



**Financial and Service Quality
Performance 2008-09**

Ergon Energy

March 2010

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1. INTRODUCTION AND SUMMARY

In its 2005 Final Determination on the Regulation of Electricity Distribution, the Authority required the Queensland Distribution Network Service Providers (DNSPs) to provide information relating to their financial and service quality performance annually.

This report provides an assessment of the financial performance of Ergon Energy for 2008-09, including comparisons with the financial forecasts included in the Authority's 2005 Final Determination and with its past financial performance.

The financial information for 2008-09 was submitted in accordance with the Authority's Cost Allocation Guidelines. In December 2007, the Authority revised the regulatory reporting guidelines in order to identify excluded services separately from network services. As a result, Ergon Energy's financial report for 2008-09 was prepared to reflect the separate contribution of network and excluded services.

The service quality information was submitted in accordance with the Authority's Electricity Distribution Service Quality Reporting Guidelines (Version 2.0), which require the DNSPs to provide data on specific service quality measures on a quarterly and annual basis. The DNSPs reporting of service quality information commenced since 2001. A revision of the Guidelines was made in August 2005 to improve the reporting of service quality performance. In some instances, this will mean that data provided since 1 July 2005 cannot be reliably compared to previous data.

This report draws on data from the regulatory statements and both the annual and quarterly service quality reports, primarily for 2008-09, along with data obtained from the four preceding financial years.

1.1 General Operating Background

There are currently two DNSPs operating in Queensland: Ergon Energy and Energex. Both DNSPs are owned by the Queensland Government and previously had significant retailing operations. Energex's retailing operations and a portion of Ergon Energy's retailing operations were sold by the Government during 2006-07, with Ergon Energy retaining only certain franchise customers.

Network Characteristics: comparison between Ergon Energy and Energex

The distribution networks are quite different. 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 shows the key characteristics of each network, and illustrates the differences between them. A key difference is customer density. While there are 24.7 customers per kilometre of line on Energex's network, Ergon Energy has just 5.3 customers per kilometre of line on its network.

These differences in network characteristics are an important determinant of the service quality performance of each distribution entity, particularly the reliability of their respective networks. It is also to be expected that the performance of distribution entities will vary significantly on a number of other service quality measures.

Table 1: Distributor network characteristics: 2008-09

<i>Characteristics</i>	<i>Ergon Energy</i>	<i>Energex</i>
Network service area (sq km)	1,698,100	25,064
Number of customers ^a	774,100	1,294,464
Energy delivered (GWh)	14,130	22,449
Energy delivered per customer (MWh)	18.3	17.3
Kilometres of line	145,904	52,361
Customers per km of line	5.3	24.7
Maximum demand of network (MVA)	2,498	4,714
Number of distribution transformers	83,744	44,613
Asset utilisation (%) ^b	22.1	26.2
Distribution losses (%)	5.7	5.66

Source: Ergon Energy Annual Service Quality Report July 2008 – June 2009; Ergon Energy 2008/2009 Regulatory Reporting Statement

a. These values are reported in the distributors' 2008-09 Regulatory Reporting Statements and differ slightly from the values reported for the same measures in the 2008-09 Service Quality Reports due to technical differences in the way these measures are defined.

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

1.2 Ergon Energy's Customer Profile

Ergon Energy's customer base consists of:

- (a) Individually calculated customers (ICCs) – those customers whose electricity consumption is sufficiently large to warrant individually calculated prices;
- (b) Connection asset customers (CACs) – those customers whose electricity consumption is sufficient to warrant individually calculated connection charges, but their remaining charges are averaged;
- (c) Standard asset customers (SACs) – those customers who pay averaged prices. The SACs include (small) customers with an average consumption of up to 100MWh per year and (large) customers with an average consumption of between 100 and 4,000MWh per year;
- (d) Embedded Generators (EGs) – those generators who have a name plate rating greater than 10kW single phase or 30kW three phase; and
- (e) Public streetlights.

The number of customers in each category and the corresponding units of electricity sold to each in 2008-09 are presented in **Table 2**.

Table 2: Ergon Energy customer numbers and units sold: 2008-09

<i>Customer Type</i>	<i>Customers</i>		<i>Units sold</i>		<i>Units sold per customer</i>	
	<i>Number</i>	<i>Percentage change from previous year</i>	<i>MWh</i>	<i>Percentage change from previous year</i>	<i>MWh/customer</i>	<i>Percentage change from previous year</i>
Individually calculated customers	48	0	3,783,730	(0.8)	78,828	(0.8)
Connection asset customers	64	4.9	535,508	(3.3)	8,367	(7.8)
Standard asset customers (consuming 100-4,000MWh pa)	1,235	35.9	593,715	13.0	481	(16.9)
Standard asset customers (consuming <100MWh pa) (small customers)	654,463	1.7	9,146,773	3.3	14.0	1.6
Public street lighting	118,256	(3.2)	70,347	2.5	0.6	5.9
Embedded generators	34	183.3	0	0	0	0
Total	774,100	1.0	14,130,073	2.3	18.3	1.3

Source: Ergon Energy's 2008/2009 and 2007/08 Regulatory Reporting Statements.

Overall, Ergon Energy experienced 1% growth in customer numbers during 2008-09, mainly driven by an increase in the number of small customers during the year. However, this was lower than the expected growth rate of 1.9% forecast in the 2005 Determination, due primarily to lower than expected interstate migration.

The number of units sold increased by 2.3% in 2008-09, higher than the 1.7% growth recorded in the previous year, due to an increase in customer numbers and an increase in general consumption by both large (13%) and small (3.3%) standard asset customers (SAC). However, growth in the number of units sold was lower than the forecast growth of 4.6% in the 2005 Final Determination.

The lower than forecast growth reflected a shortfall in expected sales to certain ICCs (including a number of coal mines) along with an increase in the use by Ergon Energy's customers of embedded generators. There was also a shortfall, relative to expected SAC energy consumption, mainly as a result of milder than forecast weather during the summer months.

As the growth in energy sales was higher than the growth in customer numbers, energy sales per customer increased by 1.3% in 2008-09.

1.3 Summary of Ergon Energy's Financial Performance

In its 2005 Final Determination, the Authority estimated the level of revenue, operating costs and capital expenditure required to deliver prescribed distribution services for each year of the regulatory period (June 2005 - July 2010). However, actual annual revenue, 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 estimates were made.

Table 3 presents a summary of the estimated and actual revenues earned in 2008-09 along with Ergon Energy's operating, maintenance and capital expenditure incurred in delivering prescribed distribution services for 2008-09. Actual revenue earned and costs incurred in 2007-08 are presented to provide some comparisons between the two years.

Table 3: Ergon Energy financial performance: 2008-09 (\$ nominal)

	<i>Actual 2007-08</i>	<i>Actual 2008-09</i>	<i>Forecast 2008-09</i>	<i>Variance from forecast 2008-09</i>	
	<i>(\$ mill)</i>	<i>(\$ mill)</i>	<i>(\$ mill)</i>	<i>(\$ mill)</i>	<i>(%)</i>
Revenue					
Revenue from services	733.4	788.4	798.3 ^a	(9.9)	(1.2)
Capital contributions	70.5	92.6	43.3	49.3	113.9
Revenue from outside use of regulated assets	2.9	2.9	8.0	(5.1)	(63.8)
Total Net Income	806.8	883.9	849.6	34.3	4.0
Operating and maintenance expenditure	310.3	305.5	262.7	42.8	16.3
Capital expenditure	737.6	766.4	645.8	120.6	18.7

Source: Ergon Energy 2008/2009 and 2007/08 Regulatory Reporting Statements; QCA Final Determination: Regulation of Electricity Distribution (April 2005).

a. Original forecast from 2005 Determination revised to account for adjustments for previous years under and over recoveries; removal of non-DUOS revenue and for certain capital expenditure pass-through decisions.

Ergon Energy's total net income in 2008-09 was \$883.9 million. This was \$34.3 million (or 4.0%) higher than forecast which was attributable to an over-recovery of \$49.3 million in capital contributions. The main reason for the high levels of capital contributions was demand from small customers for capital works which resulted in \$76.7 million being collected from those customers and \$15.9 million of 'in-kind' customer contributions. This over-recovery was offset somewhat by an under-recovery of revenue from services of \$9.9 million (1.2%) and revenue from the outside use of regulated assets of \$5.1 million (63.8%).

Operating and maintenance expenditure of \$305.5 million in 2008-09 was \$42.8 million (16.2%) higher than forecast although when an adjustment is made to take account of the removal of costs relating to excluded distribution services (worth \$23.3 million), Ergon Energy's actual operating costs increase to \$328.8 million, an overspend of \$66.1 million (or 25.1%).

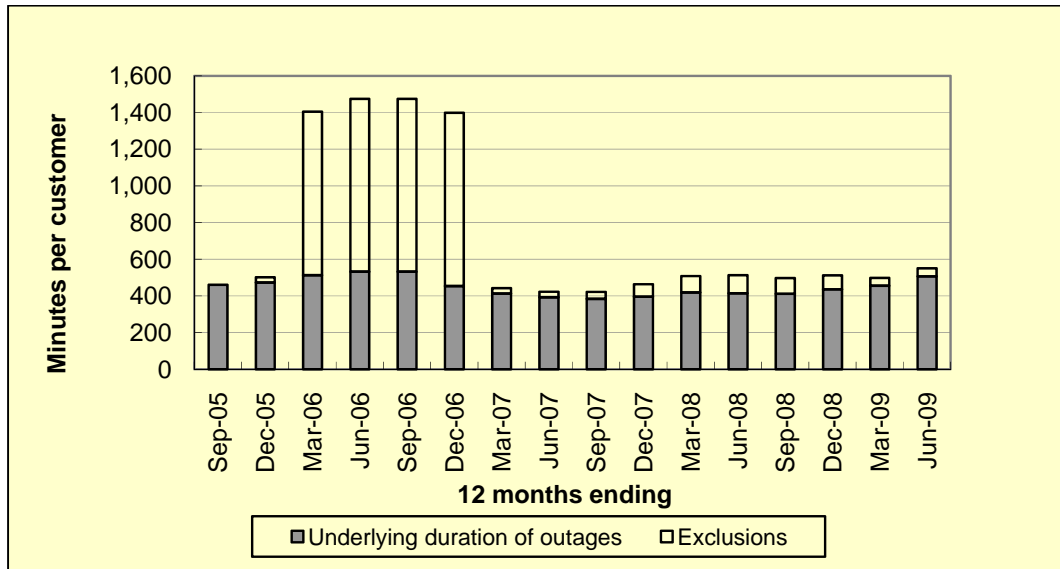
Around \$5 million of this overspend reflects additional revenue approved by the Authority for operating costs incurred by Ergon Energy as a result of Severe Tropical Cyclone Larry. The remainder over the overspend is attributable to factors such as increased vegetation maintenance costs, forced network maintenance resulting from storm damage and an overspend on non-DUOS services.

Capital expenditure was \$120.6 million (or 18.7%) higher than forecast for 2008-09 which was driven by an increase in both customer initiated work and corporation-initiated works which were also overspent due to escalating levels of investment in electricity infrastructure in Queensland and the continuing demand for resources from the mining industry.

1.4 Summary of Ergon Energy Service Quality Performance

For the 12 months ending 30 June 2009, Ergon Energy customers experienced 4.5 distribution-related interruptions, leaving them without power for an average of 550.6 minutes. **Figure 1** shows that after removing the effect of exclusion events, the underlying duration of the distribution-related outages deteriorated from 414.1 minutes in the 12 months to 30 June 2008 to 506.7 minutes in the 12 months to 30 June 2009. This deterioration was attributed to an increase in planned outages across the state due to the suspension of live line work practices, technical failures and extended wet weather.

Figure 1: Ergon Energy's duration of outages per customer for the 12 months to end of quarter



Source: Ergon Energy Quarterly Service Quality Reports.

The total number of technical quality of supply complaints received by Ergon Energy dropped from 1,921 complaints in 2007-08 to 1,819 in 2008-09. The main areas of complaint in 2008-09 related to low supply voltage (which can cause light dimming and motor starting problems), minor voltage dips and other miscellaneous events.

The average time taken to investigate and resolve technical quality of supply complaints improved from 96 days in the June quarter 2008 to 60 days in the June quarter 2009.

However, Ergon Energy's performance against a range of customer service measures deteriorated during 2008-09 with:

- the length of time that customers had to wait to speak to an operator when phoning the call centre increasing from 25.8 seconds in the June quarter 2008 to 55.1 seconds in the June quarter 2009;
- the percentage of calls abandoned increasing from 2.1% in the June quarter 2008 to 4.2% in the June quarter 2009; and
- the number of Guaranteed Service Level (GSL) payments increasing from 639 payments in 2007-08 to 1,262 payments in 2008-09, while the total cost of GSL payments made to customers also increased from \$50,960 in 2007-08 to \$83,930 in 2008-09.

2. FINANCIAL PERFORMANCE

This section summarises the financial performance of the revenue cap regulated business segment of Ergon Energy. The information is for the year ended 30 June 2009. The data used in the analysis has been drawn mainly from Ergon Energy's 2008-09 audited Regulatory Reporting Statements. These accounts were submitted in accordance with the *Authority's Electricity Distribution: Regulatory Reporting Guidelines*.

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 their respective forecasts and the previous year's actual data are presented in the following sections below. Detailed financial data for Ergon Energy is provided at **Appendix A**.

In the Authority's 2005 Final Determination, the revenue cap calculations included both distribution use of system (DUOS) services and some non-DUOS services. Non-DUOS services include prescribed distribution services, such as temporary builders' services, that are related to the operation and use of the distribution system.

However, in December 2007, the Authority released its Final Decision on the *Electricity Distribution: Review of Excluded Distribution Services*. This decision removed all non-DUOS services from the regulatory cap and left only components associated with DUOS services. This reclassification was intended to remove the influence of the less predictable revenues earned from excluded distribution services (EDS) from the regulated revenue cap and to leave only the more consistent and predictable revenues earned from DUOS services. In light of this, \$7.4 million was deducted from Ergon Energy's 2008-09 Aggregate Annual Revenue Requirement (AARR) to reflect the removal of EDS from the regulated revenue cap.

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 Authority accepted Ergon Energy's proposed treatment of shared assets – regulated assets that are utilised by both the regulated and non-regulated 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 charge non-regulated parts of the business the full costs of their use of those assets. The Authority approved this approach in its 2005 Final Determination.

The 2005 Final Determination also provided for any differences between forecast and actual revenues earned by the regulated and non-regulated parts of the Ergon Energy's business to be subject to an "unders-and-overs" process on an annual basis. This process compares actual revenue earned in the year against the annual revenue cap for that year as determined by the Authority in its 2005 Final Determination and allows under-recoveries to be collected through higher customer prices the following year and any over-recoveries to be returned to the customers the following year.

Table 4: Ergon Energy's Annual Aggregate Revenue Requirement: 2008-09

<i>Actual and forecast income</i>	<i>\$ million (nominal)</i>
<u>Actual AARR</u>	
Revenue from services	788.4
Revenue from capital contributions	92.6
Revenue from outside use of regulated assets	2.9
Total	883.9
<u>Forecast AARR</u>	
Revenue from services	798.3 ^a
Revenue from capital contributions	43.3
Revenue from outside use of regulated assets	8.0
Total	849.6
Over-recovery of AARR in 2008-09	34.3

Source: Ergon Energy's 2008/2009 Regulatory Reporting Statement; Regulation of Electricity Distribution (April 2005).

a. Original forecast from 2005 Determination revised to take account of adjustments for previous years under and over recoveries; removal of non-DUOS revenue and for certain capital expenditure pass-throughs.

Table 4 shows that Ergon Energy over-recovered its 2008-09 AARR by \$34.3 million, mainly due to higher than forecast revenue from capital contributions.

The continuing high level of capital contributions (during 2007-08 capital contributions were \$32.1 million higher than forecast) was mainly due to a high level of demand from small customers for capital works which resulted in \$76.7 million being collected from those customers by way of upfront payments. The remaining \$15.9 million in capital contributions for the year was a result of some developers exercising their choice to design and construct the electricity infrastructure within a subdivision, instead of choosing to have Ergon Energy undertake the work, which results in an 'in kind' customer contribution when it is handed over to Ergon Energy.

The over-recovery of capital contributions was offset somewhat by an under-recovery of revenue from services of \$9.9 million (1.2%) due to a number of cost pass-through applications being approved by the Authority (which added to Ergon Energy's AARR) after Ergon Energy had set its 2008-09 prices. Ergon Energy also under-recovered revenue from the outside use of regulated assets by \$5.1 million (63.8%).

After adjustment to 2010-11 values, the over-recovery will result in an additional \$40.4 million having to be returned to customers in 2010-11.

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's charges and payments made to embedded generators. Electricity transmission

charges are regulated by the Australian Energy Regulator (AER) 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. However, the distributor passes through the full amount of these avoided TUOS payments to the embedded generator whose connection led to the reduction in TUOS payable.

The Authority approves TUOS charges, to be levied by the distributors, 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 in future charges.

Table 5 shows that TUOS revenue received from customers was higher than payments to Powerlink and embedded generators by \$1 million during 2008-09. As a result, Ergon Energy will be required to return this over-recovery to customers as part of its 2010-11 TUOS charges.

Table 5: Ergon Energy's TUOS Unders and Overs Account: 2008-09

<i>TUOS revenues and charges</i>	<i>\$ million (nominal)</i>
TUOS charged by Powerlink	199.7
<i>plus</i> TUOS charged by Embedded Generators	2.8
<i>equals</i> Total TUOS charged	202.5
<i>less</i> actual TUOS revenue earned during 2008-09	203.5
<i>equals</i> Over-recovery for 2008-09	1.0

Source: Ergon Energy 2008/2009 Regulatory Reporting Statement.

2.2 Operating and Maintenance Expenditure

The regulatory framework is designed to give the distribution businesses an incentive to increase their forecast return by improving operating efficiency. To this end, the distributors retain the benefit of any efficiency gain (cost savings) for the remainder of the regulatory period.

Figure 2 shows network operating and maintenance expenditure reported by Ergon Energy for 2001-02 to 2008-09, compared with the forecast of operating and maintenance expenditure at the time of the 2001 and 2005 Final Determinations.

Figure 2: Ergon Energy operating and maintenance expenditure: 2001-02 to 2008-09

Source: Ergon Energy Regulatory Reporting Statements from 2001-02 to 2008-09.

Note: To allow for a like with like comparison, both forecast and actual data for 2008-09 include expenditure relating to non-DUOS services (later reclassified and Excluded Distribution Services).

In 2008-09, operating and maintenance expenditure of \$305.5 million was \$42.8 million (or 16.3%) higher than forecast. However, the forecasts made at the time of the 2005 Final Determination included \$6.6 million in operating costs attributed to non-DUOS services and additional revenue of around \$5 million for 2008-09 was approved by the Authority for operating costs incurred as a result of Severe Tropical Cyclone Larry.

Non-DUOS services were subsequently reclassified as excluded distribution services and hence the actual result for 2008-09 does not include operating costs associated with these excluded distribution services (on which actual expenditure amounted to \$23.2 million). On a like with like basis, including the operating costs associated with excluded distribution services, Ergon Energy's actual operating costs would increase to \$328.8 million and, on that basis, the difference between forecast and actual would be an over-expenditure of \$66.1 million (or 25.1%).

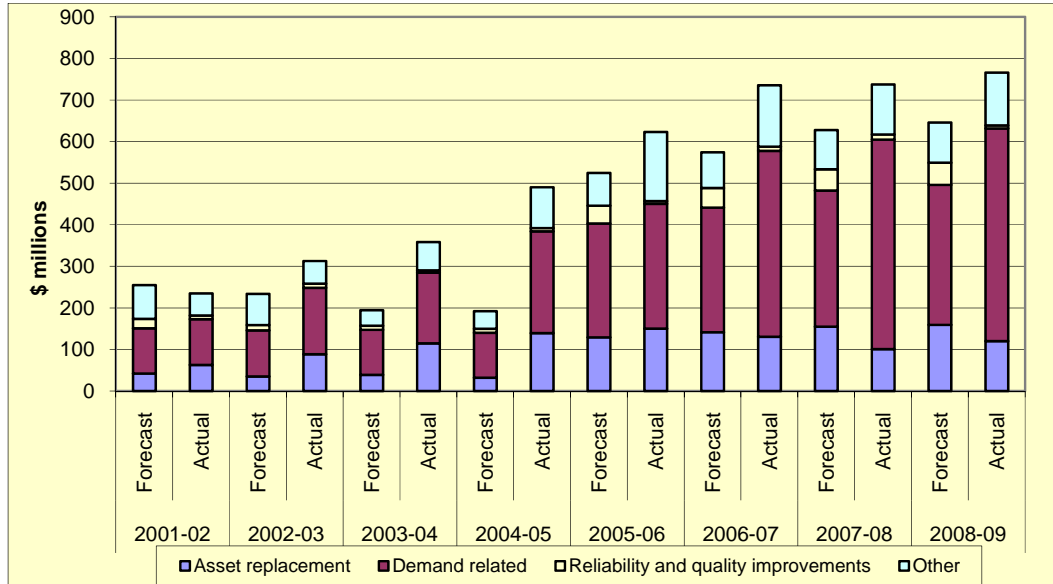
On this basis (adding back excluded services operating costs), the increase of \$66.1 million in operating costs is attributable to:

- (a) higher than forecast vegetation maintenance costs of \$84.9 which were required to meet the annual work plan and to reduce a backlog of vegetation issues;
- (b) higher than expected emergency response costs of \$42.4 million resulting from storm damage over the summer months also contributed to the increase in costs; and
- (c) an overspend on non-DUOS services (later reclassified as excluded distribution services) of \$16.6 million.

2.3 Capital Expenditure

Figure 3 shows network capital expenditure in aggregate and by purpose reported by Ergon Energy for 2001-02 to 2008-09, compared with forecast capital expenditure.

Figure 3: Ergon Energy capital expenditure: 2001-02 to 2008-09



Source: Ergon Energy's Regulatory Reporting Statements from 2001-02 to 2008-09.

Note: "other" includes expenditure on non-system assets.

Figure 3 illustrates that Ergon Energy's capital expenditure increased from \$737.6 million in 2007-08 to \$766.4 million in 2008-09 (a 3.9% increase) and was \$120.6 million (or 18.7%) higher than forecast. This is consistent with the trend experienced in the last four financial years.

The higher than forecast capital expenditure in 2008-09 is mainly attributable to an overspend on customer initiated works which were \$104.1 million above forecast. This overspend was primarily the result of:

- an increase in labour costs of 4.5% as a result of Ergon Energy's new employee collective agreement;
- higher contractor rates which increased by up to 20%; and
- an increase in the cost of materials such as transformers, cable and poles, which was partly due to a depreciation in the Australian dollar between July and November 2008.

The higher than forecast capital expenditure in 2008-09 is also attributable to an overspend on corporation-initiated works, resulting from escalating levels of investment in electricity infrastructure in Queensland over the regulatory period and the continuing demand for resources from the mining industry. The rise in costs was also attributed to a depreciating Australian dollar during July and late November 2008 which made imported equipment more expensive.

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 2009 and is drawn from Ergon Energy's quarterly and annual service quality reports for 2008-09. These reports were submitted in accordance with the Authority's *Electricity Distribution: Service Quality Reporting Guidelines* (Version 2.0).

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. 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 distributor. Reliability data for worst performing feeders highlights the 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 well customers' problems, enquiries and requests for services are handled.

3.1 Reliability Measures

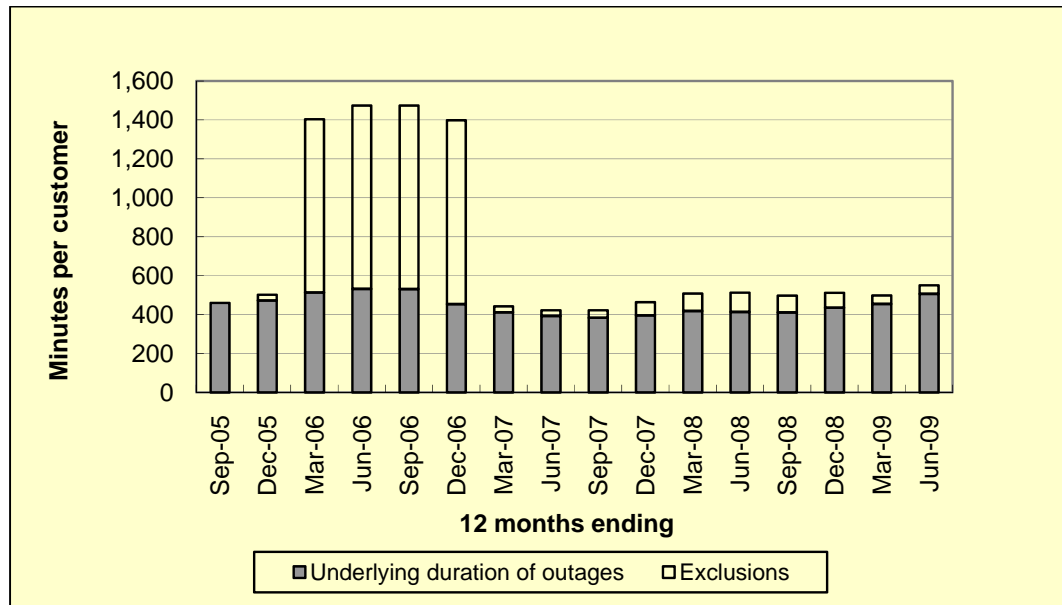
For the 12 months ending 30 June 2009, Ergon Energy customers on average experienced 4.5 distribution-related interruptions, leaving them without power for a total of 550.6 minutes. This result is shown in **Figure 4**. The high level of exclusions¹ reported over the four reporting periods in 2006 related to the impact of Severe Tropical Cyclone Larry.

Removing the effects of exclusion events, the underlying duration of the distribution-related outages deteriorated from 414.1 minutes in the 12 months ending 30 June 2008 to 506.7 minutes in the 12 months ending 30 June 2009. Much of the deterioration in performance with respect to this measure occurred between the March quarter 2009 and the June quarter 2009 when the distribution-related outages increased by 51.5 minutes (from 455.2 minutes to 506.7). This was attributed to a number of factors, including:

- (a) an increase in the number of planned outages across the state due to the suspension of live line work practices which began in February 2009 but only began to have an impact in the final quarter of the financial year;
- (b) a number of technical failures such as an increase in failures of Air Break Switches which contributed to longer planned outage durations; and
- (c) the effects of the extended wet season on the unplanned outage performance.

¹ Exclusions are defined as events that fall within the 2.5 beta method as defined under the Queensland Competition Authority's "Electricity Distribution Service Quality Reporting Guidelines, Version 2.0".

Figure 4: Ergon Energy's average duration of outages per customer for the 12 months to end of quarter



Source: Ergon Energy's Quarterly Service Quality Reports.

Interruptions arising in the distribution network can be separated by geographic category – Urban, Short Rural and Long Rural. As shown in **Table 6**, there were significant differences in the level of reliability across Ergon Energy's network during 2008-09.

Generally, customers in all categories experienced an increase in the duration of interruptions over the year. However, the magnitude of the increases varied, with urban and short rural network customers experiencing increases of 35.7 minutes and 148.4 minutes respectively for the 12 months ending June quarter 2009 compared to the 12 months ending June quarter 2008, while those customers on the long rural networks experienced increases of 71.1 minutes to 1,108 minutes.

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

	Jun 2008	Sep 2008	Dec 2008	Mar 2009	Jun 2009	Change in duration Jun 08- Jun 09
Total system	414.1	411.3	435.5	455.2	506.7	92.6
Urban	181.2	180.0	186.1	191.6	216.9	35.7
Short Rural	460.1	472.16	509.8	534.1	608.5	148.4
Long Rural	1,036.9	1,019.8	1,022.8	1,072.6	1,108.0	71.1

Source: Ergon Energy Quarterly Service Quality Reports.

Quarter by Quarter Reliability

Table 7 shows that Ergon Energy's reliability performance was significantly worse during the December and March quarters (the storm seasons) compared with the other two quarters. While

the removal of excluded events smoothes these variations in performance between quarters, it does not entirely remove seasonal fluctuations.

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

	<i>Sep 2008</i>	<i>Dec 2008</i>	<i>Mar 2009</i>	<i>Jun 2009</i>
Duration of all interruptions per customer (SAIDI) ^a before excluded events – minutes	76.9	189.1	153.0	125.0
Duration of all interruptions per customer (SAIDI) after excluded events – minutes	76.9	146.3	153.0	125.0
Average number of interruptions per customer (SAIFI) ^b before excluded events	0.6	1.5	1.2	1.0
Average number of interruptions per customer (SAIFI) after excluded events	0.6	1.2	1.2	1.0
Average duration of each interruption (CAIDI) ^c before excluded events – minutes	140.1	128.5	129.2	124.1
Average duration of each interruption (CAIDI) after excluded events - minutes	140.1	119.3	129.2	124.1

Source: Ergon Energy Quarterly Service Quality Reports

a. SAIDI is the acronym for 'system average interruption duration index', which refers to the duration of all interruptions experienced in the last year on average, per customer

b. SAIFI is the acronym for 'system average interruption frequency index', which refers to the total number of times in the last year when supply was interrupted on average, per customer.

c. CAIDI is the acronym for 'customer average interruption duration index' which refers to the average length of each supply interruption experienced by customers.

Reliability of Worst Performing Feeders

Table 8 shows that the reliability of Ergon Energy's 10 worst performing feeders was mixed for the SAIDI measure but deteriorated for the SAIFI measures in 2008-09 when compared to 2007-08.

In 2008-09, Ergon Energy's 10 worst performing urban, short rural and long rural feeders (based on the SAIDI measure) supplied electricity to 198 (urban), 666 (short rural) and 867 (long rural) customers. This is equivalent to 0.08%, 0.2% and 1.3% respectively of Ergon Energy's customer base.

Without adjusting the data for exclusions, the customers on these urban feeders were without power due to distribution related interruptions for between 27.5 to 228.2 hours which was a decrease in performance from the previous year when distribution related interruptions ranged from between 25.6 to 111.5 hours. However, performance in relation to the short rural and long rural feeders improved with customers on short rural feeders experiencing distribution related interruptions for between 73.2 to 307.5 hours (compared to 95.1 to 1,453.4 the previous year) and customers on long rural feeders experiencing distribution related interruptions for between 56.5 to 116.6 hours (compared to 65.1 to 136.4 hours the previous year).

In 2008-09, Ergon Energy's 10 worst performing urban, short rural and long rural feeders based on the SAIFI measure supplied electricity to 5,943 (urban), 1,329 (short rural) and 1,379 (long rural) customers, equivalent to 2.4%, 0.41% and 2.0% of Ergon Energy's customer base.

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

	2004-05	2005-06	2006-07	2007-08	2008-09
SAIDI – hours (before excluded events)					
Urban	15.7 – 39.6	18.4 – 78.7	15.9 – 99.2	25.6 – 111.5	27.5 – 228.2
Short Rural	52.5 – 76.0	65.5 – 110.2	46.8 – 134.6	95.1 – 1,453.4	73.2 – 307.5
Long Rural	54.7 – 97.0	63.6 – 165.9	50.8 – 103.4	65.1 – 136.4	56.5 – 116.6
SAIFI (before excluded events)					
Urban	4.0 – 12.0	5.0 – 25.3	1.0 – 13.3	6.8 – 14.0	8.0 – 17.0
Short Rural	7.0 – 17.8	15.1 – 32.5	5.0 – 16.2	15.0 – 22.8	20.0 – 58.0
Long Rural	7.3 – 22.3	11.0 – 29.4	6.6 – 18.0	13.3 – 21.5	17.0 – 32.0

Source: Ergon Energy's 2008-09 Annual Service Quality Report.

The customers connected to these urban feeders experienced between 8 to 17 distribution-related interruptions over the year which was a slight increase on the 6.8 to 14 disruptions experienced the previous year. However, customers connected to the short rural and long rural feeders experienced between 20 to 58 and 17 to 32 distribution-related interruptions to supply respectively over the year, which was higher than the 15 to 22.8 and 13.3 to 21.5 recorded the previous year. The higher number of distribution-related interruptions was attributed to an extended wet season which caused widespread flooding in Ergon Energy's region and also due to the suspension of live-line work practices from February 2009.

3.2 Quality of Supply Measures

The total number of technical quality of supply complaints received by Ergon Energy decreased from 1,921 complaints in 2007-08 to 1,819 complaints in 2008-09, a 5.3% drop. As shown in **Table 9**, complaints over low supply voltage (which can cause light dimming and motor starting problems), voltage swell (which is likely to cause minor equipment damages and blowing up of lights) and complaints related to other miscellaneous issues were among the most common types of complaints received during 2008-09.

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

	Sep 2008	Dec 2008	Mar 2009	Jun 2009	Total
Total quality of supply complaints	454	478	489	398	1,819
Low supply voltage	133	174	171	118	596
Voltage swell	121	79	106	101	407
Other complaints	79	105	87	73	344
Voltage dips –minor	42	32	40	32	146
TV or radio interference	23	33	22	18	96
Waveform distortion or unbalance	22	20	28	23	93
Voltage spike	10	16	23	19	68
Voltage dips –severe	21	14	10	12	57
Noises from appliances or lights	3	5	2	2	12

Source: Ergon Energy's Quarterly Service Quality Reports.

The average time taken to investigate and resolve technical quality of supply complaints improved from 96 days in the June quarter 2008 to 60 days in the June quarter 2009.

As shown in **Table 10**, the majority of quality of supply complaints received consist of complaints for which there was no associated cause (690 complaints) and complaints due to network restrictions or events (594 complaints).

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

Quality of supply complaint	2004-05	2005-06	2006-07	2007-08	2008-09
Network initiated quality of supply complaints	859	769	761	553	594
Quality of supply complaints initiated on the customer side of the meter	255	170	170	117	0
Quality of supply complaints for which no cause was found	803	761	200	635	690

Source: Ergon Energy's 2008-09 Annual Financial and Service Quality Report.

Note: The summation of the above categories of possible causes for quality of supply complaints does not equal to the total of the four quarterly quality of supply complaints as listed in **Table 9**, due to the removal of possible double entries and misclassified complaints.

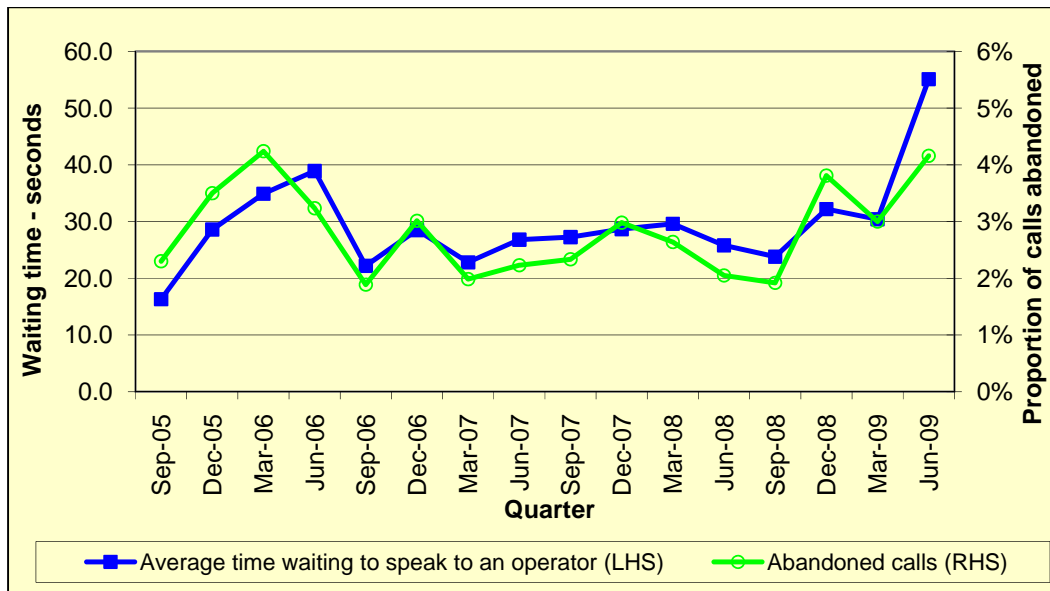
3.3 Customer Service Measures

Ergon Energy’s performance against a range of customer service measures was mixed during 2008-09.

As shown in **Figure 5**, the average length of time that customers had to wait to speak to an operator when phoning the call centre increased substantially from 25.8 seconds in the June quarter 2008 to 55.1 seconds in the June quarter 2009.

This result was well above the trend experienced over the past year. This drop in call centre performance was attributed to staffing constraints caused by increased absenteeism during the winter months. The percentage of abandoned calls also rose from 2.1% during the June quarter 2008 to 4.1% in the June quarter 2009 for the same reason.

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



Source: Ergon Energy Quarterly Service Quality Reports.

As shown in **Table 11**, the number of complaints that Ergon Energy received relating to reliability of supply varied throughout 2008-09, with the number of reliability complaints being typically higher during the storm season quarters (December and March). In total, Ergon Energy reported 1,979 reliability complaints over the course of 2008-09, an increase of 269 complaints from that recorded for 2007-08.

Table 11 also shows the number of momentary interruption² complaints received by Ergon Energy in 2008-09. The number of momentary interruption complaints decreased from 790 complaints in 2007-08 to 695 complaints in 2008-09. It should be noted that the momentary interruptions complaints are a sub-set of the total number of reliability complaints.

² Momentary interruptions to supply are defined as interruptions with a duration of less than one minute.

Table 11: Ergon Energy – number of reliability complaints

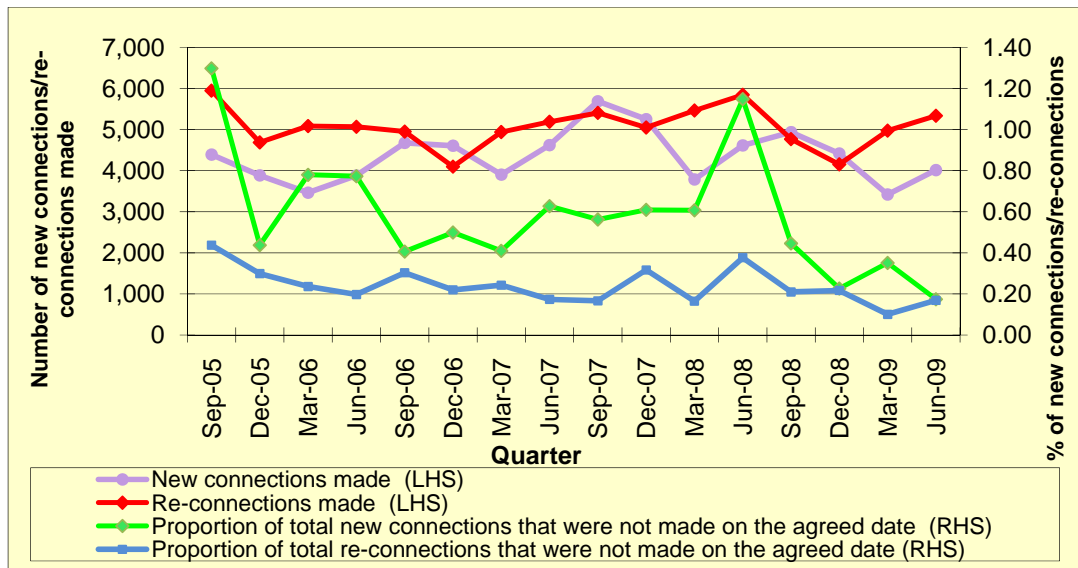
	Sep 2008	Dec 2008	Mar 2009	Jun 2009	Total
Number of reliability complaints	399	526	553	501	1,979
Momentary interruption complaints	177	185	189	144	695

Source: Ergon Energy's Quarterly Service Quality Reports.

Figure 6 shows that the number of new connections made decreased from 4,615 in the June quarter 2008 to 4,013 in the June quarter 2009. This decrease was attributed to a decline in the number of new premises built during the period because of the global financial crisis. The number of reconnections also fell over the same period with 5,336 being recorded in the June quarter 2009 compared to 5,846 recorded in the June quarter 2008. This fall was attributed to fewer customers being disconnected during the period and therefore few reconnections being required.

Figure 6 also shows that the proportion of total new supply connections that Ergon Energy failed to make by the agreed date decreased from 1.1% at the end of June quarter 2008 to 0.2% at the end of the June quarter 2009. The June quarter 2008 figure was high in the as a result of industrial action but the latest result has dropped to below average levels. There was also a decrease in the percentage of total re-connections that were not made on the agreed date from 0.4% at the end of the June quarter 2008 to 0.2% at the end of the June quarter 2009.

Figure 6: Ergon Energy – number of new and re-connections made proportion of new and re-connections not made on the agreed date



Source: Ergon Energy's Quarterly Service Quality Reports.

In the June quarter 2009, 1,080 faulty streetlights were reported in Ergon Energy's distribution area of which 269 (or 25%) were not repaired by the agreed date. This compares with 1,335 faulty streetlights of which 316 (or 23.7%) were not repaired by the agreed date in the March quarter 2009.

Table 12 shows that the average time taken to repair faulty streetlights (including the day of notification) decreased from 7.3 days in the March quarter 2009 to 5.7 days in the June quarter 2009.

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

	Dec 2008	Mar 2009	Jun 2009
Average number of days taken to repair street lights	6.5	7.3	5.7

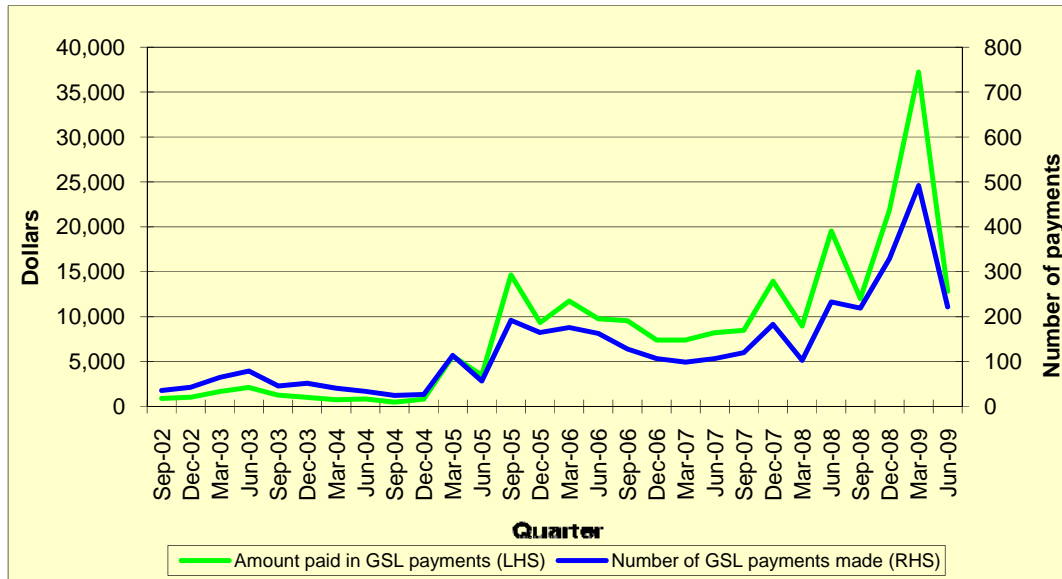
Source: Ergon Energy’s Quarterly Service Quality Reports.

Note: Ergon Energy has only supplied average time taken to repair faulty streetlight data since the December quarter 2008. It was unable to do so before this because of limitations in its reporting systems.

Figure 7 shows Ergon Energy’s guaranteed service level (GSL) payments since September 2002. GSLs relate to the quality of service received by individual customers. In certain circumstances, if the distributor fails to comply with the GSL, the Electricity Industry Code requires that an affected customer receives compensation in the form of a GSL payment. The increase in quarterly GSL payments during 2005-06 was due to the introduction of a GSL scheme mandated by the Queensland Government from 1 January 2005. Prior to 1 January 2005, GSLs were voluntary payments made by the distributors to customers that reported instances where the distributors had not met their self-imposed service quality standards.

The number of GSL payments made and the amounts paid increased from 639 payments worth \$50,960 in 2007-08 to 1,262 GSL payments to customers totalling \$83,930 in 2008-09. The most common types of GSL payments were for the duration of outages (28.6%), failure to properly notify residential customers of planned interruptions (25.2%) and for the high number of outages experienced by individual customers (17.0%).

Figure 7: Ergon Energy – guaranteed service level payments



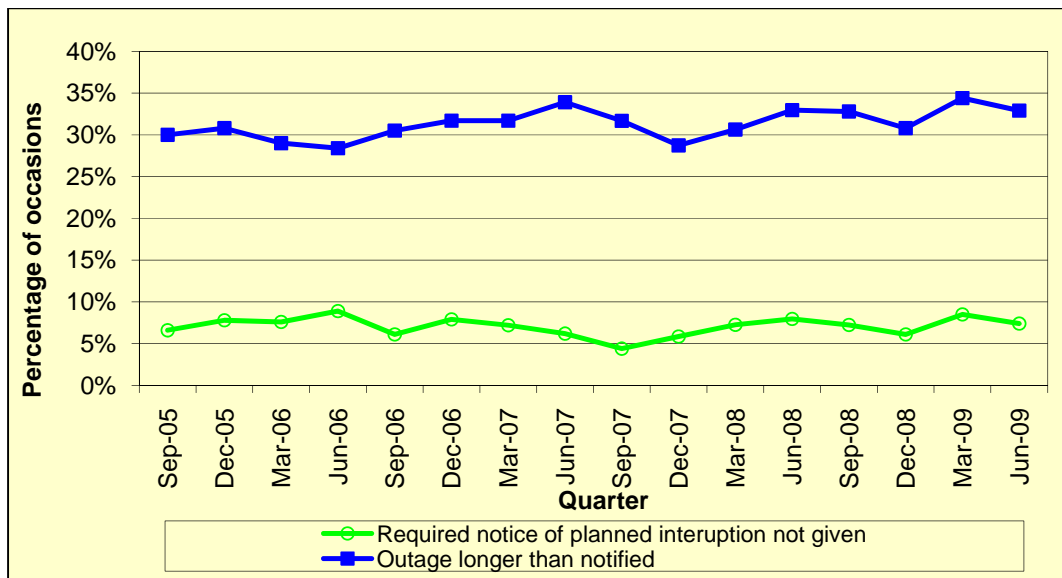
Source: Ergon Energy’s Quarterly Service Quality Reports.

Figure 8 shows that the proportion of occasions on which the required notice of a planned interruption to supply was not given remained steady over the course of the year having started

at 7.2% during the September quarter 2008 and finished at 7.4% in the June quarter 2009. This result remains close to the long-term trend level.

The proportion of occasions on which the duration of a planned interruption exceeded the time specified in the notification also remained steady over the period having started at 32.8% during the September quarter 2008 and finished at 32.9% in the June quarter 2009. Again this result remains close to the long term average and means that, on average, about one in every three planned interruptions exceeded the time specified to customers. This result is consistent with the pattern observed for the proportion of occasions on which the required notice of a planned interruption to supply was not given.

Figure 8: Ergon Energy – notification of commencement and duration of planned interruptions



Source: Ergon Energy’s Quarterly Service Quality Reports.

Table 13 shows that complaints about Ergon Energy’s customer service were the main source of complaints during 2008-09. This is consistent with the result recorded in 2007-08. Other significant reasons for complaint were related to trees touching or close to power lines, field activity and meter reading.

During the June quarter 2009, 93.5% of complaints that were not resolved at the initial point of contact were resolved within 20 days of being escalated. This is the same as was recorded in the June quarter 2008.

The average time taken to resolve complaints that were escalated decreased from 6.5 days in the June quarter 2008 to 3.8 days in the June quarter 2009. The high number which was recorded in the June quarter 2008 was attributed to the introduction of a new complaints management process which focussed on better, rather than speedier, complaints resolution.

Table 123: Ergon Energy – reasons for complaints

	<i>Sep 2008</i>	<i>Dec 2008</i>	<i>Mar2009</i>	<i>Jun 2009</i>	<i>Total</i>
Total number of complaints	946	949	1,018	984	3,897
Customer service	172	228	235	218	853
Trees	247	189	179	140	755
Field activity	158	198	191	201	748
Meter reading	170	149	164	153	636
Other complaints	50	53	144	146	393
Supply – new extensions	52	39	39	41	171
Infrastructure	47	38	31	39	155
Metering/Technical	24	38	19	20	101
Streetlights	21	14	14	24	73
Environmental issues	5	3	2	2	12

Source: Ergon Energy's Quarterly Service Quality Reports

APPENDIX A: FINANCIAL DATA TABLES – 2004-05 TO 2008-09**Table A1: Ergon Energy – Aggregate financial information (\$million, nominal)**

	2004-05	2005-06	2006-07	2007-08	2008-09
Revenue					
Forecast sales	523.4	675.2	701.6 ¹	749.4 ¹	798.3 ¹
Actual sales	535.8	690.1	697.3 ¹	733.4 ¹	788.4 ¹
Forecast revenue from outside use of regulated assets		8.0	8.0	8.0	8.0
Actual revenue from outside use of regulated assets		4.5	1.3	2.9	2.9
Expenditure					
Forecast operating and maintenance expenditure	162.4	266.7	279.6	280.4	262.7
Actual operating and maintenance expenditure					
Operating expenditure	53.0	79.9	77.9	68.6	70.7
Maintenance expenditure	142.1	203.9	214.6	241.6	234.9
Total	195.1	283.7	292.5	310.3	305.6
Forecast depreciation	192.4	231.9	237.4	256.9	271.0
Actual depreciation	186.4	225.2	221.4	221.1	246.9
Total expenditure (forecast)	354.8	498.6	517.0	537.3	533.7
Total expenditure (actual)	381.5	508.9	513.9	531.4	552.5
Customer contributions					
Forecast	17.9	28.9	35.9	38.4	43.3
Actual	35.5	36.2	42.0	70.5	92.6
Capital expenditure					
Forecast	192.3	524.5	574.4	627.8	645.8
Actual	490.1	623.2	735.5	737.6	766.4
Fixed assets					
Forecast	2,956.8	4,650.9	5,118.8	5,606.0 ²	6,144.5
Actual	3,321.5	4,690.1	5,279.9	5,894.3 ²	6,507.2
Energy Sales (million MWh)					
Actual	12.9	13.5	13.6	13.8	14.1
Number of customers					
Actual	711,143 ³	736,710	753,668	766,453	774,100

1. Excludes revenue from non-DUOS services (later reclassified as excluded services).

2. Actual fixed assets include an estimated \$4.5 million of regulated assets used for the provision of excluded services.

3. Ergon Energy revised their method of recording street lighting customers from 2004-05 onwards.

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

<i>Revenue source*</i>	<i>2004-05</i>	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>	<i>2008-09</i>
Sales					
Network services (excl public lighting)	525.5	670.7	678.5	718.5	773.3
Public lighting	10.3	13.4	14.3	14.9	15.1
Total network services	535.8	684.1	692.8	733.4	788.4
TUOS pass-through	143.9	154.1	166.5	183.3	202.5
Excluded Services	4.0	6.0	4.5	13.4	17.9
Total services	683.7	844.2	863.8	930.1	1008.8
Revenue from outside use of regulated assets		4.5	1.3	2.9	2.9
Capital contributions	35.5	36.2	42.0	70.5	92.6
Profit from sale of assets	1.7	(0.7)	3.1	4.1	5.2
Proceeds from sale of assets	4.2	4.1	5.5	57.3	13.7
Book value of assets sold	2.5	4.8	2.4	53.2	8.5
Other revenue	32.8	6.9	32.6	40.9	41.5

* *May not sum due to rounding*

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

<i>Expenditure*</i>	<i>DUOS services</i>	<i>Excluded services</i>
Operating expenditure		
Meter reading	12.9	
Customer service	18.5	
Full retail contestability	-	
Network operations	32.1	
Training	7.2	
Other	-	23.2
Total	70.7	
Public street lighting	-	
Total operating expenditure	70.7	23.2
Network maintenance expenditure		
Inspection	65.3	
Maintenance and repair	32.0	
Vegetation management	84.9	
Emergency Response	42.4	
Other	0.1	
Total	224.7	
Public street lighting	10.1	
Total maintenance expenditure	234.8	
Total operating and maintenance expenditure	305.5	23.2

* May not sum due to rounding

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

<i>Asset*</i>	<i>Network services</i>
System Assets:	
overhead sub-transmission lines	24.5
underground sub-transmission lines	0.9
overhead distribution lines	49.5
underground distribution lines	10.5
distribution equipment	3.7
substation bays	18.5
substation establishment	5.3
substation switchgear	2.2
zone transformers	6.6
distribution transformers	26.5
low voltage services	7.9
meters	6.1
communications	4.7
generation assets	0.4
street lighting	5.0
other equipment	0.4
control centre - SCADA	10.6
land and easements	-
Non-System Assets:	
communications	2.7
IT systems	11.1
office furniture and equipment	4.6
motor vehicles	19.0
plant and equipment	14.9
buildings	10.9
land and easements	-
land improvements	0.3
Total	246.9

* May not sum due to rounding

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

<i>Asset</i>	<i>Expected weighted average economic life (weighted by optimised replacements cost (ORC)) (years)</i>	<i>Weighted average remaining economic life (weighted by ORC) (years)</i>
System Assets:		
overhead sub-transmission lines	53.5	27.4
underground sub-transmission lines	50.2	40.2
overhead distribution lines	49.7	23.6
underground distribution lines	60.0	48.8
distribution equipment	35.0	30.6
substation bays	39.6	19.5
substation establishment	60.0	33.4
substation switchgear	45.0	40.1
zone transformers	50.0	23.8
distribution transformers	45.0	29.1
low voltage services	35.0	18.7
meters	24.9	9.6
communications	16.8	10.4
generation assets	19.9	4.5
street lighting	20.0	10.0
other equipment	40.0	38.8
control centre -SCADA	7.3	4.4
land and easements	n/a	n/a
Non-System Assets:		
communications	7.0	3.6
IT systems	3.3	0.9
office furniture and equipment	7.0	3.7
motor vehicles	9.1	5.2
plant and equipment	8.5	5.1
buildings	35.1	17.0
land and easements	n/a	n/a
land improvements	40.0	35.4

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

<i>Asset*</i>	<i>\$ million</i>
System Assets:	
overhead sub-transmission lines	947.9
underground sub-transmission lines	42.7
overhead distribution lines	1,643.9
underground distribution lines	547.5
distribution equipment	54.5
substation bays	570.7
substation establishment	207.0
substation switchgear	92.7
zone transformers	159.2
distribution transformers	661.0
low voltage services	128.0
meters	64.4
communications	48.1
generation assets	1.7
street lighting	70.3
other equipment	16.9
control centre - SCADA	46.1
land and easements	25.3
Non-System Assets:	
communications	12.5
IT systems	12.2
office furniture and equipment	31.6
motor vehicles	104.4
plant and equipment	80.1
buildings	101.1
land and easements	49.1
land improvements	9.0
Total	5,727.1

* May not sum due to rounding

Table A7: Ergon Energy – Capital expenditure and additions (\$ million, nominal)

<i>Capital expenditure*</i>	<i>\$ million</i>
System Assets:	
overhead sub-transmission lines	72.5
underground sub-transmission lines	5.7
overhead distribution lines	143.4
underground distribution lines	69.7
distribution equipment	.5
substation bays	147.6
substation establishment	20.4
substation switchgear	18.3
zone transformers	38.4
distribution transformers	101.5
low voltage services	15.6
meters	11.9
communications	3.8
generation assets	.9
street lighting	11.8
other equipment	5.3
control centre - SCADA	7.3
land and easements	8.3
Non-System Assets:	
communications	0.4
IT systems	14.6
office furniture and equipment	2.0
motor vehicles	23.9
plant and equipment	17.6
buildings	16.1
land and easements	2.5
land improvements	6.7
Other	0.1
Total	766.4

* May not sum due to rounding

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

<i>Capital expenditure</i>	<i>\$ million</i>
Asset replacement	120.3
Demand related	511.4
Reliability and quality improvements	7.5
Other	41.7
Total	680.9

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

<i>Transaction</i>	<i>\$ million</i>
Total value of related party transactions	53.0