealand Limited on pages 2 to 20:
  - comply with generally accepted accounting practice; and
  - give a true and fair view of the financial position of Orion New Zealand Limited as at 31 March 2000 and the results of its operations and cash flows for the year then ended; and
  - comply with the Electricity (Information Disclosure) Regulations 1999.

Our audit was completed on 25 July 2000 and our opinion is expressed as at that date.



J L Palmer  
Audit New Zealand  
On behalf of the Controller and Auditor-General  
Christchurch, New Zealand





Audit New Zealand

### AUDITOR'S OPINION OF PERFORMANCE MEASURES

We have examined the attached information, being –

- (a) the derivation table specified in regulation 16; and
- (b) the annual ODV reconciliation report in regulation 16A; and
- (c) the financial performance measures in clause 1 of Part 3 of Schedule 1; and
- (d) the financial components of the efficiency performance measures in clause 2 of Part 3 of Schedule 1, -

that were prepared by Orion New Zealand Limited and dated 25 July 2000 for the purposes of regulation 15 of the Electricity ( Information Disclosure) Regulations 1999.

In our opinion, having made all reasonable enquiry, to the best of our knowledge, that information has been prepared in accordance with the Electricity (Information Disclosure) Regulations 1999.

J L Palmer  
Audit New Zealand  
On behalf of the Controller & Auditor-General  
Christchurch, New Zealand  
25 July 2000

## **Auditor's Report**

### **To the Directors of Orion New Zealand Limited**

#### **Certification by Auditor in Relation to ODV Valuation**

We have examined the valuation report of Orion New Zealand Limited and dated 23 May 2000. This report contains valuations of system fixed assets, excluding land, as at 31 March 2000.

We certify that, having made all reasonable enquiry, to the best of our knowledge, the valuations contained in the report, including the total valuation of system fixed assets, excluding land, of \$397,912,519 have been made in accordance with the ODV Handbook.

This report is issued for the purposes of the Electricity (Information Disclosure) Regulations 1999 and is not to be used for any other purpose without our prior written consent.

*Ernst & Young*

Wellington

**Orion Network Asset Valuation**  
**OVERALL SUMMARY**  
For year ending 31 March 2000

RV-Replacement Value	\$778,654,866
Reduction for Optimisation	(\$5,418,041)
ORV-Optimised Replacement Value	\$773,236,826
DRV-Depreciated Replacement Value	\$401,655,833
Reduction for Optimisation	(\$1,595,981)
ODRV-Optimised Depreciated Replacement Value	\$400,059,852
Economic Value Adjustment - refer below	(\$3,387,497)
ODV-Optimised Deprival Value	\$396,672,355
Plus optimised emergency spares not already included in ODV above	\$1,240,164
<b>Total ODV of System Fixed Assets</b>	<b>\$397,912,519</b>
<b>Total Annual Depreciation on Network</b>	<b>\$14,458,554</b>

**Key Parameters used in the Economic Valuation Adjustment:**

Based on an economic assessment of 19 remote spurs in the network. These spurs represent 457km of 11kV line. Remote spurs occur at the extremities of Orion's network and are identified as parts of the network where there is no alternative supply route within 5km.

Useful life of assets involved = 45 years.  
Real discount rate = 12%.  
Capital recovery factor = 12.07%.  
Alternative energy source cost = 35 c/kWh.  
Delivery (transmission plus average line price over meshed network) to spur = 5.0 c/kWh.  
Cost of energy = 3.4 c/kWh.  
Admin. operations & maintenance on spur = 1.0 c/kWh.  
Resulting net sustainable line price = 25.6 c/kWh.

Weighted average replacement cost of 11kV lines on spurs = \$27,080/km.  
Average of DRV/RV of assets involved = 56.65%.  
DRV of assets on spurs tested = M\$8.43 (83% lines, 10% distribution transformers and 7% switchgear).  
Economic value reduction = M\$3.39.

23 May 2000