



**Ergon Energy's
Financial and Service Quality
Performance 2004-05**

March 2006

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1. INTRODUCTION AND SUMMARY

As part of the Authority's 2001 Determination on the Regulation of Electricity Distribution¹, the Authority required the Queensland Distribution Network Service Providers (DNSPs) to provide annual information on their financial and service quality performance. The Authority decided in its Final Determination (April 2005) to continue these requirements for the 2005-10 regulatory period, albeit with a number of refinements to the processes.

The financial information for 2004-05 was submitted in accordance with the Authority's *Electricity Distribution: Regulatory Accounting and Information Guidelines (Version 4.1)* and the DNSPs' approved Cost Allocation Guidelines.

This Report provides an assessment of the financial performance of Ergon Energy for 2004-05, including a comparison with the financial forecasts that were included in the Authority's 2001 Determination and comparisons with the past financial performance of Ergon Energy.

The service quality information is required to be submitted in accordance with the Authority's *Electricity Distribution: Service Quality Reporting Guidelines*. The data presented in this report is in accordance with Version 1.1 of these Guidelines. The Authority released a revised set of Service Quality Reporting Guidelines in August 2005 in order to address some weaknesses in the reporting arrangements identified in the Authority's 2005 Final Determination. These revised Guidelines (Version 2.0) will apply to service quality information requirements from 1 July 2005.

The 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 only commenced publicly releasing the reports with 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 2004-05, but also from the two preceding financial years.

The structure and content of this Report will evolve as financial and service quality information is accumulated and, over time, the Authority will be able to provide more in-depth commentary and analysis of the information presented.

1.1 General Operating Background

There are currently two DNSPs operating in Queensland, Energex and Ergon Energy². Both distribution entities are owned by the Queensland Government and have legally separate but wholly owned subsidiary retailing operations.

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.

¹ The cost of electricity distribution represents approximately 40 per cent of an average residential customer's final bill, with the remainder consisting of costs associated with generation, high-voltage transmission and retailing of electricity.

² Country Energy (NSW) operates a franchise network on the Queensland/New South Wales border extending into Queensland.

Table 1 identifies key network characteristics of Energex and Ergon Energy, which illustrates the differences in the distributors' networks. A key difference is customer density, specifically, while there are 25.2 customers per kilometre of line in Energex's network, Ergon Energy has just 4.4 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.

As a result, the service quality measures collected by the Authority are not intended to provide a comparison of the two DNSPs. 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 - 2004-05

Network descriptor	Energex	Ergon Energy
Network service area (sq km)	25,264	1,698,100
Number of customers ¹	1,190,237	604,345
Energy delivered (GWh) ¹	19,665	12,954
Energy delivered per customer (MWh)	16.5	21.4
Kilometres of line	47,290	138,330 ²
Customers per km of line	25.2	4.4
Maximum demand of network (MVA)	4,205	2,297
Number of distribution transformers	39,572	76,939
Asset utilisation (%) ³	34.2	23.8
Distribution losses (%)	5.8	6.4

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 For year ending 30 June 2002. Ergon Energy was unable to provide updated data for 2004-05.

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 6,700 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 (those 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 2004-05 are presented in Table 2.

Table 2: Customer numbers and units sold – Ergon Energy 2004-05

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	2.2	3,588,842	(4.3)	78,018.3	(6.3)
Connection asset customers	54	10.2	593,496	10.3	10,990.7	0.1
Standard asset customers	662	72.4	411,857	29.4	622.1	(24.9)
Non-contestable customers						
Franchise customers ¹	603,308	3.3	8,287,960	2.3	13.7	(1.0)
Embedded generators	5	66.7	-	-	-	-
Public street lighting	270	-	71,375	3.9	264.4	3.9
Total	604,345	3.4	12,953,530	1.4	21.4	(1.9)

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

The number of customers grew solidly in 2004-05, compared to no growth in 2003-04. Franchise customer growth was 3.3 per cent (franchise customers account for over 99 per cent of Ergon Energy's total customer base), while there was strong growth in the number of Standard Asset Customers (72.4 per cent) and Connection Asset Customers (10.2 per cent). Energy sales increased 1.4 per cent in the year following a 2.5 per cent increase in 2003-04. This compares with forecast average growth of 3 per cent per annum over the regulatory period. The modest growth in energy sales relative to customer number growth in 2004-05 reflects a decline in energy sales per customer across nearly all customer groups.

1.3 Summary of Ergon Energy Financial Performance

Overall, the financial performance of Ergon Energy for 2004-05 was mixed compared with the forecasts underlying the 2001 Final Determination (see Table 3). Ergon Energy's actual revenue exceeded that allowed by the Authority by \$12.4 million. Capital contributions were also \$17.6 million (or 98.3 per cent) higher than forecast during the year. Given the resulting revenue over-recovery was greater than 5 per cent of the 2004-05 revenue cap, Ergon Energy is required to submit a proposal to the Authority describing over what period the over-recovery will be returned to customers.

Table 3: Ergon Energy financial performance - 2004-05

	Actual 2003-04 (\$ mill)	Actual 2004-05 (\$ mill)	Forecast 2004-05 (\$ mill)	Variance from forecast 2004-05	
				(\$ mill)	(%)
Allowable revenue					
Distribution use of system charges	505.8	535.8	523.4	12.4	2.4
Capital contributions	17.5	35.5	17.9	17.6	98.3
Operating and maintenance expenditure	189.5	195.1	162.4	32.7	20.1
Capital expenditure	358.2	490.1	192.3	297.8	154.9

As part of the 2001 Final Determination, the Authority estimated the level of operating costs and capital expenditure required to deliver prescribed distribution services for each year of the regulatory period for Ergon Energy. 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.

Following higher-than-forecast operating and maintenance expenditure in 2003-04 of \$29.7 million, Ergon Energy exceeded forecast operating and maintenance expenditure by around \$31.3 million (19.1 per cent) in 2004-05. Ergon Energy attributed the increases to its ageing asset base and the continued effects of its Asset Inspection and Defect Management (AIDM) program, which identified a higher level of defects requiring maintenance. The higher expenditure in these areas also reflects Ergon Energy's response to the Government's Electricity Distribution and Service Delivery (EDSD) Review, which reported in July 2004.

Capital expenditure was substantially higher-than-forecast for Ergon Energy (\$297.8 million or 154.9 per cent). Ergon Energy recorded significantly higher than forecast asset replacement expenditure reflecting the impact of its AIDM program. Ergon Energy also recorded significantly higher demand-related expenditure than forecast. It indicated that the increased expenditure was due to customer requested works, including major customer projects, and system augmentation in response to the EDSD Review. A significant increase in "other" capital expenditure reflected a general increase in expenditure on non-system assets (motor vehicles, moveable plant) used to support the increased system capital and operating expenditure program.

1.4 Summary of Ergon Energy Service Quality Performance

As shown in Table 4, Ergon Energy customers, on average, experienced 3.82 distribution-related interruptions during 2004-05. With each interruption lasting an average of 119.2 minutes, customers were left without power, on average, for a total of 455.3 minutes during the year. These figures compare to the 5.10 interruptions per customer recorded during 2003-04. With each interruption lasting an average of 110.1 minutes, customers were, on average, without power for 561.2 minutes during 2003-04. This indicates that the reliability of electricity supply for 2004-05 improved compared to 2003-04. This improvement during 2004-05 is likely to be due to a relatively mild storm season compared to 2003-04.

The Authority's Service Quality Reporting Guidelines allow the impact of weather-related events that affect more than 5 per cent of a DNSP's customer base to be removed from the reliability data to facilitate an assessment of underlying performance. However, Ergon Energy

has not had any exclusions from the distribution-related reliability data due to severe weather-related events since reporting began under the Guidelines.

Table 4: Summary of Ergon Energy’s reliability of supply performance - 2004-05*

	JUN 2004	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Average number of interruptions per customer per year – distribution-related (SAIFI)	5.10	5.07	5.03	3.97	3.82
Average duration of each interruption per year – distribution-related (CAIDI) - minutes	110.1	110.6	113.8	115.2	119.2
Duration of all interruptions per customer per year – distribution-related (SAIDI) – minutes	561.2	560.0	572.3	457.8	455.3

* All estimates are 12 month rolling averages.

The total number of quality of supply complaints received by Ergon Energy decreased from 3,034 in 2003-04 to 2,786 in 2004-05. As shown in Table 5, the highest number of complaints received was in the March quarter 2005 (823) while the lowest number of complaints received was in the September quarter 2004 (606).

Ergon Energy’s performance against a range of customer service measures was mixed over the course of 2004-05:

- the length of time that customers had to wait to speak to an operator when calling the call centre fell to 18 seconds in the June quarter 2005, which was the lowest waiting time recorded since reporting began under the Authority’s Guidelines;
- the percentage of calls abandoned by callers improved from 4.6 per cent in the June quarter 2004 to 1.8 per cent in the June quarter 2005, the lowest since reporting of service quality data began under the Authority’s Guidelines;
- the average length of time that customers had to wait for a new connection to the network has generally remained stable over the past year at around 3 days. Ergon Energy’s June quarter 2005 performance was the same as the corresponding quarter in 2004 (2.7 days); and
- the proportion of total new supply connections that Ergon Energy failed to make by the agreed date was 5.8 per cent in the June quarter 2005, compared to 4.9 per cent in the June quarter 2004.

Table 5: Summary of Ergon Energy’s other service quality measures - 2004-05

	JUN 2004	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Total number of quality of supply complaints	653	606	750	823	607
Average waiting time to speak to an operator – seconds	36	44	21	21	18
Percentage of calls abandoned by customers	4.6	4.2	2.4	2.5	1.8
Average time taken for new connections - days	2.7	2.5	2.5	3.2	2.7
Percentage of new connections not made by the agreed date	4.9	6.8	6.3	8.0	5.8

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 2005. 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 May 2005 (subsequently amended in November 2005) in order to address some weaknesses in the reporting arrangements identified in the Authority's 2001 Final Determination. These revised Guidelines (Version 4.1) will 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 2001 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 2001 Final Determination, the Authority set a maximum revenue cap for each of the four years of the initial 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 2001 Final Determination also acknowledged the possibility of within-period adjustment to revenue caps to allow for agreed cost pass-throughs or corrections to the underlying revenue cap calculations. A cost pass-through allows Ergon Energy to increase/decrease its revenue cap in response to an increase/decrease in a cost that was unforeseen at the time of the 2001 Final Determination, is typically beyond its control and is readily observable.

During 2004-05, cost pass-through was permitted for costs associated with the Electrical Safety Office and QCA levies. Under legislation introduced by the Queensland Government, a number of functions previously undertaken by Ergon Energy were transferred to the Electrical Safety Office within the Department of Industrial Relations. The Electrical Safety Office is funded via a levy on both distributors.

The Authority reviewed Ergon Energy's application for pass-through of costs associated with the Electrical Safety Office and approved that an additional \$0.92 million be raised by Ergon Energy in 2004-05.

Similarly, the *Queensland Competition Authority Regulation 1997* was amended by Subordinate Legislation No. 3 of 2003 to provide for the charging of fees by the Authority. The Authority approved the pass-through of \$0.49 million in recognition of the QCA levy in 2004-05.

As part of the 2001 Final Determination, the Authority stated its intention to use an "unders and overs" account for each DNSP to ensure compliance with the annual revenue caps set in the Determination. 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.

Table 6: Ergon Energy DUOS revenue – 2004-05

	\$ million (nominal)
Revenue earned during 2004-05	
Revenue from distribution tariffs	535.8
Revenue from capital contributions	35.5
Total revenue earned	571.3
<i>less</i> Allowable annual revenue (updated where necessary)	541.3
<i>equals</i> Over/(under) recovery for 2004-05	30.0

Table 6 indicates that Ergon Energy over-recovered their allowed revenue by \$30.0 million (5.5 per cent). As per the Authority's 2001 Final Determination, an over-recovery balance of more than 5 per cent requires the distributor to submit a plan to the Authority describing over what period the over-recovery will be returned to customers.

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

TUOS charges are calculated by DNSPs each year to pass-through to distribution customers the cost levied by Powerlink for the use of the transmission system. Electricity transmission charges are regulated by the Australian Competition and Consumer Commission (ACCC) and paid to Powerlink by DNSPs on behalf of customers. 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.

In approving the (DNSP's) TUOS charges, the Authority's main aim is to ensure that these charges should reflect, as closely as possible, the structure of Powerlink's charges. Any difference between TUOS revenue recovered by DNSPs from customers and the charges they pay to Powerlink is recouped from/returned to customers through future charges.

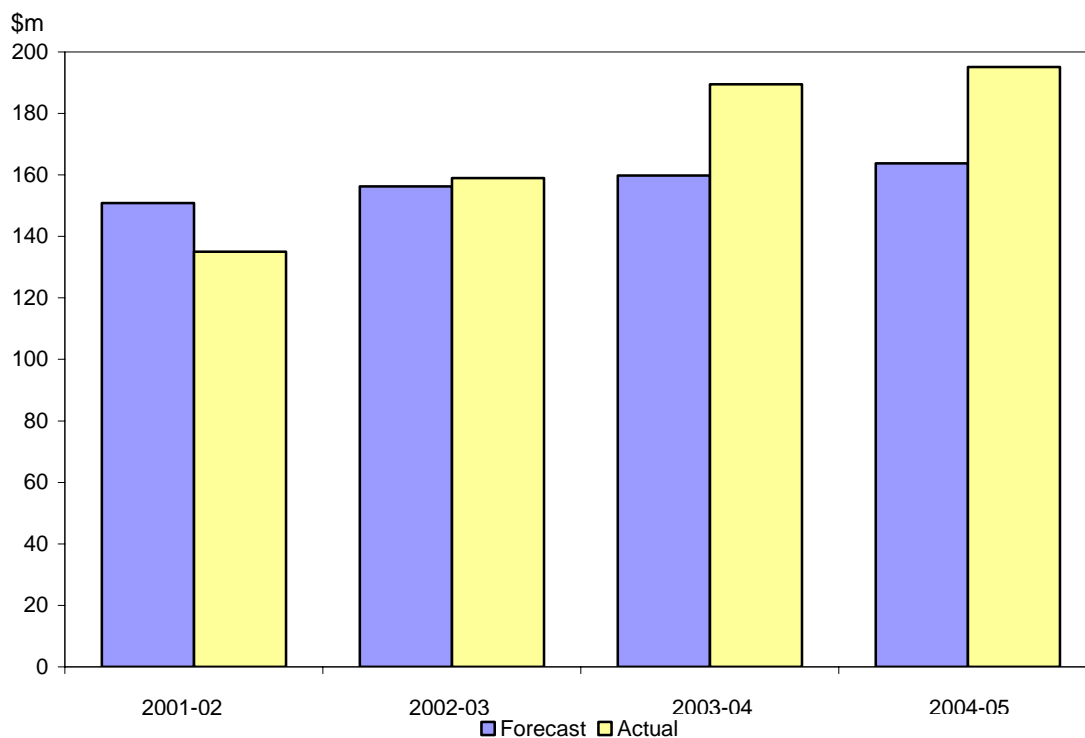
Table 7: Ergon Energy TUOS unders and overs account – 2004-05

	\$ million (nominal)
TUOS charged by Powerlink	147.0
<i>less</i> actual TUOS revenue earned during 2004-05	143.9
<i>equals</i> Over/(under) recovery for 2004-05	(3.1)

Table 7 indicates that Ergon Energy's customers were under-charged for transmission services during 2004-05 and accordingly Ergon Energy will need to recover \$3.6 million (indexed) from customers in 2006-07 TUOS charges.

2.2 Operating and Maintenance Expenditure

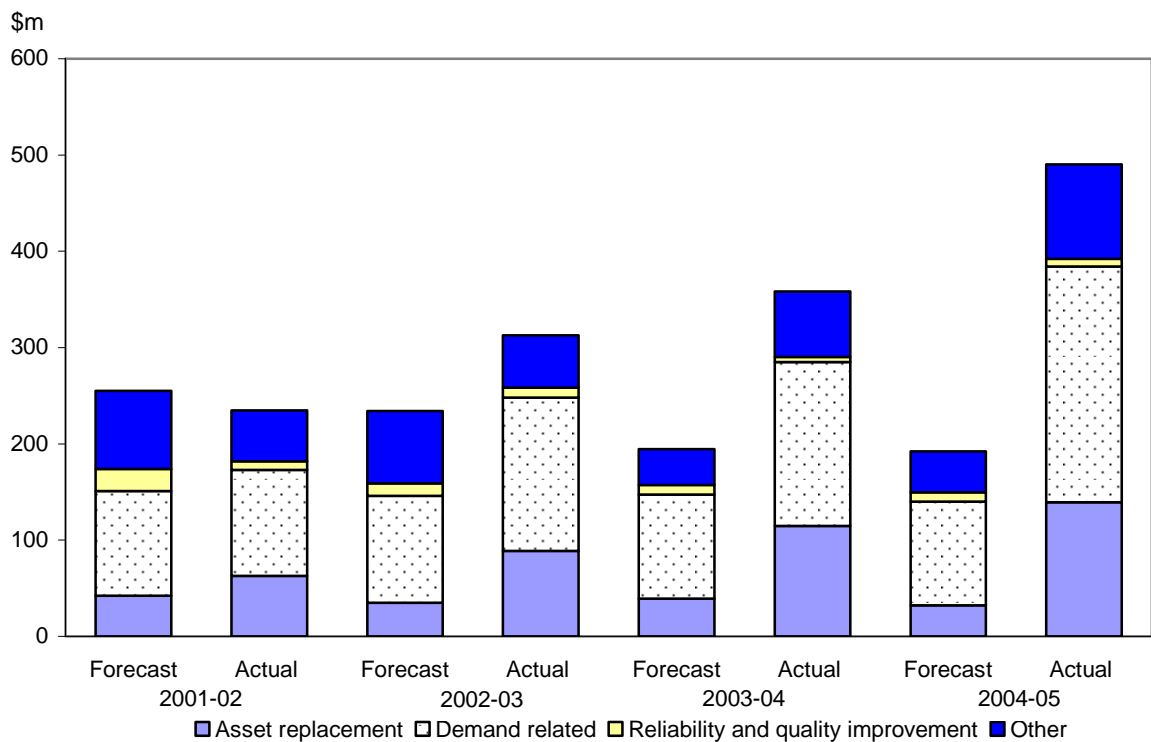
Figure 1 shows network operating and maintenance expenditure reported by Ergon Energy for 2001-02 to 2004-05, compared with the forecast operating and maintenance expenditure in the 2001 Final Determination.

Figure 1: Ergon Energy operating and maintenance expenditure – 2001-02 to 2004-05

Ergon Energy recorded a significant over-spend in operating expenditure of \$31.3 million (19.1 per cent) in 2004-05, following a similar over-spend of \$29.7 million in 2003-04. All major categories of operating expenditure increased during the year including vegetation management (115.6 per cent), inspections (42.3 per cent), and substation maintenance and other preventative maintenance (18.9 per cent). Ergon Energy attributed the increases to its ageing asset base and the continued effects of its Asset Inspection and Defect Management cycle, which identified a higher level of defects requiring maintenance. The higher expenditure in these areas also reflects Ergon Energy's response to the Government's Electricity Distribution and Service Delivery (EDSD) Review, which reported in July 2004.

2.3 Capital Expenditure

Figure 2 shows network capital expenditure (in aggregate and by purpose) reported by Ergon Energy for 2001-02 to 2004-05, compared with the forecast capital expenditure. Capital expenditure was \$297.8 million (154.9 per cent) higher than forecast during 2004-05. While Ergon Energy had been forecasting a declining capital expenditure requirement over the regulatory period at the time of the 2001 Final Determination, the reality has been the reverse.

Figure 2: Ergon Energy capital expenditure – 2001-02 to 2004-05

Ergon Energy attributed the higher than forecast capital expenditure to the continued effects of its Asset Inspection and Defect Management (AIDM) program (the inspection regime introduced in 2001-02 to establish the quality of poles and associated equipment, as well as substation equipment). Ergon Energy has previously indicated that the program identified the need for substantial increases in asset replacement expenditure. Asset replacement expenditure was \$107.3 million (333 per cent) higher than forecast for 2004-05.

Ergon Energy also reported demand-related expenditure 127 per cent higher than forecast for 2004-05, \$244.5 million compared to \$107.9 million. Ergon Energy attributed the increased expenditure to customer requested works, including major customer projects, and system augmentation in response to the EDSD Review.

Ergon Energy attributed the significant increase in “other” capital expenditure to a general increase in expenditure on non-system assets (motor vehicles, moveable plant) used to support the increased system capital and operating expenditure program.

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 2005 and is drawn from Ergon Energy's quarterly and annual service quality reports for 2004-05. These reports were submitted in accordance with the Authority's *Electricity Distribution: Service Quality Reporting Guidelines (Version 1.1)*. 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 2002-03 and 2003-04 has been included in this section as a guide to annual movements in the service quality measures. As data accumulates over time, the service quality performance of Ergon Energy 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

Table 8 shows that, during 2004-05, Ergon Energy customers, on average, experienced 4.15 interruptions as a result of interruptions arising from all segments of the electricity supply chain, including generation, transmission and distribution. With each interruption lasting an average of 113.8 minutes, customers were left without power, on average, for a total of 472.5 minutes during the year.

These figures compare to the 5.35 interruptions experienced, on average, during 2003-04. With each of these interruptions lasting an average of 108.1 minutes, customers were left without power for an average 578.4 minutes during 2003-04. This indicates that the reliability of electricity supply for 2004-05 significantly improved compared to 2003-04, probably due to a relatively mild storm season in 2004-05.

Table 8: Ergon Energy – average number and duration of total* interruptions per customer

	JUN 2004	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Average number of interruptions per customer (SAIFI)	5.35	5.52	5.43	4.35	4.15
Average duration of each interruption (CAIDI) – minutes	108.1	106.7	109.0	110.0	113.8
Duration of all interruptions per customer (SAIDI) – minutes	578.4	588.9	592.0	478.7	472.5

* Includes generation, transmission and distribution interruptions.

As shown in Table 8, the number and duration of interruptions decreased in the March quarter 2005 which was the main contributing factor to the improved reliability performance during 2004-05³. The March quarter 2005 was characterised by favourable weather conditions which resulted in a relatively low level of distribution-related interruptions compared to the severe storms experienced in the March quarter 2004, the effect of which is shown in Table 9.

Table 9: Ergon Energy – average number and duration of distribution-related interruptions per customer

	JUN 2004	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Average number of interruptions per customer (SAIFI)	5.10	5.07	5.03	3.97	3.82
Average duration of each interruption (CAIDI) - minutes	110.1	110.6	113.8	115.2	119.2
Duration of all interruptions per customer (SAIDI) – minutes	561.2	560.0	572.3	457.8	455.3

Reliability data can be affected by good and bad weather conditions, although interruptions within a distributor's network which affect at least 5 per cent of total customers and are due to widespread storms or flooding, or other natural disaster, can be excluded from the data. For Ergon Energy, with its low customer density, it requires a fairly extreme event (such as a cyclone) to affect more than 5 per cent of total customers. As a result, no events have been excluded from Ergon Energy's reliability data since reporting began under the Authority's Guidelines.⁴

Table 9 shows that the majority of interruptions on Ergon Energy's network were distribution-related. Specifically, the average number and duration of distribution-related interruptions decreased from 5.10 interruptions and 561.2 minutes for 2003-04 to 3.82 interruptions and 455.3 minutes for 2004-05.

Unplanned interruptions arising in the distribution network accounted for the majority (73 per cent) of the total 472.5 minutes that Ergon Energy customers were without electricity supply during 2004-05, as shown in Figure 3. Planned interruptions in the distribution network accounted for 23 per cent of outages. Ergon Energy has indicated that this high proportion is partly explained by increased asset replacement expenditure on the network due to the Asset

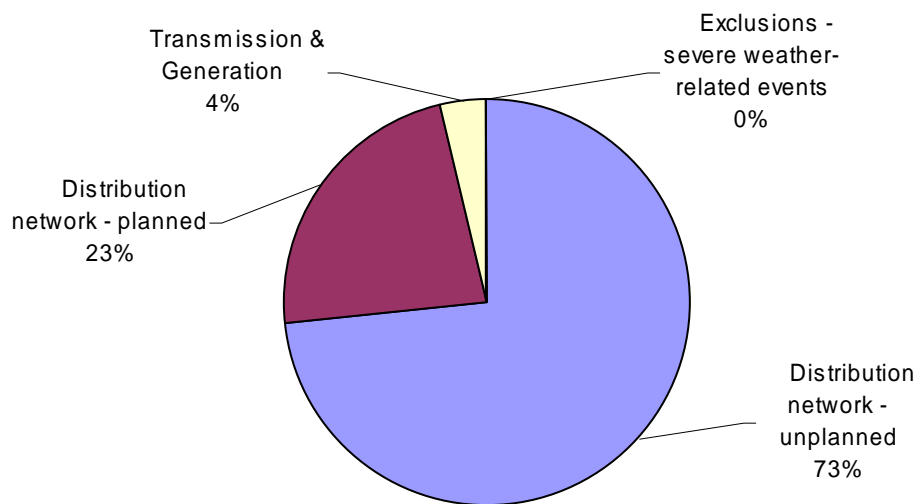
³ As quarterly reliability measures are based on 12 month rolling averages, comparison of reliability data for the December quarter 2004 and March quarter 2005 is effectively a comparison of reliability performance during the March 2004 and 2005 quarters.

⁴ In August 2005, the Authority released revised Guidelines which introduced a statistically-based method for excluding the impact of severe weather-related events from reliability data. This will apply from 1 July 2005.

Inspection and Defect Management program. Transmission and generation interruptions together made up the 4 per cent balance.

The 2004-05 data is comparable with that for 2003-04, where unplanned interruptions accounted for 78 per cent of the total 578.4 minutes that Ergon Energy customers were without power, while planned interruptions on the distribution network accounted for 19 per cent and transmission and generation interruptions together made up the 3 per cent balance.

Figure 3: Ergon Energy – duration of interruptions by source



Total duration of interruptions = 472.5 minutes

Interruptions arising in the distribution network can be disaggregated according to geographic categories – that is, Urban, Short Rural and Long Rural.⁵ As shown in Table 10, there were significant differences in the level of reliability across Ergon Energy's network during 2004-05. For example, customers in urban and short rural areas experienced decreases in the duration of interruptions of 44 minutes and 104 minutes respectively from the June quarter 2004 to the June quarter 2005, while the period of time that customers in the long rural areas were without supply decreased by 345 minutes over the same period from a very high level of 1,419 minutes.

Table 10: Ergon Energy – duration of distribution-related interruptions by network type (minutes)

	JUN 2004	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Total distribution system	561.2	560.0	572.3	457.8	455.3
Urban	239.9	238.4	248.2	204.0	195.6
Short Rural	636.5	635.5	643.6	527.0	532.8
Long Rural	1,419.4	1,418.1	1,455	1,096.3	1,074

Reliability of Worst Performing Feeders

The reliability of Ergon Energy's worst performing feeders generally improved in 2004-05 compared to 2003-04. It is likely that the improvement reflects the relatively mild storm season

⁵ Ergon Energy does not have any feeders that meet the definition of CBD.

in 2004-05 compared with the severe storms which occurred in 2003-04. With the exception of long rural feeders, Ergon Energy's reliability performance in 2004-05 is relatively consistent with its performance in 2002-03. In contrast, Ergon Energy's 10 worst performing long rural feeders considerably improved in 2004-05 compared to 2002-03.

During 2004-05, Ergon Energy's 10 worst performing urban feeders supplied electricity to 3,610 customers (equivalent to 1.5 per cent of Ergon Energy's urban customer base). On average, these customers experienced between 4 and 12 distribution-related interruptions, leaving them without power for between 15.7 hours and 39.6 hours.

In comparison, in 2003-04, Ergon Energy's 10 worst performing urban feeders supplied electricity to 3,188 customers (equivalent to 1.33 per cent of Ergon Energy's urban customer base at June 2004). On average, these customers experienced between 1.1 and 13.7 distribution-related interruptions, leaving them without power for between 18.2 hours and 43.8 hours.

Five of the worst performing urban feeders in 2003-04 were still among the 10 worst performing urban feeders for 2004-05. Three of these feeders were also among the 10 worst performing urban feeders for 2002-03.

In 2004-05, Ergon Energy's 10 worst performing short rural feeders supplied electricity to 438 customers (equivalent to 0.16 per cent of Ergon Energy's short rural customer base). On average, these customers experienced between 7 and 17.8 distribution-related interruptions, leaving them without power for between 52.5 hours and 76 hours.

In comparison, in 2003-04, Ergon Energy's 10 worst performing short rural feeders supplied electricity to 1,694 customers (equivalent to 0.65 per cent of Ergon Energy's short rural customer base at June 2004). On average, these customers experienced between 5.2 and 36.6 distribution-related interruptions, leaving them without power for between 60.6 hours and 91.6 hours.

Only one of the worst performing short rural feeders in 2003-04 was still among the 10 worst performing short rural feeders for 2004-05.

In 2004-05, Ergon Energy's 10 worst performing long rural feeders supplied electricity to 910 customers (equivalent to 1.37 per cent of Ergon Energy's long rural customer base). On average, these customers experienced between 7.3 and 19.7 distribution-related interruptions, leaving them without power for between 54.7 hours and 97 hours.

In comparison, in 2003-04, Ergon Energy's 10 worst performing long rural feeders supplied electricity to 4,056 customers (equivalent to 6.14 per cent of Ergon Energy's long rural customer base at June 2004). On average, these customers experienced between 11.1 and 34.2 distribution-related interruptions, leaving them without power for between 55.7 hours and 86.9 hours.

Only two of the worst performing long rural feeders in 2003-04 were still among the 10 worst performing long rural feeders for 2004-05. One of these feeders was also among the 10 worst performing urban feeders for 2002-03.

3.2 Quality of Supply Measures

The total number of technical quality of supply complaints received by Ergon Energy decreased from 3,034 in 2003-04 to 2,786 in 2004-05. The main reason for this decrease in total complaints was due to fewer minor voltage dips (which can cause flickering lights).

Table 11: Ergon Energy – quality of supply complaints – categorised according to symptoms

	SEP 2004	DEC 2004	MAR 2005	JUN 2005	TOTAL
Total quality of supply complaints	606	750	823	607	2,786
Low supply voltage	196	258	303	173	930
Other complaints	117	165	145	120	547
Voltage swell	85	76	90	111	362
Voltage dips –minor	73	74	84	99	330
TV or radio interference	44	48	44	32	168
Voltage dips - severe	34	65	33	28	160
Waveform distortion or unbalance	32	38	40	27	137
Noises from appliances or lights	7	7	67	2	83
Voltage spike	18	19	17	15	69

In 2004-05, Ergon Energy changed the way it reports the average time taken to investigate and resolve quality of supply complaints. The change in the December quarter 2004 had a significant effect on the reported number of days, on average, taken to resolve these complaints (Table 12). As a result of the changes to this measure, no further historical comparisons can be made.

Table 12: Ergon Energy – average time taken to fix a technical supply fault

	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Average time taken to fix a technical supply fault (days)	19	74	79	76

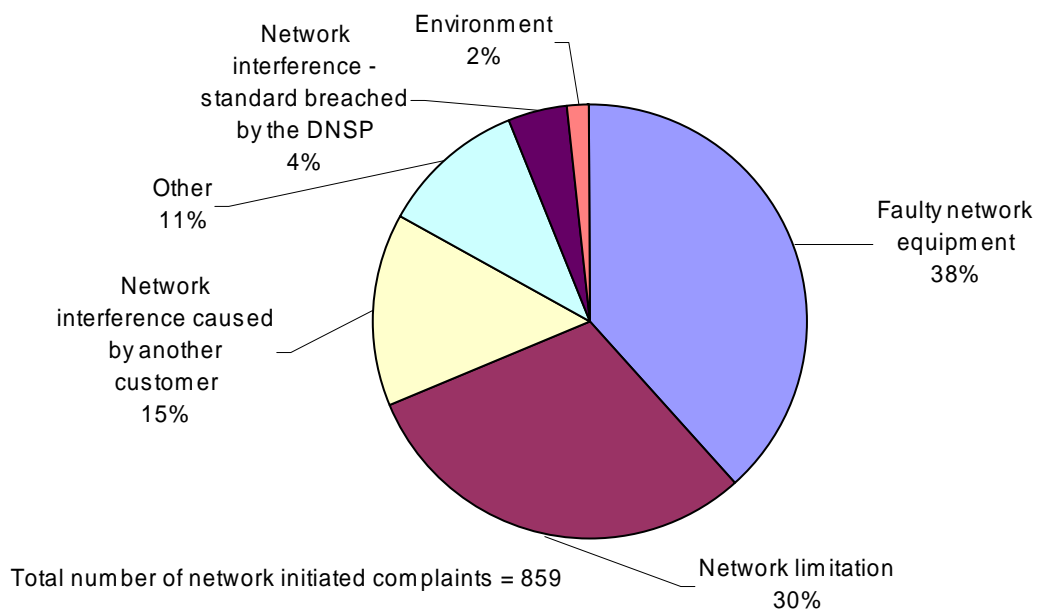
As shown in Table 13, the largest number of quality of supply complaints in 2004-05 that could be categorised were caused by network restrictions or events. Also, a large number of complaints, after investigation, were found to have no identifiable cause. All three categories of possible cause for the quality of supply complaints recorded higher numbers in 2004-05. However, Ergon Energy made improvements in collecting data on the possible causes of quality of supply complaints commencing in the March quarter 2004 and this most likely explains the increase in these numbers in 2004-05. In the past, 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 13: Ergon Energy – quality of supply complaints – possible causes

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

Note – the summation of the above categories of possible causes for quality of supply complaints do not equal the total of the four quarterly quality of supply complaints as listed in Table 11 and accompanying discussion, for the three years listed. This was due to data collection problems. For 2004-05, the difference between the number of complaints listed in Table 11 and the possible causes listed in Table 13 was due to 415 complaints that were incorrectly classified and 454 complaints which Ergon Energy is still investigating.

With improvements in data collection, Ergon Energy was able to provide a more useful break up of network-initiated complaints for 2004-05 compared to 2003-04 when 32 per cent of complaints were reported as ‘other’. As shown in Figure 4, network-initiated complaints are further broken down into sub-categories, of which faulty network equipment and network limitations accounted for 38 per cent and 30 per cent respectively. Interference to the network arising from the operation of equipment by customers explained most of the remaining quality of supply complaints.

Figure 4: Ergon Energy – causes of network initiated quality of supply complaints

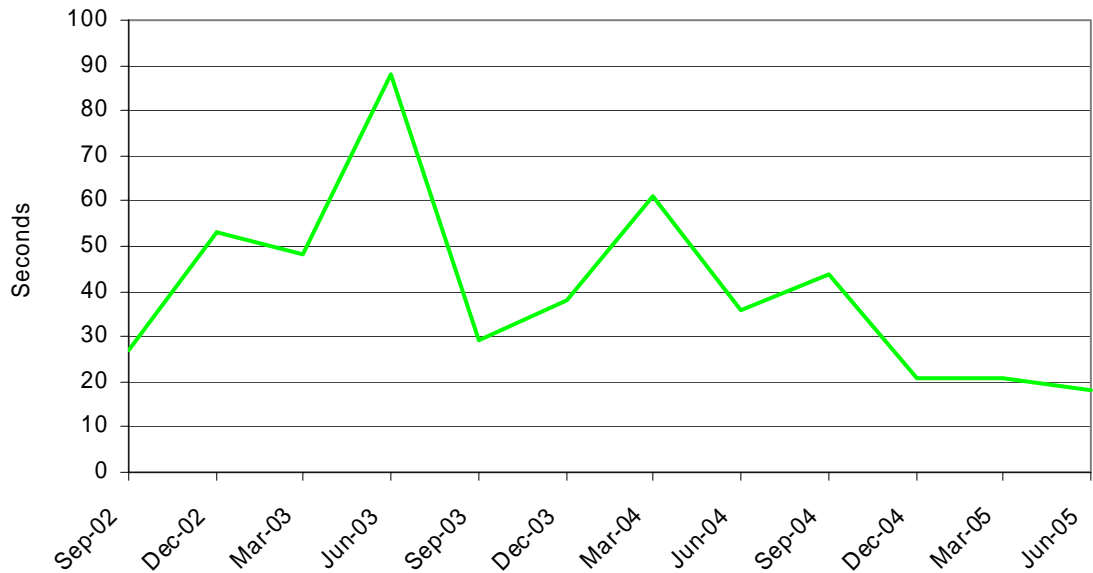
3.3 Customer Service Measures

Ergon Energy’s performance against a range of customer service measures was mixed over the course of 2004-05.

Ergon Energy’s call centre performance improved in 2004-05 compared to 2003-04. As shown in Figure 5, the length of time that customers had to wait to speak to an operator when calling the call centre fell to around 18 seconds in the June quarter 2005, which was the lowest waiting time recorded since reporting began under the Authority’s Guidelines. As a result, 81.5 per cent

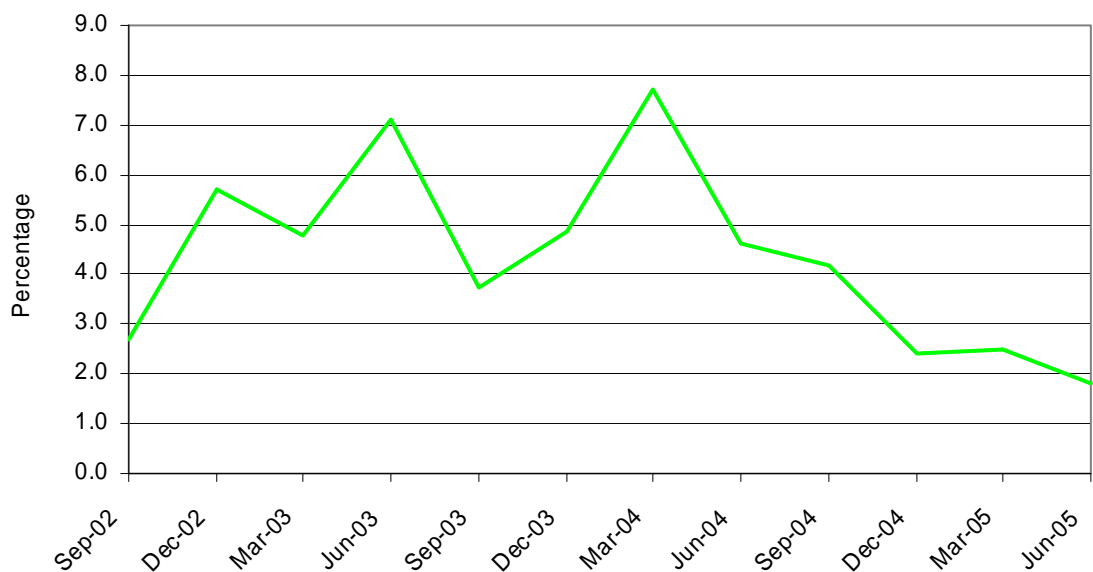
of calls were answered within 30 seconds during the June quarter 2005 compared to 76.5 per cent of calls in the June quarter 2004.

Figure 5: Ergon Energy – average time waiting to speak to an operator



As shown in Figure 6, the percentage of calls abandoned improved significantly from 4.6 per cent in the June quarter 2004 to 1.8 per cent in the June quarter 2005, the lowest since reporting began under the Authority’s Guidelines. It represents a significant improvement from the peak of 7.7 per cent of calls that were abandoned in the March quarter 2004. The improvement in this measure since the June quarter 2004 no doubt reflects measures taken by Ergon Energy to increase the capacity of its call centre following the severe storms in the March quarter 2004.

Figure 6: Ergon Energy – percentage of calls to the call centre that were abandoned by customers



As shown in Table 14, the number of complaints that Ergon Energy received regarding the reliability of supply was volatile in 2004-05. The June quarter 2005 recorded the lowest number of reliability complaints since the reporting of service quality performance began under the Authority’s Guidelines. The total number of reliability of supply complaints in 2004-05 (1,002) was much lower than in 2003-04 (1,290), probably reflecting Ergon Energy’s improved reliability performance.

Table 14: Ergon Energy – number of reliability complaints

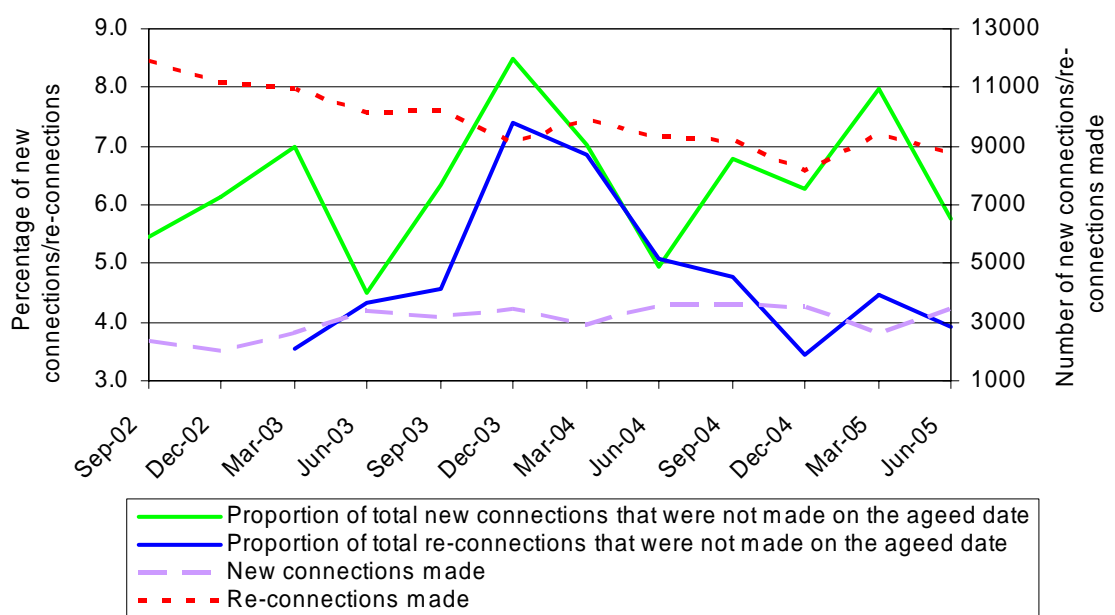
	SEP 2004	DEC 2004	MAR 2005	JUN 2005	TOTAL
Number of reliability complaints	173	339	323	167	1,002

In 2004-05, the proportion of total new supply connections that Ergon Energy failed to make by the agreed date peaked at 8 per cent in the March quarter 2004, before falling to 5.8 per cent in the June quarter 2005 (Figure 7). This figure was somewhat higher than in the June quarter 2003 and 2002. For each of the financial years presented in Figure 7, Ergon Energy records its best performance for this measure during the June quarter.

It may have been expected that the quarters recording a high proportion of new connections not made on the agreed date would correspond with quarters which had a higher than normal number of new connections required to be made. However, the historical information to date does not show this, suggesting other variables are contributing to changes in the proportion of new connections not made on the agreed date.

The proportion of total re-connections of supply that were not made on the agreed date was variable, reaching a low of 3.4 per cent in the December quarter 2004, before increasing to 3.9 per cent in the June quarter 2005. The December quarter 2004 result was the lowest since reporting began under the Guidelines. The number of re-connections made has generally declined since the September quarter 2002.

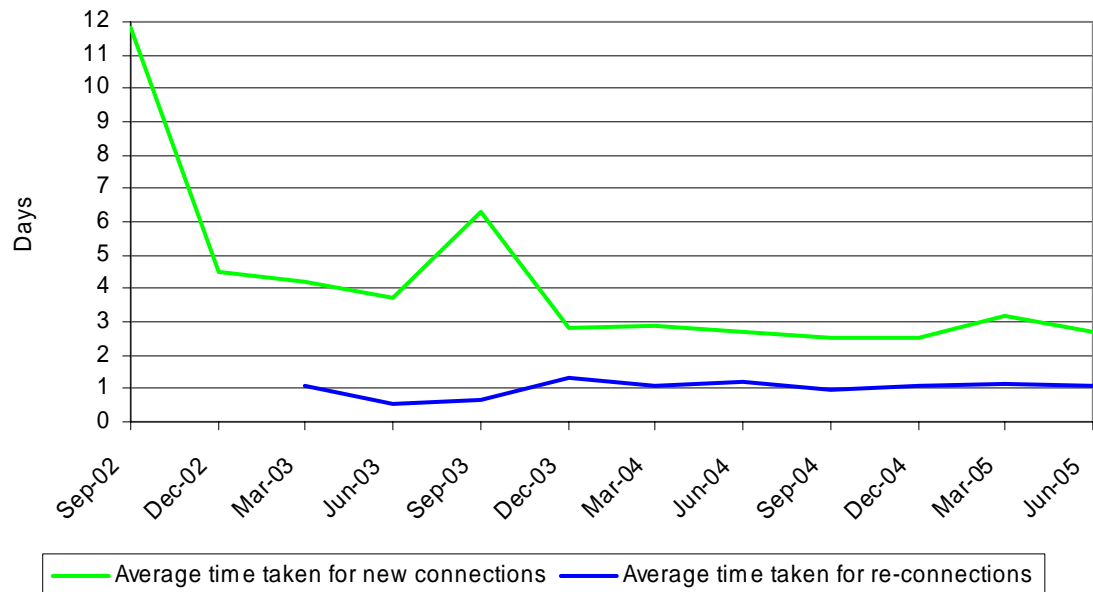
Figure 7: Ergon Energy – number of new and re-connections made, proportion of new and re-connections not made on the agreed date



As indicated in Figure 8, the average length of time that customers had to wait for a new connection to the network has generally remained stable over the past year and a half at just below 3 days. Ergon Energy's June quarter 2005 performance was the same as the corresponding quarter in 2004 (2.7 days). 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 two and a half years, at about 1 day.

Figure 8: Ergon Energy – average time taken for new connections and re-connections



In 2004-05, the number of street lights reported as being out generally followed the same pattern as in 2003-04, by reaching a low in the December quarter before peaking in the March quarter (Figure 9). This may be related to weather patterns, with the March quarter being the storm season. The number of street lights not repaired by the agreed date reflected this pattern, reaching a low of 171 in the December quarter 2004, before rising to 303 in the March quarter 2005.

Figure 9: Ergon Energy – street light maintenance



The average time taken to repair faulty street lights was 2.8 days in the June quarter 2005 compared to 3.3 days in the June quarter 2004. This measure has generally varied between 2.5 days and 3.5 days over the past three years.

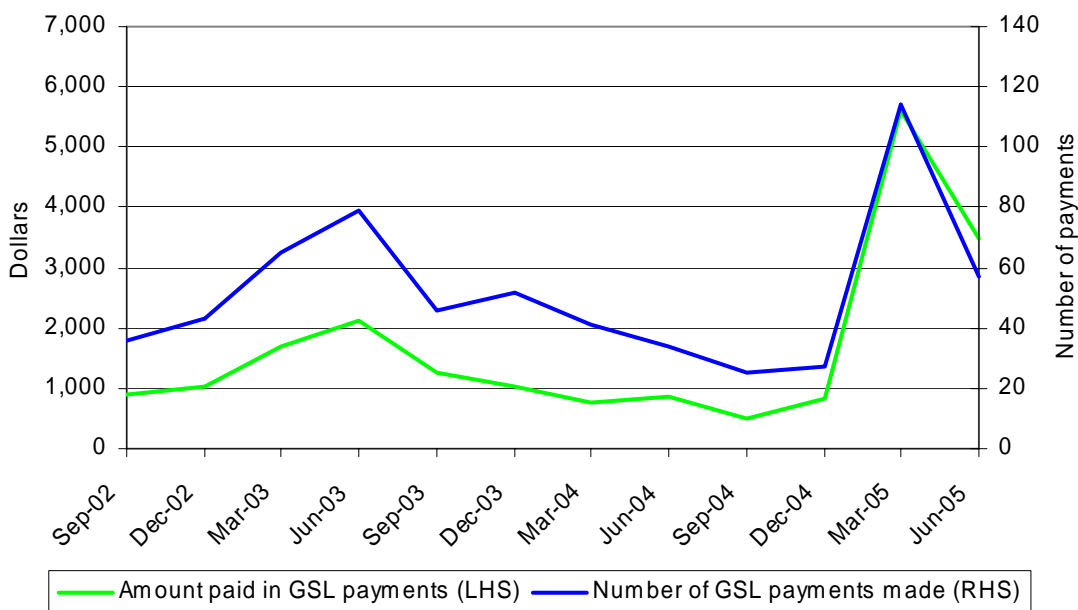
Table 15: Ergon Energy – average time taken to repair faulty street lights

	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Average number of days taken to repair street lights	2.8	3.1	2.7	2.8

The number of Guaranteed Service Level (GSL) payments and the amounts paid for GSLs both remained relatively stable in the first half of 2004-05 compared to 2003-04 (Figure 10). In contrast, in the second half of 2004-05, the number and amounts paid for GSLs were both significantly higher, most likely as a result of the introduction of a formalised GSL scheme mandated by the Queensland Government.⁶

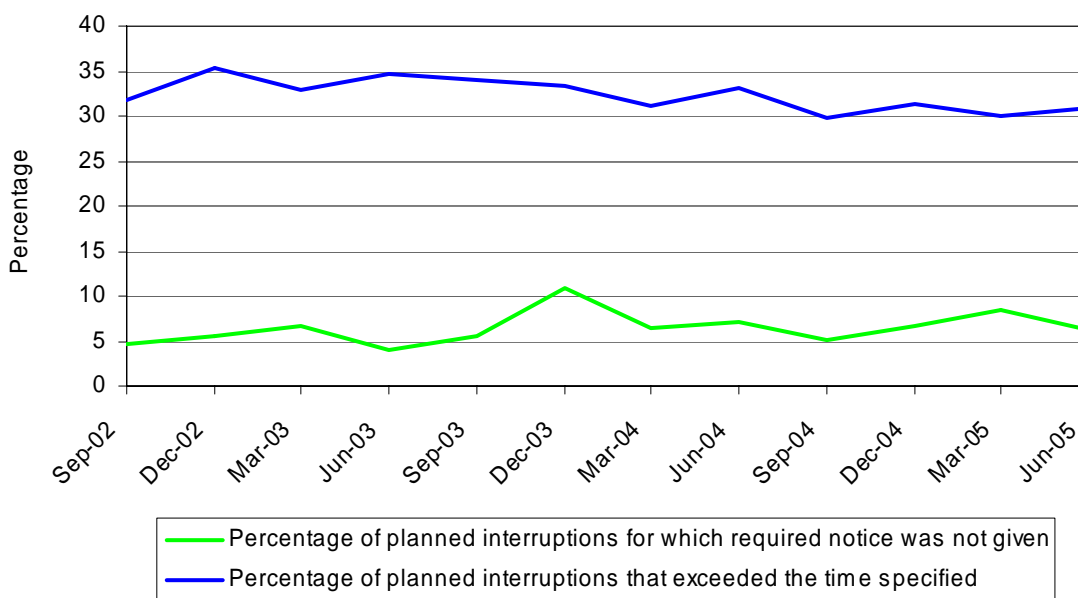
⁶ Prior to 1 January 2005, GSLs were voluntary payments made by the distributors to customers that reported instances where the distributors had not met self-imposed service quality standards. In December 2004, the Queensland Government announced a mandatory GSL scheme that would apply to the distributors 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 10: 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 three years (see Figure 11). 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. During 2004-05, the measure has generally improved compared to the previous two years. However, 30 per cent is 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 3).

Figure 11: Ergon Energy – notification of commencement and duration of planned interruptions



During 2004-05, Ergon Energy changed the way it reported the total number of complaints and the average time taken to resolve complaints. This change significantly affected the numbers reported for these measures. As a result, Table 16 only shows the data consistent with Ergon Energy's new approach for 2004-05. The total number of complaints received by Ergon Energy peaked in the March quarter 2005 at 987, while in the same quarter the average waiting time taken to resolve complaints was the lowest (6.4 days).

Table 16: Ergon Energy – complaint resolution

	SEP 2004	DEC 2004	MAR 2005	JUN 2005
Total number of complaints	823	949	987	894
Average time taken to resolve complaints (days)	6.7	6.8	6.4	8.5

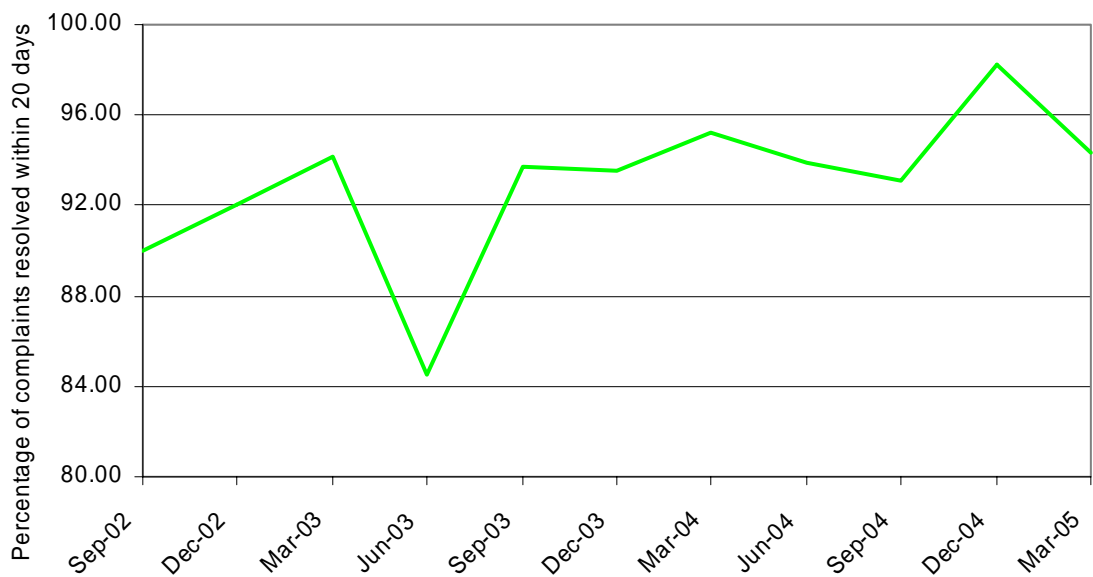
As shown in Table 17, reliability complaints were the most significant cause of complaints during 2004-05.

Table 17: Ergon Energy – complaint resolution – reasons for complaints

	SEP 2004	DEC 2004	MAR 2005	JUN 2005	TOTAL
Total number of complaints	823	949	987	894	3,653
Reliability	173	339	323	167	1,002
Field activity	143	165	154	192	654
Customer service	62	101	128	148	439
Trees	114	93	106	107	420
Meter reading	83	86	107	107	383
Other complaints	142	61	63	74	340
Supply – new extensions	57	68	54	44	223
Metering/Technical	17	11	12	15	55
Streetlights	11	9	14	13	47
Infrastructure	14	8	9	11	42
Environmental issues	5	3	13	14	35
Line Clearances	2	5	4	2	13

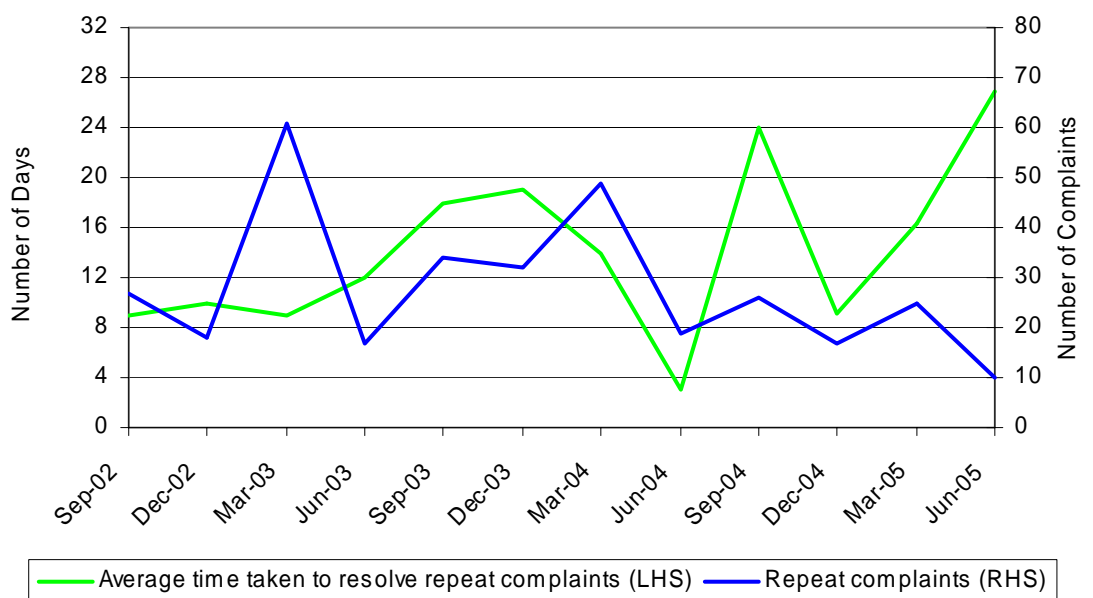
As shown in Figure 12, Ergon Energy resolved nearly all of the complaints made against it within 20 days during the December quarter 2004 (98.2 per cent). This result was the best performance recorded since service quality reporting began under the Authority's Guidelines. In the June quarter 2005, Ergon Energy changed its measurement of complaints resolved within 20 days to exclude quality of supply complaints. As a result, the performance during that quarter (89.7 per cent) cannot be compared to its past performance.

Figure 12: Ergon Energy – complaint resolution within 20 days



The number of repeat complaints generally decreased during 2004-05 (Figure 13). The number of complaints in the June quarter 2005 was the lowest on record (10) and represents an improvement on the corresponding quarter in 2004 (19). However, the average time taken to resolve repeat complaints varied significantly during 2004-05, reaching a low of 9 days in the December quarter 2004 and a peak of 27 days in the June quarter 2005. The June quarter 2005 performance was the highest recorded average time taken to resolve repeat complaints since reporting began under the Authority’s Guidelines and represent a significant increase on the corresponding quarter in 2004 (3 days).

Figure 13: Ergon Energy – repeat complaint resolution



APPENDIX A

FINANCIAL DATA TABLES – 2001-02 to 2004-05

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

	2001-02	2002-03	2003-04	2004-05
Revenue				
Forecast sales	447.5	476.05	500.4	523.4
Actual sales	443.9	475.5	505.8	535.8
Expenditure				
Forecast operating and maintenance expenditure	150.9	154.6	158.4	162.4
Actual operating and maintenance expenditure				
Operating expenditure	34.6	35.5	42.0	53.0
Maintenance expenditure	100.4	123.5	147.5	142.1
Total	135.0	159.0	189.5	195.1
Forecast depreciation	171.9	181.1	187.7	192.4
Actual depreciation	163.3	166.9	173.3	186.4
Total expenditure (forecast)	322.8	335.7	346.1	354.8
Total expenditure (actual)	298.3	325.9	362.8	381.5
Customer contributions				
Forecast	16.8	17.1	17.5	17.9
Actual	16.9	19.9	25.4	35.5
Capital expenditure				
Forecast	255.0	234.0	194.6	192.3
Actual	235.0	312.8	358.2	490.1
Fixed assets				
Forecast	2,720.7	2,831.0	2,896.8	2,956,804
Actual	2,501.8	2,661.5	2961.2	3,321,538
Energy Sales (million MWh)				
Actual	12.3	12.5	12.8	12.9
Number of customers				
Actual	574,259	584,878	584,717	604,345

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

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

FINANCIAL DATA – 2004-05**Table A3: Operating and maintenance expenditure – Ergon Energy (\$ million (nominal))**

Expenditure*	
Operating expenditure	
Meter reading	7.5
Customer service	17.2
Advertising and marketing	0.1
Full retail contestability	0
Other	32.3
Total	57.1
Public street lighting	0
Total operating expenditure	57.1
Network maintenance expenditure	
Inspection	19.9
Maintenance and repair	79.7
Vegetation management	24.6
Emergency Response	15.5
Other	0.6
Total	140.3
Public street lighting	1.8
Total maintenance expenditure	142.1
Total operating and maintenance expenditure	199.2
Total corporate overheads included in O and M	8.9

* May not sum due to rounding.

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

Asset	
System Assets:	
sub-transmission lines	22.2
distribution lines	41.2
substations	20.8
distribution transformers	22.5
low voltage supply	21.1
meters	12.4
communications	1.9
land & easements	-
buildings	1.1
imbedded generation	0.3
other (balance)	0.2
Non-System Assets:	
building contents	1.8
motor vehicles	11.1
plant and equipment	0.3
moveable plant	3.0
base stations	0.3
mobiles	0.1
office machines	0.5
computers	5.2
furniture and equipment	0.2
software	12.0
change programs	1.5
buildings	2.9
Public Street Lighting	3.7
Other	-
Total	186.4

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:		
sub-transmission lines	39.4	18.9
distribution lines	37	19.4
substations	40	18.4
distribution transformers	34.5	19.3
low voltage supply	43.5	24.8
meters	25	6.7
communications	15.4	8.9
land & easements	n/a	n/a
buildings	40	21.7
other (balance)	35.5	14.6
Non-System Assets:		
building contents	7	3.4
motor vehicles	8.3	4.1
plant and equipment	10	2.5
moveable plant	7	2.7
base stations	7	0.6
mobiles	7	1.3
office machines	7	2.8
computers	3.5	1.3
furniture and equipment	7	6.0
software	5.6	2.9
change programs	5	0.3
buildings	40	18.9
Public Street Lighting	20	7.5
Other	7	7.0

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

Asset	
System Assets:	
sub-transmission lines	507.9
distribution lines	914.1
substations	465.9
distribution transformers	486.3
low voltage supply	518.5
meters	87.7
communications	24.4
land & easements	39.2
buildings	25.3
imbedded generation	3.7
other (balance)	3.6
Non-System Assets:	
building contents	7.4
motor vehicles	65.7
plant and equipment	1.4
moveable plant	16.6
base stations	0.5
mobiles and transmitters	0.4
office machines	2.0
computers	11.5
furniture and equipment	1.4
software	33.6
change programs	0.2
buildings	61.5
Public Street Lighting	42.8
Other	0.2
Total written down value	3,321.5

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

Capital expenditure	
System Assets:	
sub-transmission lines	24.7
distribution lines	192.6
substations	56.2
distribution transformers	92.6
low voltage supply	13.8
meters	5.9
communications	15.6
land & easements	0.4
Buildings	5.4
other (balance)	1.0
Non-System Assets:	
building contents	0.2
motor vehicles	21.9
moveable plant	7.5
base stations	-
mobiles	0.1
computers	5.5
furniture and equipment	0.5
software	2.8
change programs	25.5
buildings	11.5
Public Street Lighting	3.2
Other	3.0
Total	490.1

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

Capital expenditure	
Asset replacement	139.5
Demand related	244.5
Reliability and quality improvements	8.0
Other	98.1
Total	490.1

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

Transaction	
Total value of related party transactions	25.9
