



**Ergon Energy's
Financial and Service Quality
Performance 2005-06**

March 2007

TABLE OF CONTENTS

	PAGE
1. INTRODUCTION AND SUMMARY	1
1.1 General Operating Background	1
<i>Network Characteristics</i>	<i>1</i>
1.2 Ergon Energy Customer Profile	2
1.3 Summary of Ergon Energy Financial Performance	3
1.4 Summary of Ergon Energy Service Quality Performance	4
2. FINANCIAL PERFORMANCE	6
2.1 Revenue	6
<i>Under/Over Recovery of Distribution Revenue</i>	<i>6</i>
<i>Under/Over Recovery of Transmission Use of System (TUOS) Charges</i>	<i>7</i>
2.2 Operating and Maintenance Expenditure	8
2.3 Capital Expenditure	9
3. SERVICE QUALITY PERFORMANCE	11
3.1 Reliability Measures	11
<i>Quarter by Quarter Reliability</i>	<i>14</i>
<i>Reliability of Worst Performing Feeders</i>	<i>14</i>
3.2 Quality of Supply Measures	16
3.3 Customer Service Measures	18
APPENDIX A	25

1. INTRODUCTION AND SUMMARY

The Authority's 2001 Determination on the Regulation of Electricity Distribution required the Queensland Distribution Network Service Providers (DNSPs) to provide annual information on their financial and service quality performance. The Authority's 2005 Final Determination continued these requirements for the 2005-10 regulatory period, albeit with a number of refinements to the processes.

The financial information for 2005-06 was submitted in accordance with the Authority's *Electricity Distribution: Regulatory Reporting Guidelines (Version 4.1)* and the DNSPs' approved Cost Allocation Guidelines.

This Report provides an assessment of the financial performance of Ergon Energy for 2005-06, including a comparison with the financial forecasts that were included in the Authority's 2005 Determination and comparisons with the past financial performance of Ergon Energy.

The service quality information for 2005-06 was submitted in accordance with the Authority's *Electricity Distribution: Service Quality Reporting Guidelines*. The Authority revised the Guidelines in August 2005 in order to improve the reporting of the DNSPs service quality performance. In some instances, this will mean that the 2005-06 data can not be reliably compared to past data.

The Service Quality Reporting Guidelines require DNSPs to provide data on specific service quality measures on a quarterly and annual basis. While the DNSPs commenced reporting with the December quarter 2001 reports, the Authority did not commence publicly releasing the reports until the issue of the September quarter 2002 reports due to concerns about the robustness of the data. As a result, 2002-03 was the first year for which the Authority had annual service quality data.

This report draws on data from both the annual and quarterly service quality reports, primarily for 2005-06, but also from the three preceding financial years.

1.1 General Operating Background

There are currently two DNSPs operating in Queensland, Energex and Ergon Energy¹. Both distribution entities are owned by the Queensland Government and until recently had legally separate but wholly owned subsidiary retailing operations which the Government sold during 2006-07.

Network Characteristics

The distribution entities have considerably different network characteristics. Energex operates a largely urban network with relatively high customer density in southeast Queensland, whereas Ergon Energy operates a geographically dispersed network with low customer density that covers much of the remainder of the State.

Table 1 identifies the key characteristics of each network, which illustrates the differences in the distributors' networks. A key difference is customer density; specifically, while there are 25.3 customers per kilometre of line in Energex's network, Ergon Energy has just 5.2 customers per kilometre of line in its network.

These differences in network characteristics are an important determinant of the service quality performance of each distributor, particularly the reliability of their respective networks.

¹ Country Energy (NSW) operates a franchise network on the Queensland/New South Wales border extending into Queensland.

As a result, the service quality measures collected by the Authority are not intended to provide a comparison of the two DNSPs one with the other. Additionally it is to be expected that the distributors' performances will vary significantly on a number of service quality measures.

It is for these reasons that this Report deals separately with Ergon Energy.

Table 1: Network characteristics - 2005-06

Characteristics	Energex	Ergon Energy
Network service area (sq km)	25,264	1,698,100
Number of customers ¹	1,217,193	736,710
Energy delivered (GWh) ¹	20,757	13,486
Energy delivered per customer (MWh)	17.1	18.3
Kilometres of line	48,115	142,793 ²
Customers per km of line	25.3	5.2
Maximum demand of network (MVA)	4,350	2,393
Number of distribution transformers	41,069	80,216
Asset utilisation (%) ³	34.2	23.8
Distribution losses (%)	6.5	6.59

¹ These values are reported in the distributors' regulatory accounts and differ slightly to the values reported for the same measures in the distributors' service quality reports due to technical differences in the way they are defined.

² As at 31 December 2005. Ergon Energy was unable to update the data for the six months to 30 June 2006. Ergon Energy noted that the kilometres of low voltage lines included in this figure is not complete or representative of the total kilometres of low voltage lines.

³ Sub-transmission transformer utilisation factor. Electricity throughput (MWh) expressed as a percentage of sub-transformer capacity (MVA) multiplied by the number of hours per year.

1.2 Ergon Energy Customer Profile

All customers with an average consumption of more than 100MWh a year, approximately 7,100 customers, were eligible to become contestable. The contestable customer groups of Ergon Energy consist of:

- *individually calculated customers* - those customers whose electricity consumption is sufficiently large to warrant individually calculated prices;
- *connection asset customers* - customers whose electricity consumption is sufficient to warrant individually calculated connection charges but their remaining charges are averaged; and
- *standard asset customers* - customers who pay averaged charges.

The non-contestable customer group incorporates all franchise customers (customers who access a franchise retail price set by the Queensland Government). The number of customers in each category and the corresponding units of electricity sold to each in 2005-06 are presented in Table 2.

Table 2: Customer numbers and units sold – Ergon Energy 2005-06

Customer type	Customers		Units sold		Units sold per customer	
	Number	Percentage change from previous year	MWh	Percentage change from previous year	MWh/customer	Percentage change from previous year
Contestable customers						
Individually calculated customers	46	0	3,757,671	4.7	81,688.5	4.7
Connection asset customers	59	9.3	572,729	(3.5)	9,707.3	(11.7)
Standard asset customers	689	4.1	475,456	15.4	690.1	10.9
Non-contestable customers						
Franchise customers ¹	618,427	2.5	8,614,615	3.9	13.9	1.4
Public street lighting	117,481	9.7	65,702	(7.9)	0.6	(16.1)
Embedded generators	8	60.0	-	-	-	-
Total	736,710	3.6	13,486,173	4.1	18.3	0.5

¹ This category includes some potentially contestable customers which have not elected to enter the market.

The number of customers grew solidly in 2005-06, and represents the second consecutive year of above 3 per cent growth. Franchise customers, which account for the majority of Ergon Energy's customer base, grew 2.5 per cent during the year.

Energy sales increased 4.1 per cent in the year following a 1.4 per cent increase in 2004-05. This compares with forecast growth in energy sales of 2.7 per cent in the 2005 Final Determination.

1.3 Summary of Ergon Energy Financial Performance

Ergon Energy exceeded its Aggregate Annual Revenue Requirement (AARR), including capital contributions and revenue from the use of regulated assets by other Ergon Energy entities, by \$18.7 million in 2005-06 (see Table 3). As per the requirements of the 2005 Final Determination, Ergon Energy can return this over-recovery to customers over the next 2 pricing periods (2007-08 and 2008-09). Ergon have proposed delaying the return of the 2005-06 revenue over-recovery to 2008-09. Accordingly Ergon will be required to return \$23.9 million to customers in 2008-09 (reflecting the \$18.7 million revenue over-recovery adjustment to 2008-09 values).

A summary of Ergon Energy's financial performance in 2005-06 is provided in Table 3.

Table 3: Ergon Energy financial performance - 2005-06 (\$ nominal)

	Actual 2004-05 (\$ mill)	Actual 2005-06 (\$ mill)	Forecast 2005-06 (\$ mill)	Variance from forecast 2005-06	
				(\$ mill)	(%)
Aggregate Annual Revenue Requirement					
Revenue from services	535.8	690.1	675.2	14.9	2.2
Capital contributions	35.5	36.2	28.9	7.3	25.3
Revenue from outside use of regulated assets		4.5	8.0	(3.5)	43.8
Operating and maintenance expenditure	195.1	283.7	266.7	17.0	6.4
Capital expenditure	490.1	623.2	524.5	98.7	18.8

* *Includes network and non-network services*

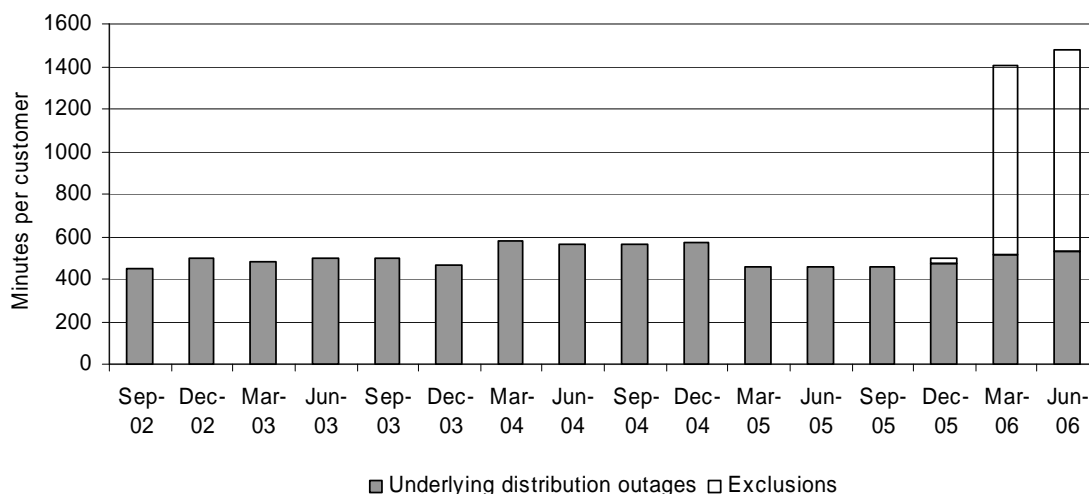
In preparing its 2005 Final Determination, the Authority estimated the level of operating costs and capital expenditure required by Ergon Energy to deliver prescribed distribution services for each year of the regulatory period. While estimates were provided for each year of the regulatory period, actual annual operating and capital expenditure are likely to vary from those estimates in response to a range of external circumstances and operational requirements not foreseen at the time the estimates were made.

Ergon Energy's operating and maintenance expenditure in 2005-06 was substantially higher than the previous year and exceeded forecast operating and maintenance expenditure in 2005-06 by \$17.0 million (6.4 per cent). Ergon Energy attributed the higher expenditure to unforeseen costs associated with the introduction of Full Retail Competition and costs associated with the aftermath of Cyclone Larry.

Capital expenditure was \$98.7 million (18.8%) higher than forecast during 2005-05 and \$133.1 million (27.2%) higher than the previous year. Both asset replacement and demand related capital expenditure were higher than forecast. Asset replacement expenditure was higher than forecast as a result of Cyclone Larry while the higher demand related expenditure reflected strong population growth and new construction growth, as well as ongoing demand for major customer projects in the Ergon Energy network. In addition, "other" capital expenditure was substantially higher than forecast reflecting a general increase in expenditure on non-system assets (motor vehicles, buildings and computer systems) used to support the increased system capital and operating expenditure program.

1.4 Summary of Ergon Energy Service Quality Performance

During 2005-06, Ergon Energy customers on average experienced 4.77 distribution-related interruptions leaving them without power for a total of 1,474.8 minutes. As shown in Figure 1, the impact of Cyclone Larry in the March quarter 2006 had a major influence on the 12-month reliability data.

Figure 1 Average duration of outages per customer for the 12 months to end of quarter

The Authority's Service Quality Reporting Guidelines allow the impact of unusual, severe outage events to be removed from the reliability data to facilitate an assessment of underlying performance. Three weather-related events (one of which included the severe impact of Cyclone Larry) met the test for exclusion during 2005-06 compared to no events during 2004-05. Excluding the effect of these three events, underlying distribution-related outages, represented by the shaded columns in Figure 1, remained near the middle of the historical range during 2005-06.

The number of technical quality of supply complaints received by Ergon Energy increased from 2,786 in 2004-05 to 2,821 in 2005-06. However, the 2005-06 result was better than the 3,034 complaints received in 2003-04. The largest increases in complaints in 2005-06 were recorded for voltage swells (which can cause blown lights) and low supply voltage (which can cause light dimming and motor starting problems).

The average time taken to investigate and resolve quality of supply complaints has fallen steadily from 79 in the March quarter 2005 to 72 in the June quarter 2006.

Ergon Energy's performance against a range of customer service measures was mixed during 2005-06:

- the length of time that customers had to wait to speak to an operator when calling the call centre fell to 16 seconds in the September quarter 2005, which was the lowest waiting time recorded since reporting began under the Authority's Guidelines, before increasing to 39 seconds in the June quarter 2006.
- the percentage of calls abandoned averaged 3.3 per cent, up from 2.7 per cent during 2004-05.
- the proportion of new connections that Ergon Energy failed to make by the agreed date dropped significantly, to 0.8 per cent in the June quarter 2006, despite making more new connections. The proportion of total re-connections that were not made on the agreed date also fell significantly, to 0.2 per cent in the June quarter 2006.
- the number of street lights not repaired by the agreed date escalated throughout 2005-06, explained at least partly by the diversion of resources in response to Cyclone Larry from the March quarter onwards.

2. FINANCIAL PERFORMANCE

This chapter summarises the financial performance of the revenue cap regulated business segment of Ergon Energy. The information is for the year ended 30 June 2006. The data used in the analysis has been drawn mainly from Ergon Energy's audited Regulatory Accounting Statements. These accounts were submitted in accordance with the Authority's *Electricity Distribution: Regulatory Accounting and Information Guidelines*. The Authority released a revised set of Regulatory Reporting Guidelines in November 2005 in order to address some weaknesses in the reporting arrangements identified in the Authority's 2005 Final Determination. These revised Guidelines (Version 4.1) apply to financial reporting requirements from 1 July 2005.

Areas of particular interest concerning Ergon Energy's overall financial performance are revenue, operating and maintenance expenditure, and capital expenditure. Ergon Energy's reported results on these components compared with the corresponding forecasts that were included in the 2005 Final Determination and the previous year's actual data are presented below. Detailed financial data tables for Ergon Energy are provided at Appendix A.

2.1 Revenue

Under/Over Recovery of Distribution Revenue

In the 2005 Final Determination, the Authority set a maximum revenue cap for each of the five years of the regulatory period for Ergon Energy. The maximum revenue cap allows Ergon Energy to earn a return on assets, plus an allowance for depreciation and operating and maintenance expenditure incurred in the delivery of prescribed distribution services.

The 2005 Final Determination revenue cap calculations included both network and non-network services as opposed to the inclusion of network services only in the 2001 Final Determination. These non-network services include other prescribed distribution services that are related to the operation and use of the distribution system. These services typically account for less than 5 per cent of total services revenue. In the Authority's 2001 Final Determination non-network services were dealt with separately from the revenue cap calculations. However, for simplicity these services were included in the revenue cap calculations in the 2005 Final Determination.

In its 2005 Final Determination the Authority accepted Ergon Energy's proposed treatment of shared assets – regulated assets that are utilised by both the regulated and unregulated businesses within Ergon Energy. Ergon Energy proposed to include these shared assets in the regulated asset base (as they are owned by the regulated business) but to then charge non-regulated parts of the business the full costs of their use of those assets². The Authority approved this approach in its 2005 Final Determination but made an adjustment to Ergon Energy's AARR to reflect the forecast revenue Ergon Energy would receive over the regulatory period by charging non-regulated parts of the business for the use of these assets. The Authority provided for any differences between forecast and actual revenue from the outside use of regulated assets to be subject to an unders and overs process on an annual basis.

The Authority's 2005 Final Determination uses an "unders and overs" account for each DNSP to ensure compliance with the annual revenue caps. The unders and overs process compares actual revenue earned in the year against the annual revenue cap for that year as determined by the Authority (see Table 4).

² In the case of Energex, the shared asset portion of assets utilised by the regulated distribution services was identified and only that portion was allowed to be included in the regulated asset base (the remaining portion was excluded from the regulated asset base). The Energex and Ergon Energy approaches yield the same outcome ensuring that customers of the regulated business are not subsidising the provision of unregulated services.

Table 4: Ergon Energy Aggregate Annual Revenue Requirement – 2005-06

	\$ million (nominal)
Actual revenue earned during 2005-06	
Revenue from services	690.1
Revenue from capital contributions	36.2
Revenue from outside use of regulated assets	4.5
<i>less</i> Allowable annual revenue	
Revenue from services	675.2
Revenue from capital contributions	28.9
Revenue from outside use of regulated assets	8.0
Over-recovery of AARR for 2005-06	18.7

Table 4 indicates that Ergon Energy exceeded its 2005-06 AARR by \$18.7 million. This was comprised of:

- \$14.9 million more than forecast from the provision of services; and
- \$7.3 million more than forecast from capital contributions

This was partially offset by \$3.5 million lower than forecast revenue from the use of regulated assets by other Ergon entities.

Given the over-recovery is between 2 per cent and 5 per cent of the 2005-06 revenue cap, the Authority's 2005 Final Determination allows Ergon Energy to return the over-recovery to customers over a period of two years (2007-08 and 2008-09). Ergon have proposed delaying the return of the 2005-06 revenue over-recovery to 2008-09. Accordingly Ergon will be required to return \$23.9 million to customers in 2008-09 (reflecting the \$18.7 million revenue over-recovery adjustment to 2008-09 values).

Under/Over Recovery of Transmission Use of System (TUOS) Charges

TUOS charges are calculated by the distributors each year to pass-through to distribution customers the cost levied for the use of the transmission system. These costs primarily reflect Powerlink charges and payments to embedded generators. Electricity transmission charges are regulated by the Australian Energy Regulator and paid to Powerlink by distributors on behalf of customers. The connection of an embedded generator to a distribution network reduces the amount of energy drawn from the transmission network. This in turn reduces the TUOS charge that the distributor has to pay the transmission network owner. The distributor passes through the full amount of these avoided TUOS payments to the embedded generator whose connection leads to the reduction in TUOS payable.

The Authority approves TUOS charges, to be levied by the distributors, that are intended to allow them to recover the TUOS charges they have paid to Powerlink and avoided TUOS payments to embedded generators. Any difference between TUOS revenue recovered by distributors from customers and the charges they pay to Powerlink and embedded generators is recouped from, or returned to, customers through future charges.

Ergon Energy's 2005-06 TUOS charges are provided in Table 5.

Table 5: TUOS Unders and Overs Account – 2005-06

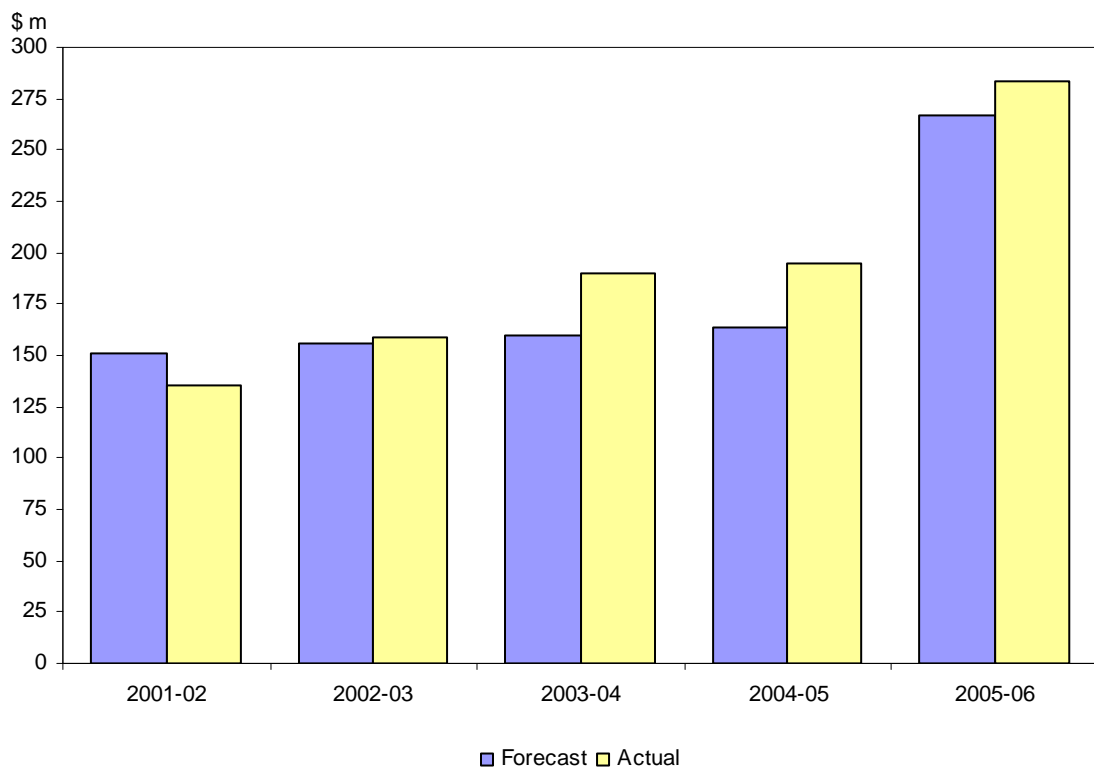
	\$ million (nominal)
TUOS charged by Powerlink	152.8
<i>plus</i> TUOS charged by Embedded Generators	2.4
<i>equals</i> Total TUOS charged	155.2
<i>less</i> actual TUOS revenue earned during 2005-06	154.1
<i>equals</i> Under-recovery for 2005-06	1.1

Table 5 indicates that TUOS charges to customers were less than TUOS payments to Powerlink and embedded generators by \$1.1 million during 2005-06. Accordingly, Ergon Energy will need to recoup this under-recovery from customers as part of its 2007-08 TUOS charges.

2.2 Operating and Maintenance Expenditure

Figure 2 shows network operating and maintenance expenditure reported by Ergon Energy for 2001-02 to 2005-06, compared with the forecast operating and maintenance expenditure in the 2001 and 2005 Final Determinations.

Figure 2: Ergon Energy operating and maintenance expenditure – 2001-02 to 2005-06



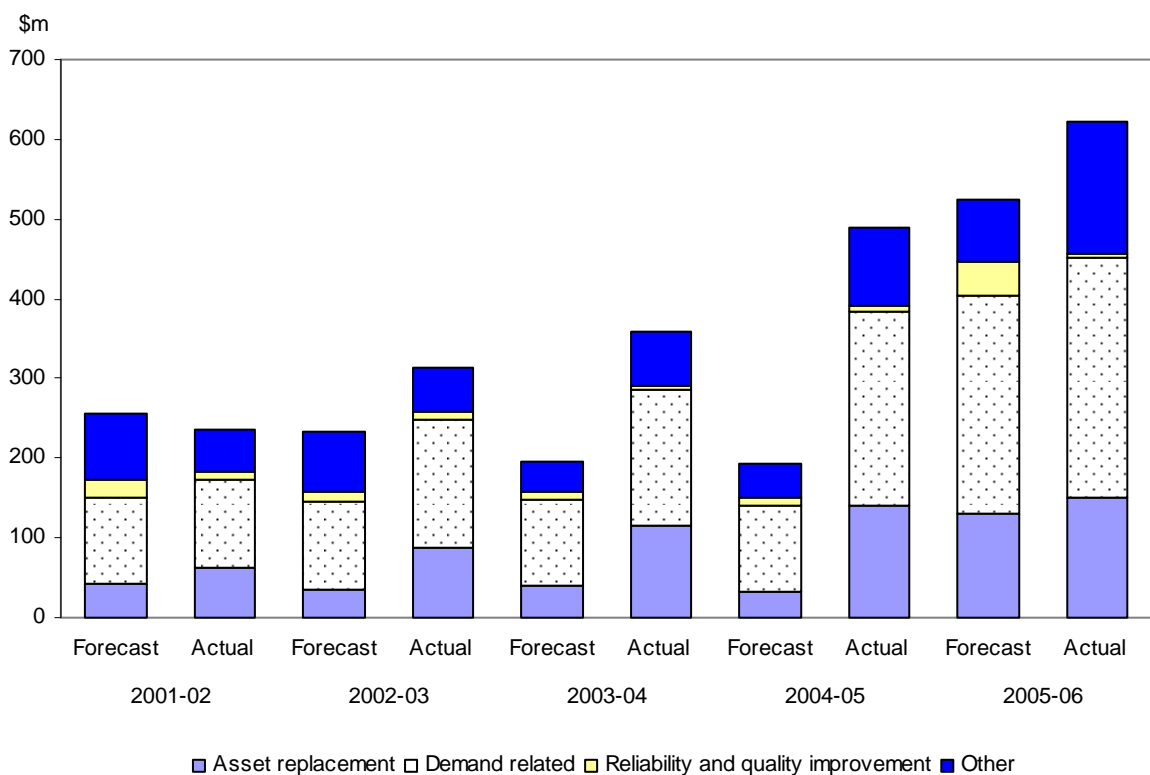
Ergon Energy's operating and maintenance expenditure in 2005-06 was \$17.0 million (6.4 per cent) higher than forecast and \$88.6 million (45 per cent) higher than last year. The higher than forecast expenditure during the year reflects costs associated with the implementation of Full Retail Competition (\$7.1 million) and Cyclone Larry (approximately \$13.0 million), both of which were unanticipated at the time of the 2005 Final Determination. Expenditure on asset inspections and vegetation management increased substantially (more than 180 per cent each)

over the previous year. This largely reflected Ergon Energy's response to the Government's Electricity Distribution and Service Delivery (EDSD) Review, which reported in July 2004 and recommended substantial improvements in network reliability and service quality for both the Ergon Energy and Energex distribution networks. In addition, "emergency response" expenditure was significantly higher than the previous year as a result of Cyclone Larry.

2.3 Capital Expenditure

Figure 3 shows network capital expenditure (in aggregate and by purpose) reported by Ergon Energy for 2001-02 to 2005-06, compared with the forecast capital expenditure. Capital expenditure was \$98.7 million (18.8 per cent) higher than forecast during 2005-05 and \$133.1 million (27.2 per cent) higher than the previous year. Significant growth in expenditure over the last 2 years largely reflects Ergon Energy's response to the Government's EDSD Review.

Figure 3: Ergon Energy capital expenditure – 2001-02 to 2005-06



Higher than forecast capital expenditure in 2005-06 was primarily due to the following factors:

- spending on asset replacement was 16.2 per cent higher than expected reflecting increased expenditure to replace aging assets as a result of Cyclone Larry;
- the customer initiated component of "demand related" expenditure (expenditure specifically requested by a customer to meet changed demand) was 37.9 per cent higher than forecast as a result of strong population growth and new construction growth, as well as ongoing demand for major customer projects; and
- other expenditure (primarily expenditure on non-system assets) was 112 per cent higher than forecast largely due to acquisitions of non-system assets in support of growth, including increased expenditure on motor vehicles, buildings and computer systems. In addition expenditure of \$32.8 million was incurred on non-system assets in relation to

Project JET, a joint initiative of both Ergon Energy and Energex aimed at combining and integrating a number of administrative functions such as Asset Management, Works Management, Human Resources and Payroll, Finance, Health, Safety and Environment and Logistics.

Project JET is being undertaken by Sparq Solutions Pty Ltd (a jointly owned subsidiary company of Ergon Energy and Energex). However, a final decision is yet to be taken by the shareholders on the ownership of the JET assets. If Sparq Solutions is to be the owner, then the capex amount reported above will be transferred from Ergon Energy to Sparq and the assets will be excluded from the regulatory asset base.

These increases were offset to some extent by lower than forecast expenditure on demand related augmentation (expenditure which is generally initiated by the distributor to meet general demand changes) and reliability/quality improvement reflecting the diversion of spending and resources to other areas.

3. SERVICE QUALITY PERFORMANCE

This section summarises the service quality performance of the revenue cap regulated business segment of Ergon Energy. The information is for the year ended 30 June 2006 and is drawn from Ergon Energy's quarterly and annual service quality reports for 2005-06. These reports were submitted in accordance with the Authority's *Electricity Distribution: Service Quality Reporting Guidelines (Version 2.0)*. The Authority commenced posting service quality reports provided by the DNSPs on its website with the September quarter 2002 reports (released February 2003).

Historical information for the three years preceding 2005-06 has been included in this section as a guide to annual movements in the service quality measures. Unfortunately, due to the improved reporting requirements of service quality data incorporated in Version 2.0 of the Guidelines, historical information for some measures may not be directly comparable. As data accumulates over time for these measures, Ergon Energy's service quality performance against those measures will be able to be better assessed.

The service quality measures that the DNSPs are required to report against fall into three broad groups – reliability measures, quality of supply measures and customer service measures.

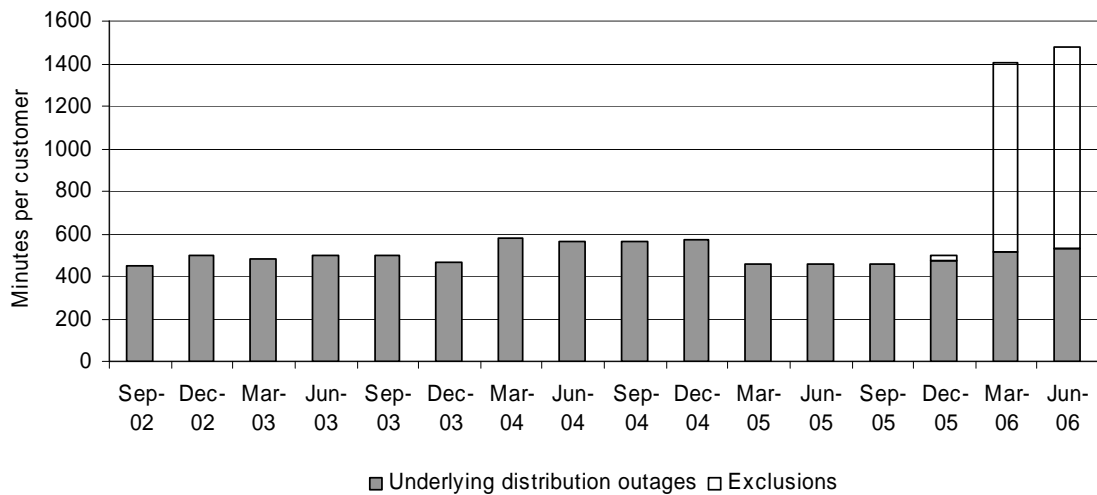
Reliability measures provide information about interruptions to electricity supply. Interruptions can occur because of problems with generation, transmission or distribution. Distribution interruptions may be planned or unplanned, and unplanned interruptions will at times be due to events that are beyond the control of the DNSPs, such as severe storms. A DNSP's performance is best indicated by the duration and frequency of planned and unplanned interruptions that are due to distribution network problems within the distributor's control (although lengthy and frequent interruptions due to other influences may indicate a need for improved risk management measures on the part of the distributors). Reliability data for worst performing feeders highlights pockets of the network where customers experience relatively poor service quality.

Quality of supply measures are intended to indicate problems with the nature of electricity supply, such as low or high voltage levels, based on customers reporting symptoms that are typically associated with such problems. For example, low supply voltage would be evidenced by complaints relating to light dimming or motor starting problems.

Customer service measures provide information about how customers' problems, enquiries and requests for services are handled.

3.1 Reliability Measures

During 2005-06, Ergon Energy customers on average experienced 4.77 distribution-related interruptions leaving them without power for a total of 1,474.8 minutes. As shown in Figure 4, the impact of Cyclone Larry in the March quarter 2006 had a major influence on the 12-month reliability data.

Figure 4 Average duration of outages per customer for the 12 months to end of quarter

Reliability data can be affected by good and bad weather conditions. Under the Authority's old Service Quality Reporting Guidelines, interruptions within a distributor's network which affected at least five per cent of customers and were due to widespread storms or flooding, or other natural disasters, were able to be excluded from the data. This was because such outages, which were deemed to be beyond the control of the DNSPs, would otherwise distort the measurement of underlying reliability performance. For Ergon Energy, with its low customer density, it required a fairly extreme event (such as a cyclone) to affect more than 5 per cent of total customers. As a result, no events had been excluded from Ergon Energy's reliability data since reporting began under the Authority's Guidelines.

In August 2005, the Authority released revised Service Quality Reporting Guidelines which introduced a statistically-based method (2.5 beta method) for excluding the impact of severe weather-related events from reliability data. Ergon Energy was required to apply the 2.5 beta method from 1 July 2005. Under the improved exclusion methodology, Ergon Energy has recorded a number of excluded events.

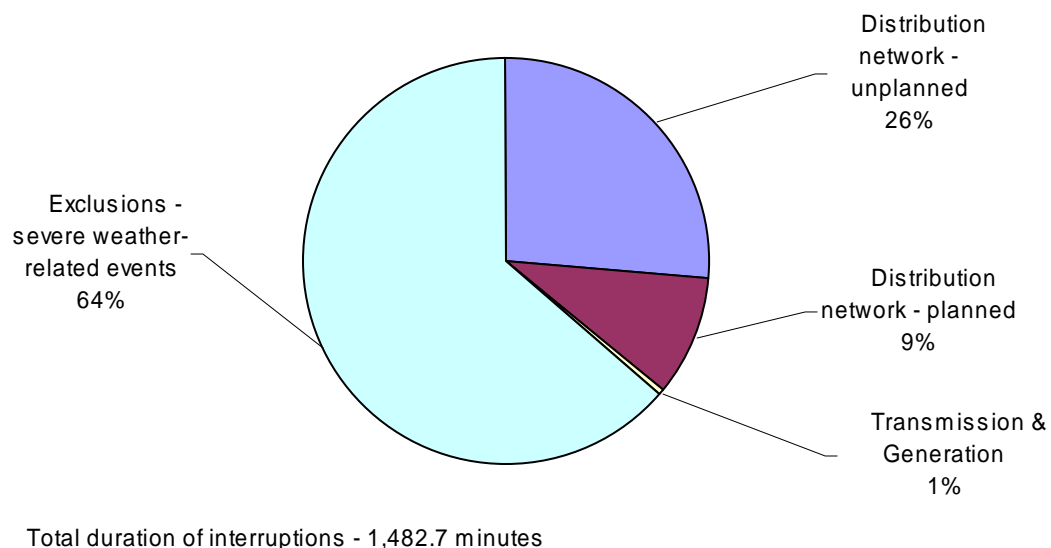
Three weather-related events (one of which included the severe impact of Cyclone Larry) met the test for exclusion during 2005-06 compared to no events during 2004-05. Excluding the effect of these three events, Ergon Energy customers, on average, experienced 4.44 distribution-related interruptions during 2005-06. With each interruption lasting an average of 119.9 minutes, customers were left without power, on average, for a total of 532 minutes during the year. As shown by the shaded columns in Figure 4, this level of underlying distribution-related outages was near the middle of the historical range.

Three weather-related events (one of which included the severe impact of Cyclone Larry) met the test for exclusion during 2005-06 compared to no events during 2004-05. Excluding the effect of these three events, underlying distribution-related outages, represented by the shaded columns in Figure 3, remained near the middle of the historical range during 2005-06. Specifically, after adjusting for exclusions Ergon Energy customers, on average, experienced 4.44 distribution-related interruptions during 2005-06. With each interruption lasting an average of 119.9 minutes, customers were left without power, on average, for a total of 532 minutes during the year. These figures compare to the 3.82 interruptions reported for 2004-05. With each interruption lasting an average of 119.2 minutes, customers were left without power for an average 455 minutes during 2004-05.

Unplanned interruptions arising in the distribution network (of which excluded weather-related events are a sub-component) accounted for the majority (90 per cent) of the total 1,482.7 minutes that Ergon Energy customers were without electricity supply during 2005-06, as shown in Figure 5. Planned interruptions in the distribution network accounted for 9 per cent of outages while transmission and generation interruptions accounted for the remaining balance.

In contrast, in 2004-05, unplanned interruptions accounted for 73 per cent of the total 472.5 minutes that Ergon Energy customers were, on average, without electricity supply. Planned interruptions in the distribution network accounted for 23 per cent of outages while transmission and generation interruptions together made up the 4 per cent balance. As noted above, the impact of severe storm events (exclusions) were not registered in 2004-05. Exclusions contributed 64 per cent of the outages during 2005-06

Figure 5: Ergon Energy – duration of interruptions during 2005-06 by source



Interruptions arising in the distribution network can be disaggregated according to geographic categories – that is, Urban, Short Rural and Long Rural.³ As shown in Table 6, there were significant differences in the level of reliability across Ergon Energy’s network during 2005-06. Customers in all geographic categories experienced increases in the duration of interruptions. However, the magnitude of the increases varied with urban and short rural areas experiencing increases of 23.4 minutes and 61.6 minutes respectively from the June quarter 2005 to the June quarter 2006, while the period of time that customers in the long rural areas were without supply increased by 258 minutes over the same period from a very high level of 1,074 minutes.

³ Ergon Energy does not have any feeders that meet the definition of CBD.

Table 6: Ergon Energy – duration of distribution-related interruptions by network type (minutes) after removal of excluded events for the 12 months to end of quarter

	JUN 2005	SEP 2005	DEC 2005	MAR 2006	JUN 2006
Total distribution system	455.3	460.2	472.7	513.3	532.0
Urban	195.6	186.9	211.4	215.3	219.0
Short Rural	532.8	514.1	525.9	575.7	594.4
Long Rural	1,074.0	1,145.0	1,131.4	1,258.8	1,332.0

Quarter by Quarter Reliability

As part of the amendments to the Authority's Service Quality Reporting Guidelines released in August 2005, Ergon Energy is now required to report its reliability performance for the quarter only in addition to the 12 month rolling averages discussed above.

As shown in Table 7, Ergon Energy's performance was significantly worse during the December and March quarters, due to the storm season. Unadjusted reliability during the March quarter was especially poor due to the impact of Cyclone Larry on Ergon Energy's network. While the removal of excluded events smoothes the variations in the reliability performance between quarters it does not entirely remove seasonal fluctuations.

Table 7: Ergon Energy – average number and duration of distribution-related interruptions per customer

	SEP 2005	DEC 2005	MAR 2006	JUN 2006
Average number of interruptions per customer (SAIFI) before excluded events	0.70	1.76	1.47	0.81
Average number of interruptions per customer (SAIFI) after excluded events	0.70	1.56	1.35	0.81
Duration of all interruptions per customer (SAIDI) before excluded events – minutes	86.4	221.9	1,024.3	90.9
Duration of all interruptions per customer (SAIDI) after excluded events – minutes	86.4	192.8	162.5	90.9

Reliability of Worst Performing Feeders

As shown in Table 8, the reliability of Ergon Energy's worst performing feeders generally deteriorated in 2005-06 compared to 2004-05. It is likely that the deterioration partly reflects a more severe storm season in 2005-06 than in 2004-05.

Table 8: Ergon Energy – range of average number and duration of distribution-related interruptions per customer for 10 worst performing feeders

	2002-03	2003-04	2004-05	2005-06
Average number of interruptions per customer (SAIFI) before excluded events				
Urban	2.0 – 13.0	1.1 – 13.7	4.0 – 12.0	5.0 – 25.3
Short Rural	11.2 – 24.7	5.2 – 36.6	7.0 – 17.8	15.1 – 32.5
Long Rural	11.8 – 37.1	11.1 – 34.2	7.3 – 19.7	11.0 – 29.4
Duration of all interruptions per customer (SAIDI) before excluded events – hours				
Urban	16.3 – 36.1	18.2 – 43.8	15.7 – 39.6	18.4 – 78.7
Short Rural	55.0 – 81.2	60.6 – 91.6	52.5 – 76	65.5 – 110.2
Long Rural	46.4 – 111.4	55.7 – 86.9	54.7 – 97	63.6 – 165.9

During 2005-06, Ergon Energy's 10 worst performing urban feeders supplied electricity to 1,196 customers (equivalent to 0.5 per cent of Ergon Energy's urban customer base). On average, these customers experienced between 5 and 25.3 distribution-related interruptions (without adjusting the data for exclusions), leaving them without power for between 18.4 hours and 78.7 hours. These are the highest results on record.

Three of the worst performing urban feeders in 2005-06 were among the 10 worst performing urban feeders for 2004-05 and 2003-04 and one was among the worst performing feeders for 2002-03.

In 2005-06, Ergon Energy's 10 worst performing short rural feeders supplied electricity to 608 customers (equivalent to 0.2 per cent of Ergon Energy's short rural customer base). On average, these customers experienced between 15.1 and 32.5 distribution-related interruptions (without adjusting the data for exclusions), leaving them without power for between 65.5 hours and 110.2 hours. The number of distribution-related interruptions on the worst performing feeder in 2005-06 was close to the highest value recorded to date, while the time without power on the worst performing feeder exceeded the highest value recorded to date.

Three of the worst performing short rural feeders in 2005-06 were among the 10 worst performing short rural feeders for 2004-05.

In 2005-06, Ergon Energy's 10 worst performing long rural feeders supplied electricity to 1,022 customers (equivalent to 1.6 per cent of Ergon Energy's long rural customer base). On average, these customers experienced between 11 and 29.4 distribution-related interruptions (without adjusting the data for exclusions), leaving them without power for between 63.6 hours and 165.9 hours. The number of distribution-related interruptions on the worst performing feeder in 2005-06 was around the mid-point of the values recorded to date, while the time without power on the worst performing feeder significantly exceeded the highest value recorded to date.

Five of the worst performing long rural feeders in 2005-06 were among the 10 worst performing long rural feeders for 2004-05.

3.2 Quality of Supply Measures

While the total number of technical quality of supply complaints received by Ergon Energy increased from 2,786 in 2004-05 to 2,821 in 2005-06, this result was still better than the 3,034 complaints received in 2003-04.

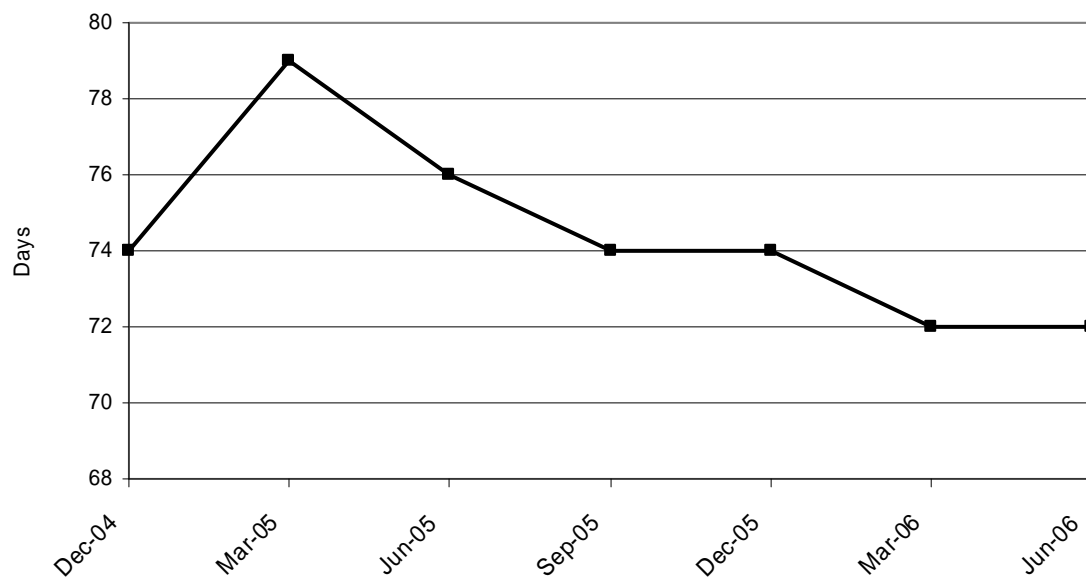
The largest increases in complaints in 2005-06 were recorded for voltage swells (which can cause blown lights) and low supply voltage (which can cause light dimming and motor starting problems). Table 9 provides a breakdown of complaints for 2005-06 categorised according to the type of symptom reported.

Table 9: Ergon Energy – quality of supply complaints – categorised according to symptoms

	SEP 2005	DEC 2005	MAR 2006	JUN 2006	TOTAL
Total quality of supply complaints	617	780	899	525	2,821
Low supply voltage	203	303	391	144	1,041
Other complaints	117	152	165	96	530
Voltage swell	123	127	121	124	495
Voltage dips –minor	78	77	83	65	303
TV or radio interference	42	34	28	30	134
Waveform distortion or unbalance	27	30	29	40	126
Voltage dips – severe	16	35	47	12	110
Voltage spike	9	15	27	10	61
Noises from appliances or lights	2	7	8	4	21

In the December quarter 2004, Ergon Energy changed the way it reports the average time taken to investigate and resolve quality of supply complaints to include the time taken to augment the network to resolve a problem. This change had a significant effect on the reported number of days, on average, taken to resolve these complaints. As a result, comparisons of performance from the December quarter 2004 with performance prior to this can no longer be made.

As shown in Figure 6, the average time taken to investigate and resolve quality of supply complaints decreased steadily since the March quarter 2005 to 72 days.

Figure 6: Ergon Energy – average time taken to fix a technical supply fault

As shown in Table 10, lower numbers were recorded for all three categories of possible causes for the quality of supply complaints in 2005-06. The largest number of quality of supply complaints in 2005-06 that could be categorised were caused by network restrictions or events. As for 2004-05, a large number of complaints in 2005-06, after investigation, were found to have no identifiable cause.

Further historical comparisons on the possible causes of quality of supply complaints is complicated by the improvements in collecting data that were made by Ergon Energy in the March quarter 2004. This likely explains most of the increase in these numbers from 2003-04. Prior to the March quarter 2004, possible causes of quality of supply complaints and the number of complaints were reported in two different databases instead of one. The number of possible causes of quality of supply complaints was based on the number of jobs undertaken as a result of complaints and did not take into account the number of complaints which may have related to any single job.

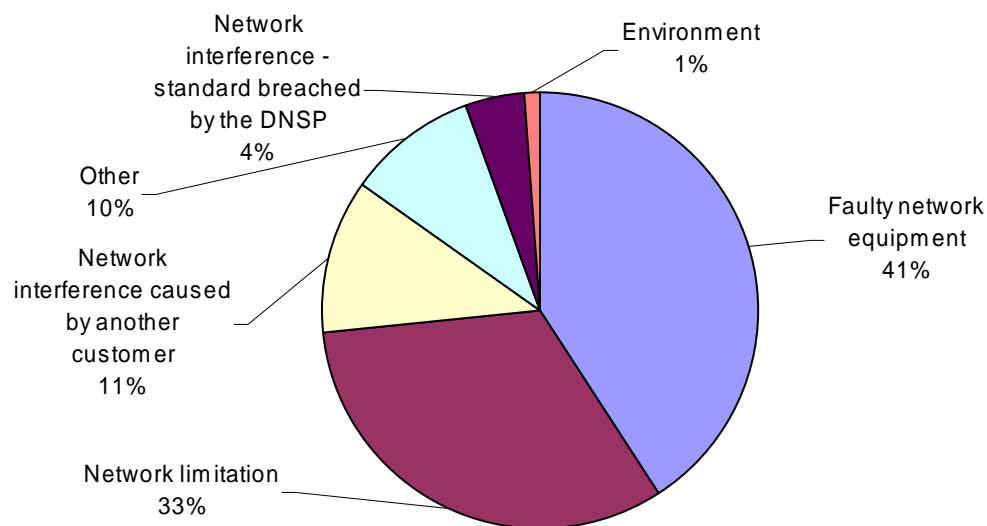
Table 10: Ergon Energy – quality of supply complaints – possible causes

	2002-03	2003-04	2004-05	2005-06
Network initiated quality of supply complaints	289	795	859	769
Quality of supply complaints initiated on the customer side of the meter	3	46	255	170
Quality of supply complaints for which no cause was found	51	187	803	761

Note – the summation of the above categories of possible causes for quality of supply complaints does not equal the total of the four quarterly quality of supply complaints as listed in Table 11 due to data collection problems. For 2005-06, the difference between the number of complaints listed in Table 11 and the possible causes listed in Table 13 was due to 563 complaints that were incorrectly classified and 558 complaints which Ergon Energy is still investigating.

As shown in Figure 7, network-initiated complaints are further broken down into sub-categories, of which faulty network equipment and network limitations accounted for 41 per cent and 33 per cent of total network-initiated complaints respectively. Interference to the network arising from the operation of equipment by customers and ‘other’ unclassified complaints explained most of the remaining quality of supply complaints.

Figure 7: Ergon Energy – causes of network initiated quality of supply complaints during 2005-06



Total number of network initiated complaints - 769

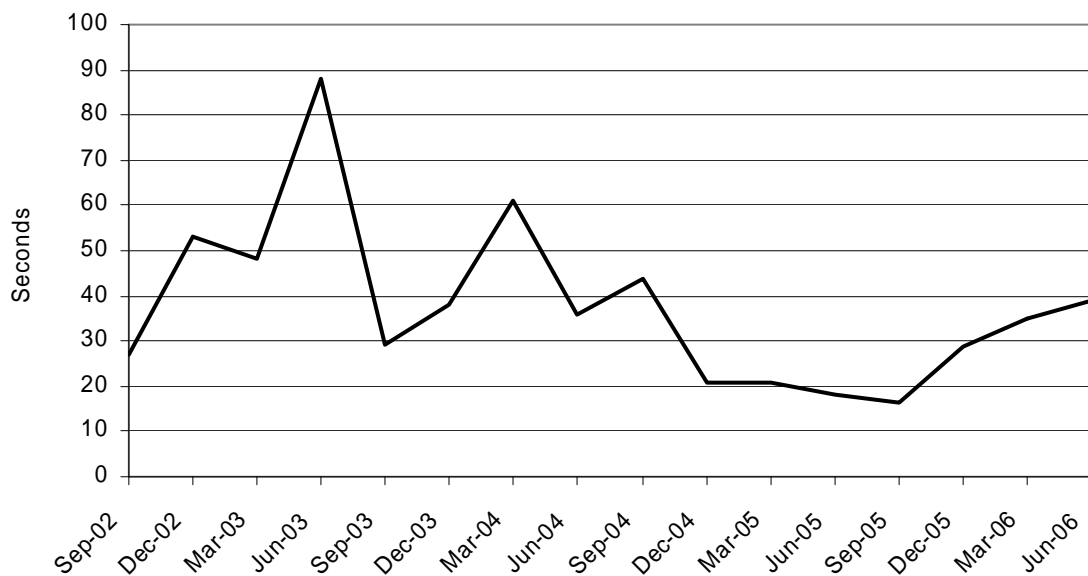
3.3 Customer Service Measures

Ergon Energy’s performance against a range of customer service measures was mixed during 2005-06.

Ergon Energy’s call centre performance deteriorated throughout 2005-06 to a June quarter result similar to that for 2003-04.

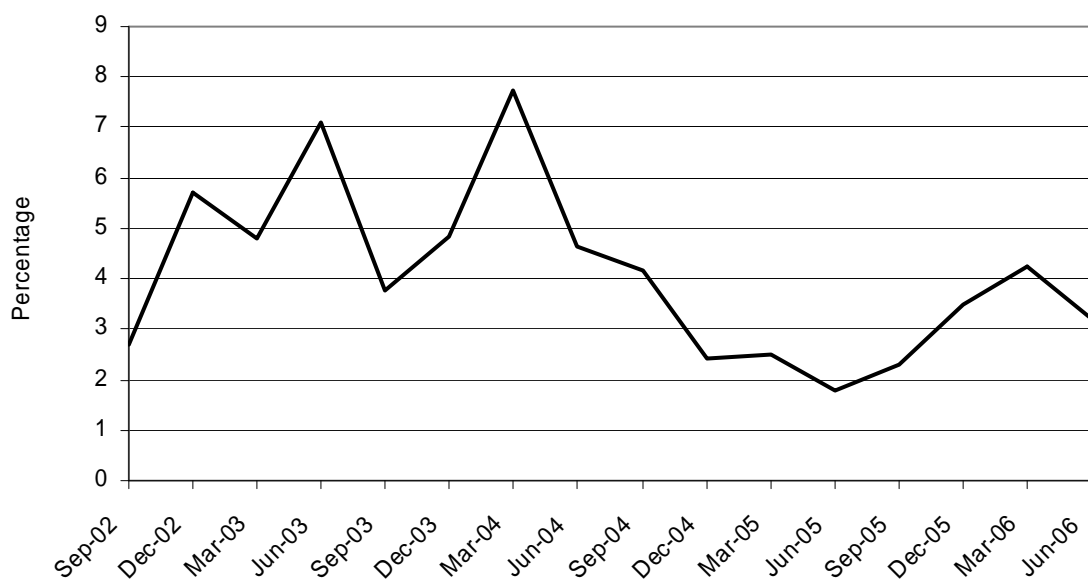
As shown in Figure 8, the length of time that customers had to wait to speak to an operator when calling the call centre fell to 16 seconds in the September quarter 2005, which was the lowest waiting time recorded since reporting began under the Authority’s Guidelines, before increasing to 39 seconds in the June quarter 2006. Reflecting this increase in the average time taken to answer calls, Ergon Energy answered fewer calls within 30 seconds during the June quarter 2006 (74.7 per cent), down from 81.5 per cent in the June quarter 2005.

Figure 8: Ergon Energy – average time waiting to speak to an operator



As shown in Figure 9, the percentage of calls abandoned deteriorated from its lowest value of 1.8 per cent in the June quarter 2005 to 3.2 per cent in the June quarter 2006. However, the performance in 2005-06 still represents a significant improvement from the peak of 7.7 per cent of calls that were abandoned in the March quarter 2004 when severe storms affected Ergon Energy’s network. The general improvement in this measure since the March quarter 2004 reflects measures taken by Ergon Energy to increase the capacity of its call centre.

Figure 9: Ergon Energy – percentage of calls to the call centre that were abandoned by customers



As shown in Table 11, the number of complaints that Ergon Energy received regarding the reliability of supply was volatile in 2005-06. As to be expected, the number of reliability complaints is higher in the storm season quarters (December and March). In the September quarter 2005, reliability complaints fell to the lowest level since reporting of service quality performance began under the Authority’s Guidelines. The total number of reliability of supply complaints in 2005-06 (1,237) was higher than in 2004-05 (1,002), probably reflecting the deterioration in Ergon Energy’s reliability performance.

A new requirement of the Authority’s revised Service Quality Reporting Guidelines is the inclusion of complaints relating to momentary interruptions to supply as a sub-category of reliability complaints. Ergon Energy has been unable to separately report complaints relating to momentary interruptions for 2005-06 in its complaint handling system. The momentary complaints are included in the total number of reliability and quality of supply complaints.

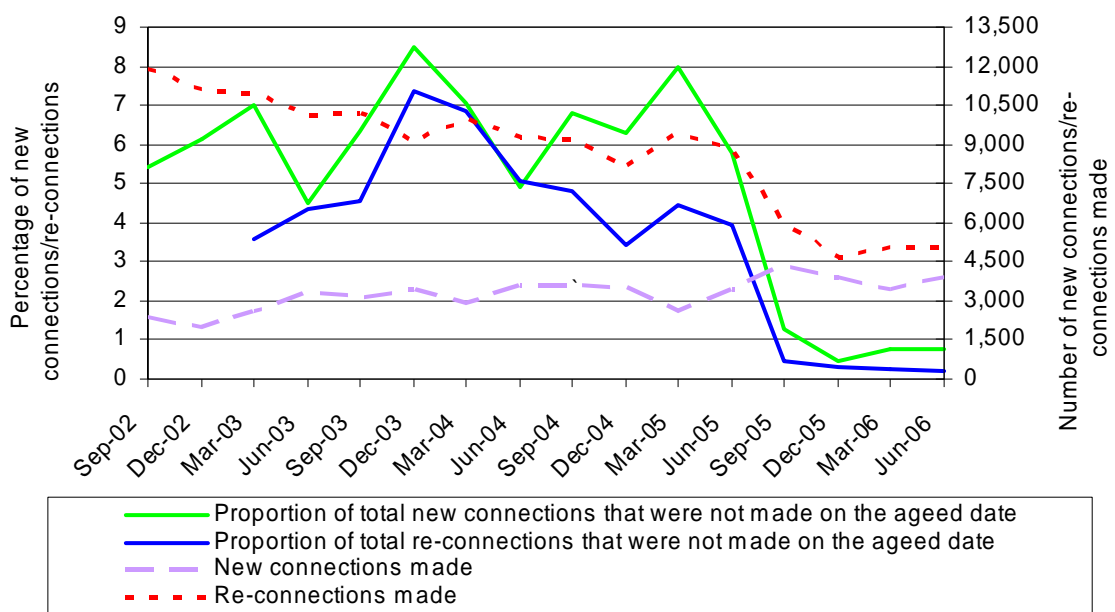
Table 11: Ergon Energy – number of reliability complaints

	SEP 2005	DEC 2005	MAR 2006	JUN 2006	TOTAL
Number of reliability complaints	121	441	446	229	1,237

In 2005-06, the proportion of total new supply connections that Ergon Energy failed to make by the agreed date dropped significantly, from 5.8 per cent in the June quarter 2005 to 0.8 per cent in the June quarter 2006 (Figure 10). Similarly, the proportion of total re-connections of supply that were not made on the agreed date fell significantly during 2005-06, from 3.9 per cent in the June quarter 2005 to 0.2 per cent in the June quarter 2006.

While the improved timeliness of re-connections may in part reflect the lower number of re-connections made during 2005-06 compared to previous years, the timeliness of new connections appears to have improved despite a higher average level of new connections made during 2005-06 than in previous years.

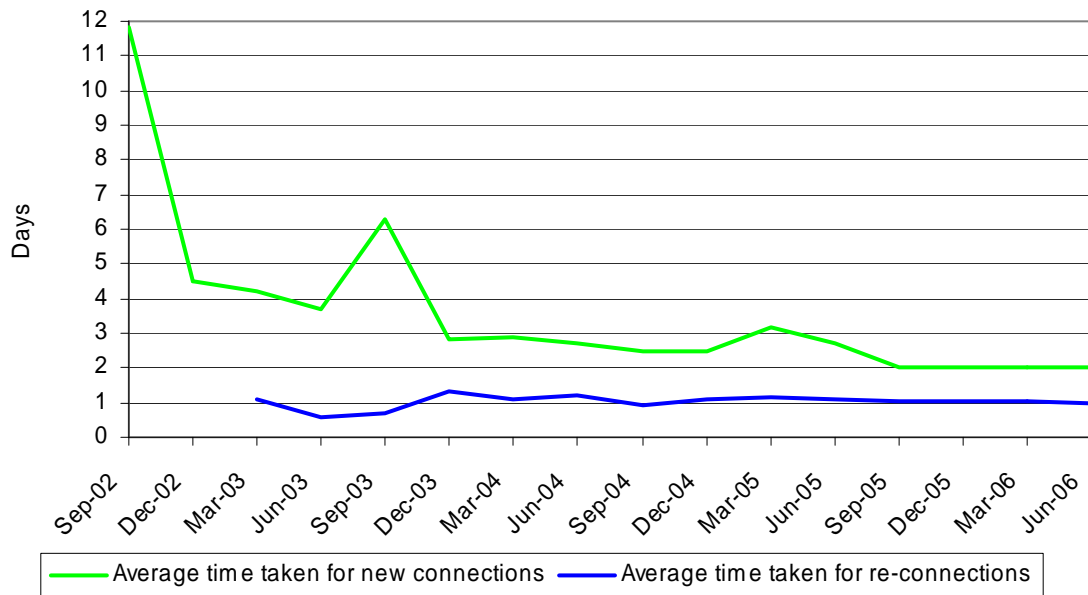
Figure 10: Ergon Energy – number of new and re-connections made, proportion of new and re-connections not made on the agreed date



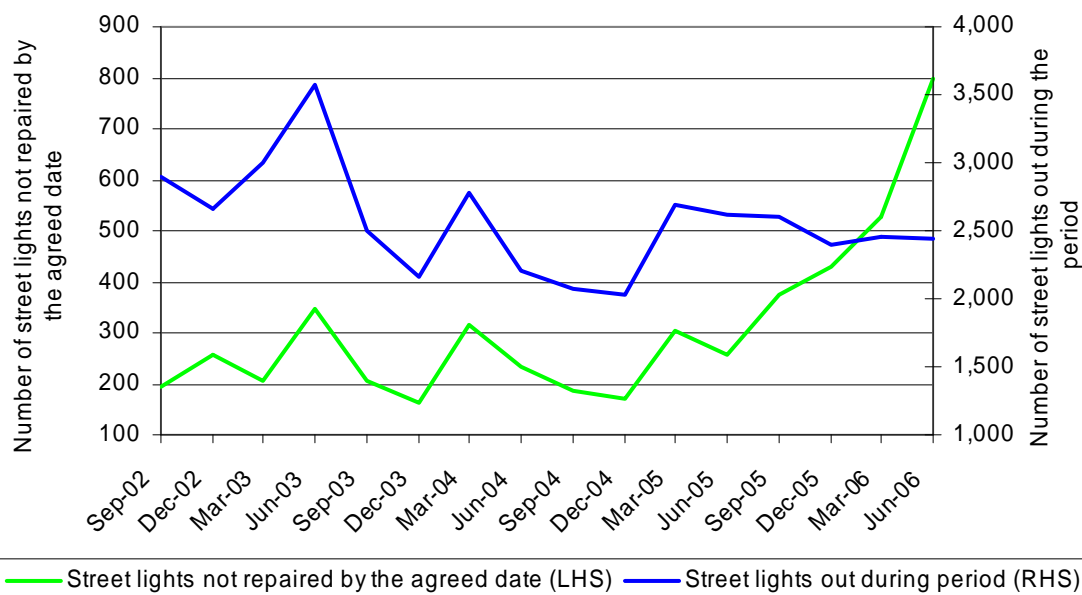
As indicated in Figure 11, the average length of time that customers had to wait for a new connection to the network fell to a steady 2 days during 2005-06. The recent performance represented a significant improvement from that achieved at the commencement of reporting under the Guidelines.

The average length of time that customers had to wait for a re-connection to the network has varied little over the last three and a half years, at about 1 day.

Figure 11: Ergon Energy – average time taken for new connections and re-connections



In 2005-06, the number of street lights reported as being out remained steady relative to previous years, at around 2,500 (Figure 12). However, the number of street lights not repaired by the agreed date escalated throughout the year. The delayed repair of streetlights during the March and June quarters in 2006 can be explained at least partly by the diversion of resources in response to Cyclone Larry in the March quarter.

Figure 12: Ergon Energy – street light maintenance

The average time taken to repair faulty street lights was 6.5 days in the June quarter 2006 compared to 2.8 days in the June quarter 2005. As mentioned, this deterioration was due at least partly to the impact of Cyclone Larry in the March quarter.

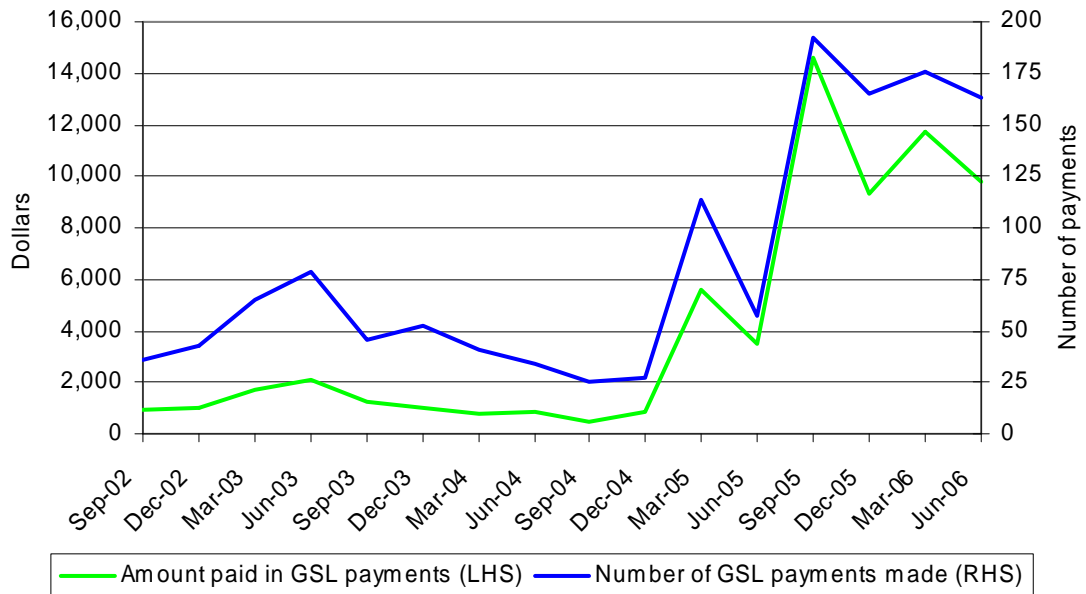
Table 12: Ergon Energy – average time taken to repair faulty street lights

	JUN 2005	SEP 2005	DEC 2005	MAR 2006	JUN 2006
Average number of days taken to repair street lights	2.8	2.4	3.1	3.8	6.5

The number of Guaranteed Service Level (GSL) payments and the amounts paid for GSLs both increased significantly in 2005-06 compared to 2004-05 (Figure 11), most likely as a result of the introduction of a formalised GSL scheme mandated by the Queensland Government.⁴

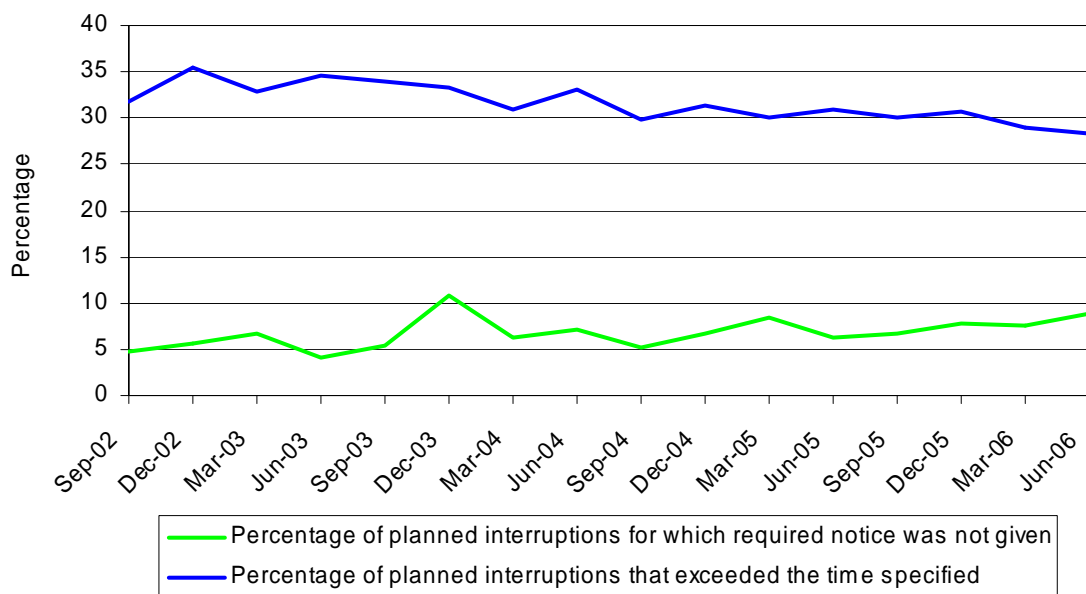
⁴ Prior to 1 January 2005, GSLs were voluntary payments made by the distributors to customers that reported instances where the distributors had not met self-imposed service quality standards. In December 2004, the Queensland Government announced a mandatory GSL scheme that would apply to the distributors from 1 January 2005. Prior to 30 June 2005, customers had to make a claim to the relevant distributor for all GSL payments. After 30 June 2005, the distributors must use their best endeavours to automatically make most GSL payments to customers, although a few GSLs still require the customer to make a claim. Information on the Government's GSL scheme is available at www.energy.qld.gov.au

Figure 13: Ergon Energy – Guaranteed service level payments



The proportion of occasions on which the required notice of a planned interruption to supply was not given has varied between around 5 per cent and 10 per cent over the past four years (see Figure 14). Over the same period, the proportion of occasions on which the duration of a planned interruption exceeded the time specified in the notification has varied between around 30 per cent and 35 per cent. While a record low of 28.4 per cent was recorded in the June quarter 2006, this is still a large percentage of planned interruptions that will exceed the time specified to customers. This is an important measure of Ergon Energy’s customer service performance given the large number of planned interruptions on its network (see Figure 5).

Figure 14: Ergon Energy – notification of commencement and duration of planned interruptions



The basis for reporting customer service complaints was changed in the Authority's revised Service Quality Reporting Guidelines (August 2005). As a result, it is not possible to compare results from September quarter 2005 with earlier results.

As shown in Table 15, complaints about field activity were the single most important cause of complaints during 2005-06. Other important causes for complaint included customer service, trees touching or close to power lines and meter reading.

Table 15: Ergon Energy – complaint resolution – reasons for complaints

	SEP 2005	DEC 2005	MAR 2006	JUN 2006	TOTAL
Total number of complaints	733	699	751	826	3,009
Field activity	195	182	205	190	772
Customer service	136	144	123	299	702
Trees	141	121	151	102	515
Meter reading	104	102	106	92	404
Other complaints	63	49	74	41	227
Supply – new extensions	45	51	45	63	204
Streetlights	17	18	13	12	60
Infrastructure	7	11	16	14	48
Metering/Technical	16	10	13	5	44
Environmental issues	9	9	5	4	27
Line clearances	0	0	0	4	4
Suspected compliance failure	0	2	0	0	2

The rate at which Ergon Energy resolved complaints within 20 days averaged 86.5 per cent during 2005-06. The average time taken to resolve complaints fell from 8.2 days in the September quarter 2005 to 6.6 days in the June quarter 2006.

The number of repeat complaints peaked at 26 in the December quarter 2005 and fell to 18 in the June quarter 2006. The average time taken to resolve repeat complaints fell significantly over 2005-06, from almost 20 days in the June quarter 2005 to 6.6 days in the June quarter 2006.

APPENDIX A

FINANCIAL DATA TABLES – 2001-02 to 2005-06

Table A1: Aggregate financial information – Ergon Energy (\$ million (nominal))

	2001-02	2002-03	2003-04	2004-05	2005-06
Revenue					
Forecast sales	447.5	476.05	500.4	523.4	675.2*
Actual sales	443.9	475.5	505.8	535.8	690.1*
Forecast revenue from outside use of regulated assets					8.0
Actual revenue from outside use of regulated assets					4.5
Expenditure					
Forecast operating and maintenance expenditure	150.9	154.6	158.4	162.4	266.7
Actual operating and maintenance expenditure					
Operating expenditure	34.6	35.5	42.0	53.0	79.9
Maintenance expenditure	100.4	123.5	147.5	142.1	203.9
Total	135.0	159.0	189.5	195.1	283.7
Forecast depreciation	171.9	181.1	187.7	192.4	231.9
Actual depreciation	163.3	166.9	173.3	186.4	225.2
Total expenditure (forecast)	322.8	335.7	346.1	354.8	498.6
Total expenditure (actual)	298.3	325.9	362.8	381.5	508.9
Customer contributions					
Forecast	16.8	17.1	17.5	17.9	28.9
Actual	16.9	19.9	25.4	35.5	36.2
Capital expenditure					
Forecast	255.0	234.0	194.6	192.3	524.5
Actual	235.0	312.8	358.2	490.1	623.2
Fixed assets					
Forecast	2,720.7	2,831.0	2,896.8	2,956.8	4,650.9
Actual	2,501.8	2,661.5	2,961.2	3,321.5	4,690.1
Energy Sales (million MWh)					
Actual	12.3	12.5	12.8	12.9	13.5
Number of customers					
Actual	574,259	584,878	584,717	711,143**	736,710

* Includes network and non-network services

**ErgonEnergy revised their method of recording street lighting customers from 2004-05 onwards.

Table A2: Revenue – Ergon Energy (\$ million (nominal))

Revenue source*	2001-02	2002-03	2003-04	2004-05	2005-06
Sales					
Network services (excl public lighting)	443.9	475.5	495.3	525.5	670.7
Public lighting	n/a	n/a	10.5	10.3	13.4
Total network services	443.9	475.5	505.8	535.8	684.1
TUOS pass-through	139.0	154.4	150.5	143.9	154.1
Non Network Services	3.0	2.0	3.8	4.0	6.0
Total services	585.9	631.9	660.1	683.7	844.2
Revenue from outside use of regulated assets					4.5
Capital contributions	16.9	19.9	25.4	35.5	36.2
Profit from sale of assets	(3.4)	0.8	(15.9)	1.7	(0.7)
Proceeds from sale of assets	1.5	4.8	5.2	4.2	4.1
Book value of assets sold	4.9	4.0	4.3	2.5	4.8
Other revenue	-	15.0	17.7	32.8	6.9

* May not sum due to rounding.

Table A3: Operating and maintenance expenditure – Ergon Energy (\$ million (nominal))

Expenditure*	
Operating expenditure	
Meter reading	7.9
Customer service	25.4
Advertising and marketing	0.2
Full retail contestability	7.1
Network operations	18.1
Training	12.6
Other	8.5
Total	79.9
Public street lighting	0
Total operating expenditure	79.9
Network maintenance expenditure	
Inspection	55.8
Maintenance and repair	16.9
Vegetation management	70.5
Emergency Response	51.6
Other	1.5
Total	196.3
Public street lighting	7.6
Total maintenance expenditure	203.9
Total operating and maintenance expenditure	283.7

* May not sum due to rounding.

Table A4: Depreciation - Ergon Energy (\$ million (nominal))

Asset*	
System Assets:	
overhead sub-transmission lines	19.6
underground sub-transmission lines	1.0
overhead distribution lines	36.5
underground distribution lines	2.3
distribution equipment	2.0
substation bays	10.9
substation establishment	5.9
substation switchgear	1.0
zone transformers	4.3
distribution transformers	20.7
low voltage services	18.5
meters	8.8
communications	2.0
generation assets	0.4
street lighting	4.4
control centre -SCADA	2.4
Non-System Assets:	
communications	0.8
IT systems	36.2
office furniture and equipment	2.3
motor vehicles	17.6
plant and equipment	6.9
buildings	8.9
land and easements	-
land improvements	0.1
Total	213.5

* May not sum due to rounding.

Table A5: Expected and remaining lives of assets – Ergon Energy

Asset	Expected weighted average economic life (weighted by ORC) (years)	Weighted average remaining economic life (weighted by ORC) (years)
System Assets:		
overhead sub-transmission lines	48.3	24.9
underground sub-transmission lines	44.4	31.6
overhead distribution lines	49.4	23.6
underground distribution lines	58.1	46.6
distribution equipment	35.0	34.9
substation bays	40.0	17.4
substation establishment	38.1	22.4
substation switchgear	34.1	30.6
zone transformers	40.0	16.5
distribution transformers	34.1	20.1
low voltage services	51.1	26.0
meters	25.0	6.4
communications	17.1	10.3
generation assets	20.0	6.1
street lighting	20.0	7.9
other equipment	40.0	38.8
control centre -SCADA	7.1	3.0
Non-System Assets:		
communications	7.0	2.7
IT systems	3.2	0.7
office furniture and equipment	7.0	3.8
motor vehicles	8.3	4.2
plant and equipment	7.8	3.5
buildings	38.2	17.1
land and easements	n/a	n/a
land improvements	40.0	35.6

Table A6: Asset values - Ergon Energy (\$ million (nominal))

Asset*	
System Assets:	
overhead sub-transmission lines	806.2
underground sub-transmission lines	19.5
overhead distribution lines	1,135.1
underground distribution lines	125.7
distribution equipment	46.0
substation bays	397.0
substation establishment	182.5
substation switchgear	53.3
zone transformers	105.1
distribution transformers	441.8
low voltage services	561.7
meters	58.0
communications	40.7
generation assets	2.7
street lighting	50.0
other equipment	0.1
control centre -SCADA	15.4
land and easements	19.1
Non-System Assets:	
communications	9.2
IT systems	29.0
office furniture and equipment	23.7
motor vehicles	94.1
plant and equipment	34.4
buildings	63.1
land and easements	24.8
land improvements	2.8
Work in progress	349.1
Total	4,690.1

* May not sum due to rounding.

Table A7: Capital Expenditure and additions - Ergon Energy (\$ million (nominal))

Capital expenditure*	
System Assets:	
overhead sub-transmission lines	18.0
underground sub-transmission lines	0.3
overhead distribution lines	310.1
underground distribution lines	20.8
distribution equipment	13.7
substation bays	44.4
substation establishment	14.2
substation switchgear	2.9
zone transformers	12.4
distribution transformers	-
low voltage services	21.3
meters	6.8
communications	2.0
generation assets	-
street lighting	2.8
control centre -SCADA	5.7
Non-System Assets:	
communications	0.1
IT systems	73.6
office furniture and equipment	0.8
motor vehicles	37.7
plant and equipment	11.4
buildings	23.9
land and easements	0.2
land improvements	-
Total	623.2

* May not sum due to rounding.

Table A8: Capital expenditure by purpose - Ergon Energy (\$ million (nominal))

Capital expenditure	
Asset replacement	150.4
Demand related	300.0
Reliability and quality improvements	6.5
Other	166.3
Total	623.2

Table A9: Related party transactions - Ergon Energy (\$ million (nominal))

Transaction	
Total value of related party transactions	34.5