



**Energex's
Financial and Service Quality
Performance 2005-06**

March 2007

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1. INTRODUCTION AND SUMMARY

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

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

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

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

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

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

1.1 General Operating Background

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

Network Characteristics

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

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

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

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

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

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

Table 1: Network characteristics - 2005-06

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

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

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

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

1.2 Energex Customer Profile

All customers with an average consumption of more than 100MWh a year, approximately 13,200 customers, were eligible to become contestable. The contestable customer groups of Energex consist of:

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

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

Table 2: Energex customer numbers and units sold – 2005-06

| Customer type | Customers | | Units sold | | Units sold per customer | |
|-----------------------------------|-----------|--------------------------------------|------------|--------------------------------------|-------------------------|--------------------------------------|
| | Number | Percentage change from previous year | MWh | Percentage change from previous year | MWh/customer | Percentage change from previous year |
| Contestable customers | | | | | | |
| Individually calculated customers | 26 | 8.3 | 1,590,867 | 6.3 | 61,187.2 | (3.4) |
| Connection asset customers | 362 | 5.2 | 3,571,481 | 5.4 | 9,866.0 | 0.2 |
| Standard asset customers | 4,524 | 8.4 | 3,372,706 | 10.2 | 745.5 | 1.8 |
| Non-contestable customers | | | | | | |
| Franchise customers ¹ | 1,212,088 | 2.2 | 12,073,750 | 4.3 | 10.0 | 1.6 |
| Public street lighting | 187 | - | 146,053 | 15.2 | 781.0 | 15.2 |
| Embedded generators | 6 | 200 | 2,302 | (84.6) | 383.7 | (94.9) |
| Total | 1,217,193 | 2.3 | 20,757,159 | 5.6 | 16.5 | 0.0 |

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

Table 2 indicates that the number of customers increased 2.3 per cent during 2005-06, slightly less than the 2.6 per cent during 2004-05, driven by franchise customer growth (these customers account for over 99 per cent of Energex's total customer base).

Energy sales increased 5.6 per cent during the year following a 3.6 per cent increase in 2004-05. This compares with forecast growth in energy sales of 4.1 per cent in the 2005 Final Determination.

The Standard Asset Customer category experienced the strongest growth in 2005-06, for the fourth consecutive year, with an increase in customers of 8.4 per cent and an increase in energy sales of 10.2 per cent, which translated into an increase of 1.8 per cent in units sold per SAC. The majority of this customer group consume between 100 and 4,000MWh per annum.

1.3 Summary of Energex Financial Performance

Energex exceeded its Aggregate Annual Revenue Requirement (AARR) by \$12.4 million in 2005-06. This was comprised of over-recoveries of \$25.9 million from the provision of services and \$2.9 million from capital contributions, partially offset by the payment of \$16.4 million more in tax than forecast in the 2005 Final Determination.

The revenue over-recovery will be returned to customers in 2007-08 as the 2005-06 data was not available in time for adjustments to be made to 2006-07 allowable revenue. After adjustment to 2007-08 values, the aggregate over-recovery will result in \$14.6 million having to be returned to customers.

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

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

| | Actual 2004-05 (\$ mill) | Actual 2005-06 (\$ mill) | Forecast 2005-06 (\$ mill) | Variance from forecast 2005-06 | |
|---------------------------------------|--------------------------------|--------------------------------|----------------------------------|-----------------------------------|-------|
| | | | | (\$ mill) | (%) |
| Aggregate Annual Revenue Requirement | | | | | |
| Revenue from services | 551.1 | 652.7 | 626.8 | 25.9 | 4.1 |
| Capital contributions | 40.8 | 38.8 | 35.9 | 2.9 | 0.8 |
| Income tax paid | 0 | 24.0 | 7.6 | (16.4) | 215.8 |
| Operating and maintenance expenditure | 170.1 | 234.2 | 225.9 | 8.3 | 3.7 |
| Capital expenditure | 526.5 | 725.0 | 578.7 | 146.3 | 25.3 |

* *Includes network and non-network services*

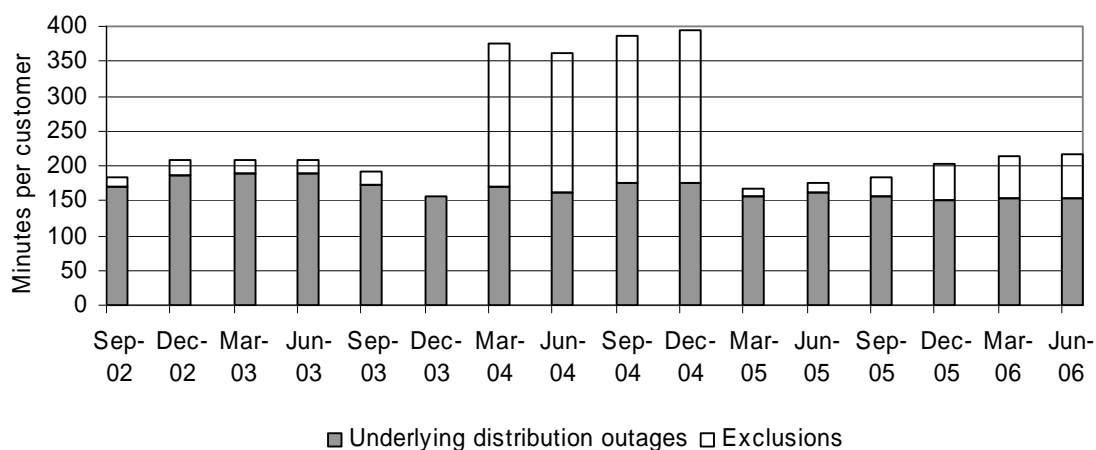
In preparing its 2005 Final Determination, the Authority estimated the level of operating costs and capital expenditure required to deliver prescribed distribution services for each year of the regulatory period for each DNSP. While estimates were provided for each year of the regulatory period, actual 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 estimates are made.

Operating and maintenance expenditure of \$234.2 million was higher than forecast during the year (\$8.3 million or 3.7 per cent higher). Energex attributed this over-spend to a number of factors, including higher than forecast expenditure on vegetation management, an increase in contractor costs associated with streetlighting and costs associated with preparing for the introduction of full retail competition.

Capital expenditure was \$146.3 million (25.3 per cent) higher than originally forecast and \$198.5 million (37.7 per cent) higher than in 2005-06. This was driven by significantly higher demand-related capital expenditure reflecting increased commercial and industrial customer activity and continued high levels of sub-division and high-rise building activity. In addition, additional capital expenditure was spent on system headworks and distribution transformer replacements aimed at decreasing network loads.

1.4 Summary of Energex Service Quality Performance

During 2005-06, Energex customers on average experienced 2.21 distribution-related interruptions leaving them without power for a total of 215.3 minutes. As shown in Figure 1, this result was a deterioration on the March and June quarters 2005, but a significant improvement on the total level of outages in 2004 which was affected by the severe storms that hit Energex's network in January 2004.

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

The Authority's Service Quality Reporting Guidelines allow the impact of unusual, severe outage events to be removed from the reliability data to facilitate an assessment of underlying performance. Six weather-related events met the test for exclusion during 2005-06 compared to only one event during 2004-05. Excluding the effect of these six events, underlying distribution-related outages, represented by the shaded columns in Figure 1, fell to historically low levels during 2005-06.

The number of technical quality of supply complaints received by Energex increased from 1,773 in 2004-05 to 1,839 in 2005-06. However, the 2005-06 result was well below the 2,732 complaints received in 2002-03. The largest increases in complaints in 2005-06 were recorded for low supply voltage (which can cause light dimming and motor starting problems) and minor voltage dips (which can cause flickering lights).

The average time taken to investigate and resolve these quality of supply complaints varied over the year but was still generally below the levels recorded in 2004-05.

Energex's performance against a range of customer service measures generally improved during 2005-06:

- on average, Energex customers had to wait less than 30 seconds to speak to an operator when calling the call centre during 2005-06, a slight improvement on the result for 2004-05 and significantly better than in previous years.
- the percentage of calls abandoned averaged 3.7 per cent, down from 4.1 per cent during 2004-05.
- the proportion of customer appointments that were not met by Energex within 15 minutes of the agreed time averaged 2.3 per cent during 2005-06 compared to 2.8 per cent in 2004-05. This may have been due partly to fewer customer-arranged appointments in 2005-06.
- the proportion of new connections that Energex failed to make by the agreed date fell significantly during 2005-06, to an average of 0.6 per cent. The proportion of total re-connections that were not made on the agreed date also fell during 2005-06, to an historic low of 0.5 per cent, but increased somewhat towards the end of the year.

2. FINANCIAL PERFORMANCE

This section summarises the financial performance of the revenue cap regulated business segment of Energex. The information is for the year ended 30 June 2006. The data used in the analysis has been drawn mainly from Energex's audited Regulatory Accounting Statements. These accounts were submitted in accordance with the Authority's *Electricity Distribution: Regulatory Reporting Guidelines*.

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

2.1 Revenue

Under/Over Recovery of Distribution Revenue

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

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

The 2005 Final Determination also provided for any differences between forecast and actual tax paid to be subject to an unders and overs process on an annual basis. In the 2001 Final Determination any difference between forecast and actual tax paid was addressed as part of adjustments made to the revenue requirement in the next regulatory review period.

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

Table 4: Energex Aggregate Annual Revenue Requirement – 2005-06

| | \$ million (nominal) |
|--|----------------------|
| Actual revenue earned during 2005-06 | |
| Revenue from services | 652.7 |
| Revenue from capital contributions | 38.8 |
| Allowable annual revenue | |
| Revenue from services | 626.8 |
| Revenue from capital contributions | 35.9 |
| Actual revenue earned less allowable revenue (a) | 28.8 |
| Income tax paid | |
| Actual income tax paid | 24.0 |
| Allowance for income tax paid | 7.6 |
| Actual income tax paid less allowance for income tax paid (b) | 16.4 |
| Over-recovery of AARR for 2005-06 (equals (a) – (b)) | 12.4 |

Table 4 shows that Energex exceeded its 2005-06 AARR by \$12.4 million. This was comprised of over-recoveries of:

- \$25.9 million more revenue than forecast from the provision of services. Energex attributed the higher than forecast revenue to higher than forecast demand for DUOS services as well as higher than expected “Recoverable Works” activity (non-DUOS services); and
- \$2.9 million more than forecast from capital contributions.

These increases were partially offset by \$16.4 million higher than forecast income tax paid as a result of higher than forecast Group Operating Profit Before Tax (2005-06 was the first full tax year for Energex having consumed the last of its outstanding tax losses in 2004-05).

The 2005 Final Determination requires that where there is a revenue under or over-recovery of less than 2 per cent of that years AARR, the DNSP is required to clear the unders and overs balance during the subsequent pricing period. Accordingly, the revenue over-recovery by Energex during 2005-06 will be rolled-forward and reflected in its allowable revenue for 2007-08 to be returned to all customers through distribution prices.

After adjustment to 2007-08 values, the aggregate over-recovery will result in \$14.6 million having to be returned to customers.

As the Authority is currently considering Energex’ application for pass-through of additional capex costs, returning this revenue over-recovery will be addressed in combination with the impact of any additional capex approved for pass-through;

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

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

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

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

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

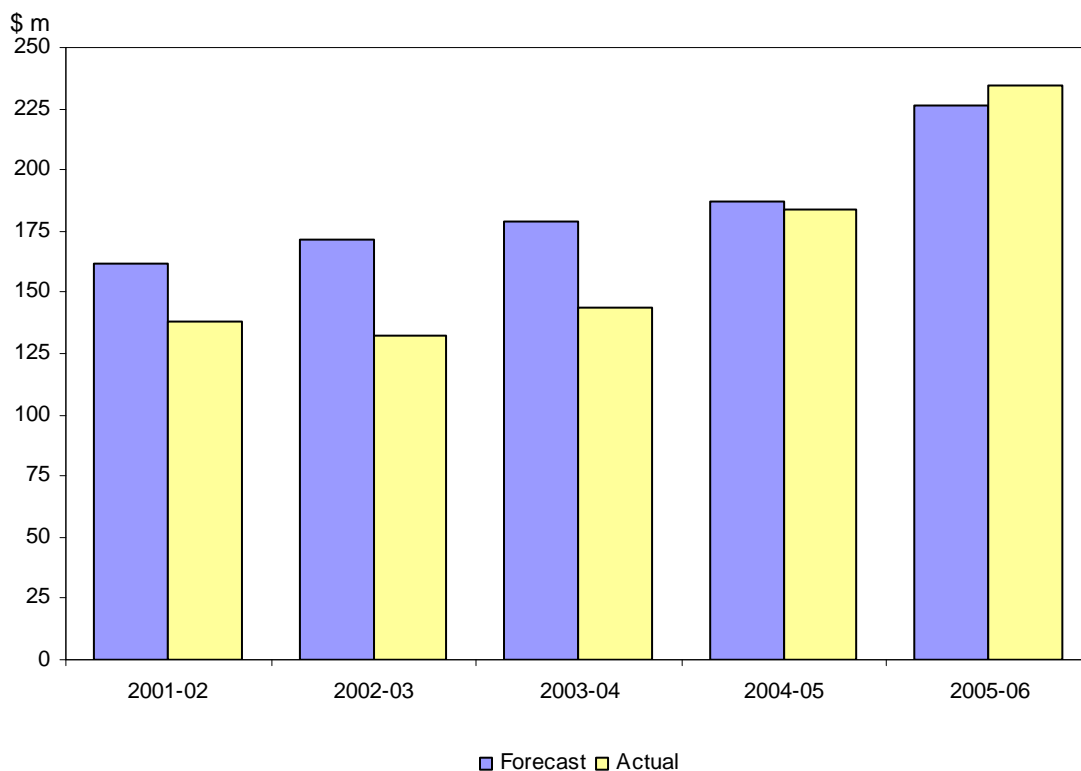
| | \$ million (nominal) |
|---|----------------------|
| TUOS charged by Powerlink | 181.0 |
| <i>plus</i> TUOS charged by Embedded Generators | 0.7 |
| <i>equals</i> Total TUOS charged | 181.7 |
| <i>less</i> actual TUOS revenue earned during 2005-06 | 187.0 |
| <i>equals</i> Over-recovery for 2005-06 | 5.3 |

Table 5 indicates that TUOS charges to customers were more than TUOS payments to Powerlink and embedded generators by \$5.3 million during 2005-06. Accordingly, Energex will be required to return this over-recovery to customers as part of its 2007-08 TUOS charges.

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 for the remainder of the regulatory period.

Figure 2 shows network operating and maintenance expenditure reported by Energex for 2001-02 to 2005-06, compared with that forecast at the time of the 2001 and 2005 Final Determinations.

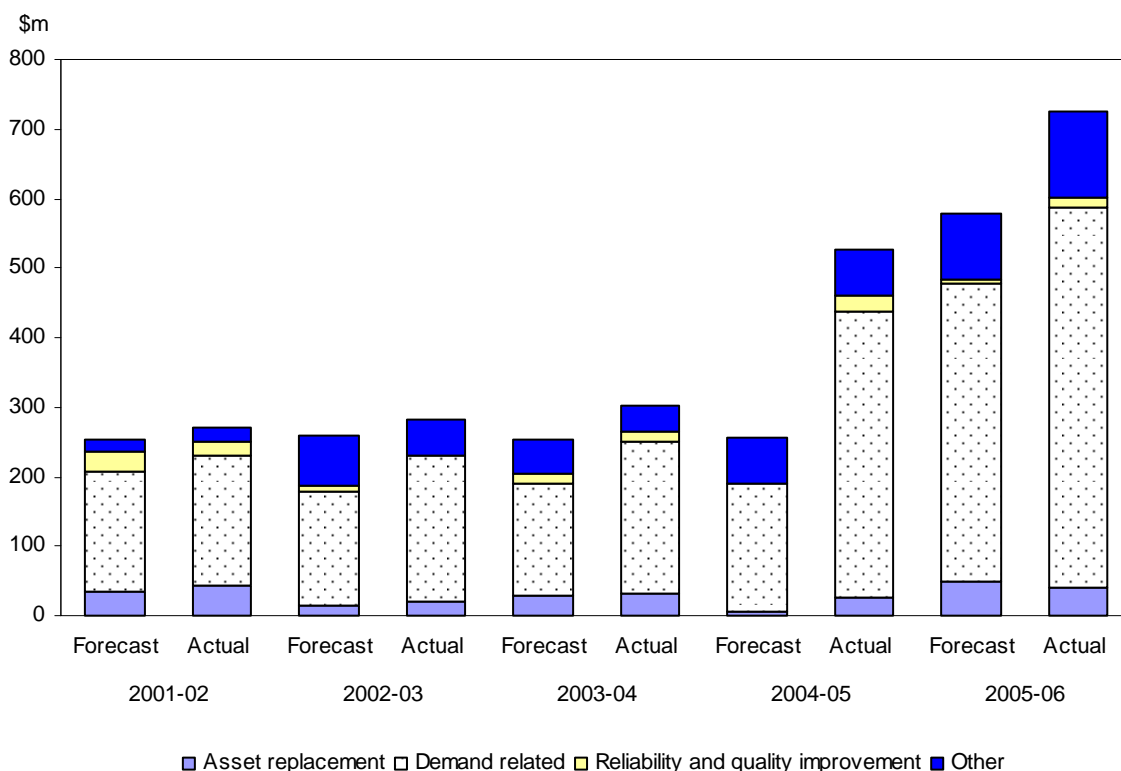
Figure 2: Energex operating and maintenance expenditure – 2001-02 to 2005-06

Energex's operating and maintenance expenditure increased by \$50.7 million (27.6 per cent) during 2005-06 to be \$8.3 million (3.7 per cent) higher than forecast. The increase in expenditure reflected a number of factors, including higher than forecast expenditure on vegetation management, an increase in contractor costs associated with streetlighting and costs associated with preparing for the introduction of full retail competition.

Energex's operating expenditure in 2005-06 was substantially higher than in previous years and represents the first time in five years that Energex has exceed its forecast expenditure. The higher expenditure largely reflects Energex's response to the Government's Electricity Distribution and Service Delivery (EDSD) Review, which reported in July 2004 and put forward a number of recommendations to improve network reliability and efficiency in both the Energex and Ergon Energy distribution networks.

2.3 Capital Expenditure

Figure 3 shows network capital expenditure in aggregate and by purpose reported by Energex for 2001-02 to 2005-06, compared with the forecast capital expenditure included in the 2001 and 2005 Final Determinations.

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

Energex's capital expenditure was significantly higher in both 2004-05 and 2005-06 compared with previous levels. This primarily reflected Energex's response to the EDSD Review. In particular, the EDSD Review highlighted the extent of over-utilisation of the Energex network due to past underinvestment and the need to reduce utilisation to more sustainable levels. The Authority's 2005 Final Determination concluded that a large quantity of capital expenditure was required to address this over-utilisation and cope with the expected future growth in electricity demand on the network.

Capital expenditure in 2005-06 was \$198.3 million (37.7 per cent) higher than in 2004-05 and \$146.3 million (25.3 per cent) higher than forecast for the year. Higher than forecast capital expenditure in 2005-06 reflected the following factors:

- demand-related capital expenditure was 27.5 per cent higher than forecast reflecting increased commercial and industrial customer activity and continued high levels of subdivision and high-rise building activity. In addition, additional capital expenditure was spent on system headworks and distribution transformer replacements aimed at decreasing network loads;
- reliability/quality improvement was 95.9 per cent higher than forecast as a result of increased expenditure on specialised programs to improve reliability and performance to meet minimum service standards. Programs included installation of re-closers, line fault indicators and protection upgrades; and
- other expenditure (primarily expenditure on non-system assets) was 28.8 per cent higher than forecast largely as a result of increased expenditure on vehicles, tools and equipment, and additional depot facilities to accommodate large increases in staff (Energex indicated that its Asset Services staff increased from 1,256 in June 2004 to 1,850 in August 2006). This increased expenditure was required to support the

increased program of work conducted by Energex. In addition expenditure of \$11 million was incurred on non-system assets in relation to Project JET, a joint initiative of both Energex and Ergon Energy aimed at combining and integrating a number of administrative functions such as Asset Management, Works Management, Human Resources and Payroll, Finance, Health, Safety and Environment and Logistics.

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

These increases in expenditure were partially offset by lower than forecast expenditure in the asset replacement and “other” expenditure categories. This lower expenditure largely reflected delays in this work in order to undertake capital expenditure in higher priority areas such as demand related expenditure.

3. SERVICE QUALITY PERFORMANCE

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

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

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

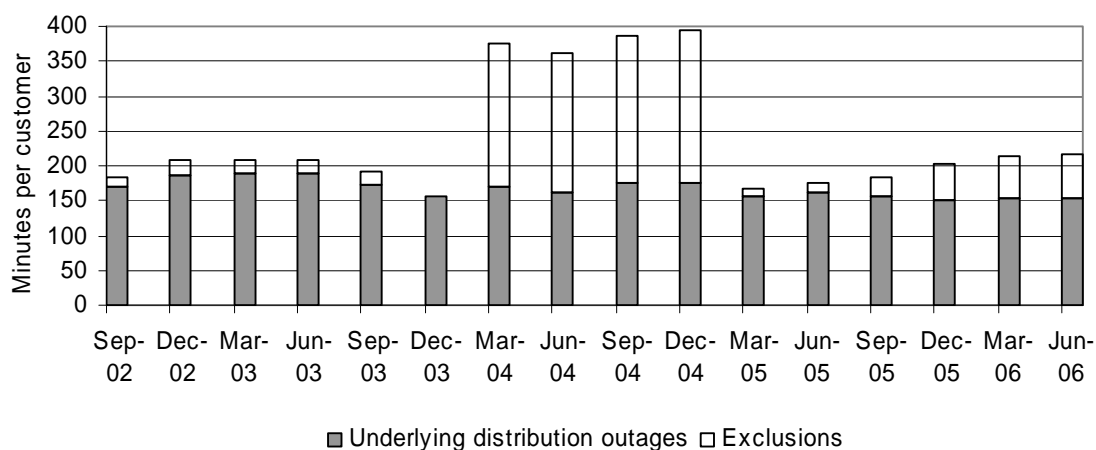
Reliability measures provide information about interruptions to electricity supply. Interruptions can occur because of problems with generation, transmission or distribution. Distribution interruptions may be planned or unplanned, and unplanned interruptions will at times be due to events that are beyond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

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

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

3.1 Reliability Measures

During 2005-06, Energex customers on average experienced 2.21 distribution-related interruptions leaving them without power for a total of 215.3 minutes. As shown in Figure 4, this result was a deterioration on the March and June quarters 2005, but a significant improvement on the total level of outages in 2004 which was affected by the severe storms that hit Energex's network in January 2004.

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

Reliability data can be affected by good and bad weather conditions. Under the Authority's old Service Quality Reporting Guidelines, interruptions within a distributor's network which affected at least five per cent of customers and were due to widespread storms or flooding, or other natural disasters, were able to be excluded from the data. This was because such outages, which were deemed to be beyond the control of the DNSPs, would otherwise distort the measurement of underlying reliability performance.

In August 2005, the Authority released revised Service Quality Reporting Guidelines which introduced a statistically-based method (2.5 beta method) for excluding the impact of severe weather-related events from reliability data. Energex was required to apply the 2.5 beta method from 1 July 2005. While caution should be exercised in comparing results under the new and old approaches, Energex has provided data that shows the methods exclude similar outage events. As a result, historical data is included to put Energex's reliability performance in 2005-06 into context.

Six weather-related events met the test for exclusion during 2005-06 compared to only one event during 2004-05. Excluding the effect of these six events, Energex customers, on average, experienced 1.88 distribution-related interruptions during 2005-06. With each interruption lasting an average of 82.3 minutes, customers were left without power, on average, for a total of 154.8 minutes during the year. As shown by the shaded columns in Figure 4, underlying distribution-related outages were at historical lows during 2005-06.

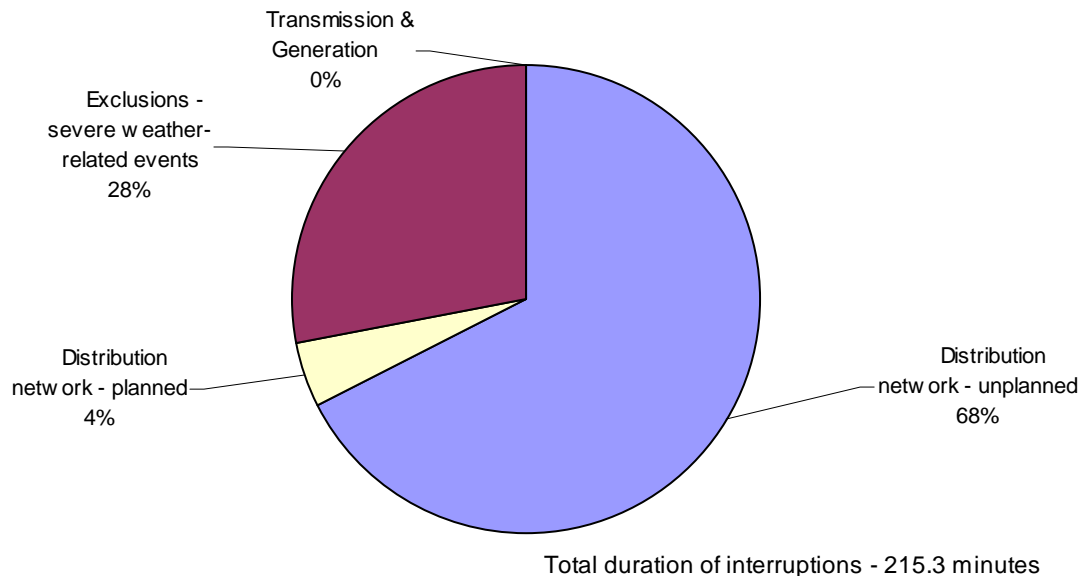
While underlying reliability for Energex's entire network has been relatively steady since the start of 2005, this masks a shift in performance which has seen a deteriorating reliability in areas supplied by short rural feeders that has been offset by improved reliability in urban areas.

Interruptions resulted in an estimated 5,704.3 MWh of energy not being supplied to customers during the year, which was equivalent to 0.027 per cent of total energy delivered to customers. These figures compare to 5,693 MWh of energy not supplied to customers in 2004-05 which was equivalent to 0.029 per cent of total energy delivered to customers over that period.

Unplanned interruptions arising in the distribution network (of which excluded weather-related events are a sub-component) accounted for most (96 per cent) of the total 215.3 minutes that Energex customers were, on average, without electricity supply during 2005-06, as shown in Figure 5. Planned interruptions in the distribution network accounted for the remaining 4 per cent of outages.

In contrast, in 2004-05, unplanned interruptions accounted for 87 per cent of the total 186.1 minutes that Energex customers were, on average, without electricity supply. Planned interruptions in the distribution network accounted for 7 per cent of outages while transmission and generation interruptions together made up the 6 per cent balance. In 2004-05, the impact of severe storm events (exclusions) only contributed 7 per cent of the total time customers were without power. Exclusions contributed 28 per cent of the outages during 2005-06.

Figure 5: Energex – duration of interruptions during 2005-06, by source



Interruptions arising in the distribution network after the removal of excluded events can be disaggregated according to geographic categories – that is, Central Business District (CBD), Urban and Short Rural.² As shown in Table 6, there were significant differences in the level of reliability across Energex’s network over the course of 2005-06. Customers in short rural and CBD areas experienced increases in the duration of interruptions of 65.2 minutes and 1.7 minutes respectively from the June quarter 2005 to the June quarter 2006, while the period of time that customers in the urban areas were without supply decreased by 20 minutes.

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

| | JUN 2005 | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 |
|---------------------------|----------|----------|----------|----------|----------|
| Total distribution system | 162.4 | 156.1 | 150.5 | 153.2 | 154.8 |
| CBD | 2.2 | 2.4 | 2.8 | 2.5 | 3.9 |
| Urban | 123.8 | 113.1 | 99.8 | 99.9 | 103.8 |
| Short Rural | 241.2 | 249.9 | 270.4 | 294.6 | 306.4 |

Quarter by Quarter Reliability

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

² Energex does not have any feeders that meet the definition of Long Rural.

As shown in Table 7, Energex’s performance was significantly worse during the December and March quarters, due to the storm season. While the removal of excluded events smoothes the variations in the reliability performance between quarters it does not entirely remove seasonal fluctuations.

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

| | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 |
|--|----------|----------|----------|----------|
| Average number of interruptions per customer (SAIFI) before excluded events | 0.20 | 0.80 | 0.64 | 0.35 |
| Average number of interruptions per customer (SAIFI) after excluded events | 0.13 | 0.61 | 0.57 | 0.35 |
| Duration of all interruptions per customer (SAIDI) before excluded events – minutes | 20.1 | 91.5 | 57.5 | 27.6 |
| Duration of all interruptions per customer (SAIDI) after excluded events – minutes | 9.2 | 51.9 | 47.6 | 27.6 |

Reliability of Worst Performing Feeders

As shown in Table 8, the reliability of Energex’s worst performing feeders generally deteriorated in 2005-06 compared to 2004-05. The only exception was the average time without power on the 10 worst urban feeders.

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

| | 2002-03 | 2003-04 | 2004-05 | 2005-06 |
|--|-------------|-------------|-------------|-------------|
| Average number of interruptions per customer (SAIFI) before excluded events | | | | |
| Urban | 3.0 – 9.8 | 1.6 – 9.0 | 1.3 – 6.6 | 1.1 – 10.0 |
| Short Rural | 3.2 – 11.9 | 3.7 – 13.6 | 4.1 – 10.7 | 4.4 – 13.6 |
| Duration of all interruptions per customer (SAIDI) before excluded events – hours | | | | |
| Urban | 12.6 – 23.5 | 31.0 – 49.3 | 8.7 – 14.6 | 7.2 – 13.8 |
| Short Rural | 15.0 – 32.0 | 36.3 – 48.2 | 16.3 – 25.8 | 15.7 – 49.2 |

During 2005-06, Energex’s 10 worst performing urban feeders supplied electricity to 14,390 customers (equivalent to 1.7 per cent of Energex’s urban customer base). On average, these customers experienced between 1.1 and 10 distribution-related interruptions (without adjusting the data for exclusions), leaving them without power for between 7.2 hours and 13.8 hours. The number of distribution-related interruptions on the worst performing feeder in 2005-06 was similar to the values recorded in 2002-03 and 2003-04, while the time without power on the worst performing feeder decreased further during 2005-06 to its lowest value on record.

None of the worst performing urban feeders in 2005-06 were amongst the 10 worst performing feeders in 2004-05.

During 2005-06, Energex’s 10 worst performing short rural feeders supplied electricity to 7,041 customers (equivalent to 2.4 per cent of Energex’s short rural customer base). On

average, these customers experienced between 4.4 and 13.6 distribution-related interruptions (without adjusting the data for exclusions), leaving them without power for between 15.7 hours and 49.2 hours, the highest value recorded to date.

Only one of the worst performing short rural feeders in 2005-06 was amongst the 10 worst performing feeders in 2004-05.

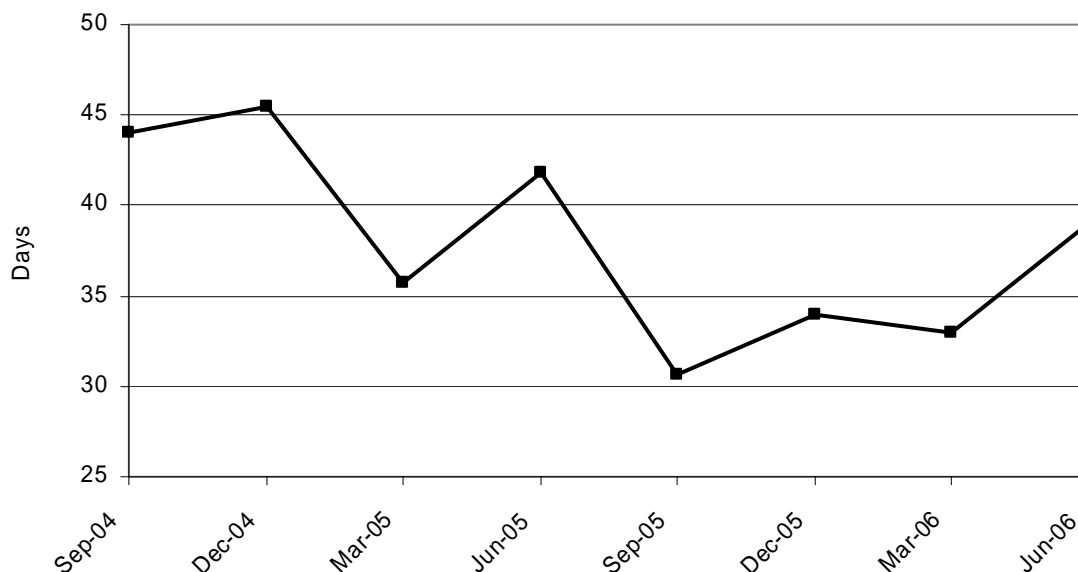
3.2 Quality of Supply Measures

While the total number of technical quality of supply complaints received by Energex increased from 1,773 in 2004-05 to 1,839 in 2005-06, this was still well below the 2,732 complaints received in 2002-03. The largest increases in complaints in 2005-06 were recorded for low supply voltage (which can cause light dimming and motor starting problems) and minor voltage dips (which can cause flickering lights). Table 9 provides a breakdown of complaints for 2005-06 categorised according to the type of symptom reported.

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

| | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 | TOTAL |
|------------------------------------|----------|----------|----------|----------|-------|
| Total quality of supply complaints | 475 | 413 | 569 | 382 | 1,839 |
| Voltage dips –minor | 199 | 138 | 185 | 171 | 693 |
| Low supply voltage | 130 | 153 | 257 | 107 | 647 |
| Voltage swell | 95 | 56 | 73 | 76 | 300 |
| TV or radio interference | 43 | 37 | 26 | 21 | 127 |
| Voltage dips – severe | 1 | 4 | 13 | 3 | 21 |
| Noises from appliances or lights | 1 | 6 | 10 | 2 | 19 |
| Voltage spike | 6 | 4 | 5 | 2 | 17 |
| Other complaints | 0 | 15 | 0 | 0 | 15 |
| Waveform distortion or unbalance | 0 | 0 | 0 | 0 | 0 |

While the average time taken to investigate and resolve a technical quality of supply complaint varied during 2005-06, it was still generally below the levels recorded in 2004-05 (Figure 6). Further historical comparisons of this measure cannot be made due to a change in the reporting of this measure to include the time taken to augment the network to resolve a problem in the September quarter 2004.

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

As shown in Table 10, a majority of the technical quality of supply complaints in 2005-06 were caused by network restrictions or events as in previous years.

Table 10: Energex – quality of supply complaints – possible causes

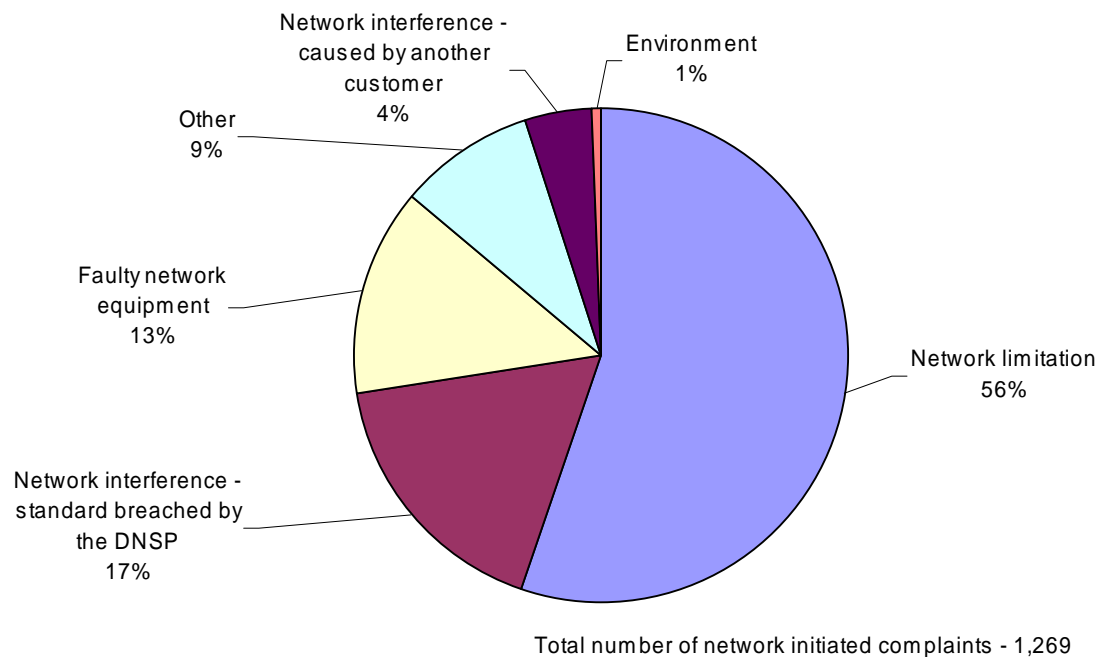
| | 2002-03 | 2003-04 | 2004-05 | 2005-06 |
|--|---------|---------|---------|---------|
| Network initiated quality of supply complaints | 1,692 | 1,479 | 1,134 | 1269 |
| Quality of supply complaints initiated on the customer side of the meter | 264 | 243 | 294 | 210 |
| Quality of supply complaints for which no cause was found | 712 | 572 | 206 | 391 |

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 due to the removal of possible double entries and misclassified complaints.

As shown in Figure 7, network-initiated complaints can be further broken down into sub-categories, of which limitations in the distribution network accounted for 56 per cent of the total. These are defined as problems which required Energex to invest in its network to resolve. For example, by increasing network capacity, upgrading plant or altering control settings.

Interference to the network arising from the operation of equipment by Energex and faulty network equipment explained most of the remaining network-related quality of supply complaints. There were no major changes in the composition of the network-initiated complaints in 2005-06.

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



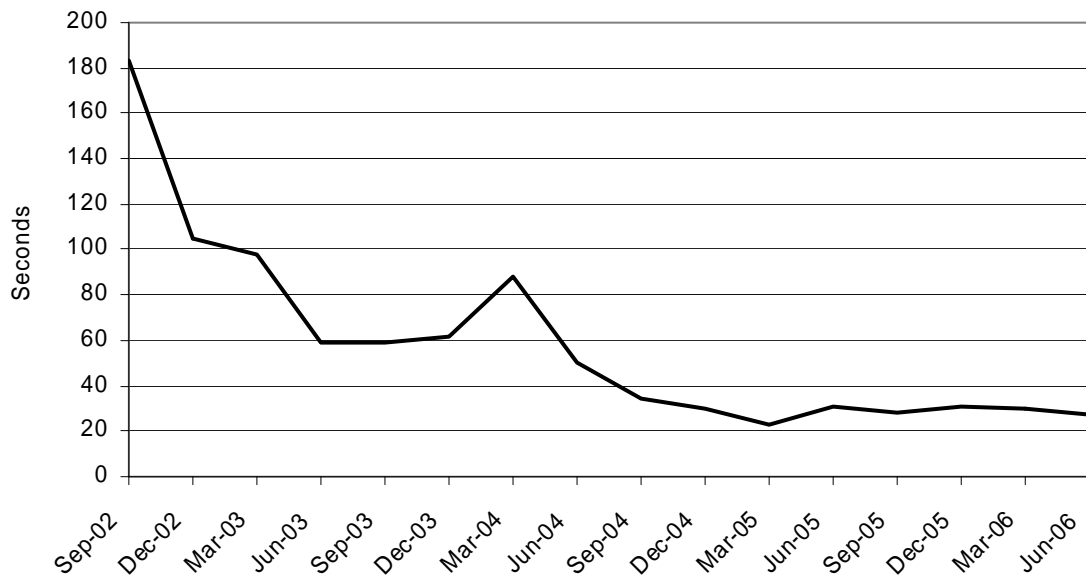
3.3 Customer Service Measures

Energex's performance against a range of customer service measures generally improved during 2005-06.

Energex's call centre performance was relatively unchanged between 2004-05 and 2005-06. However, this performance represented an improvement compared to earlier years.

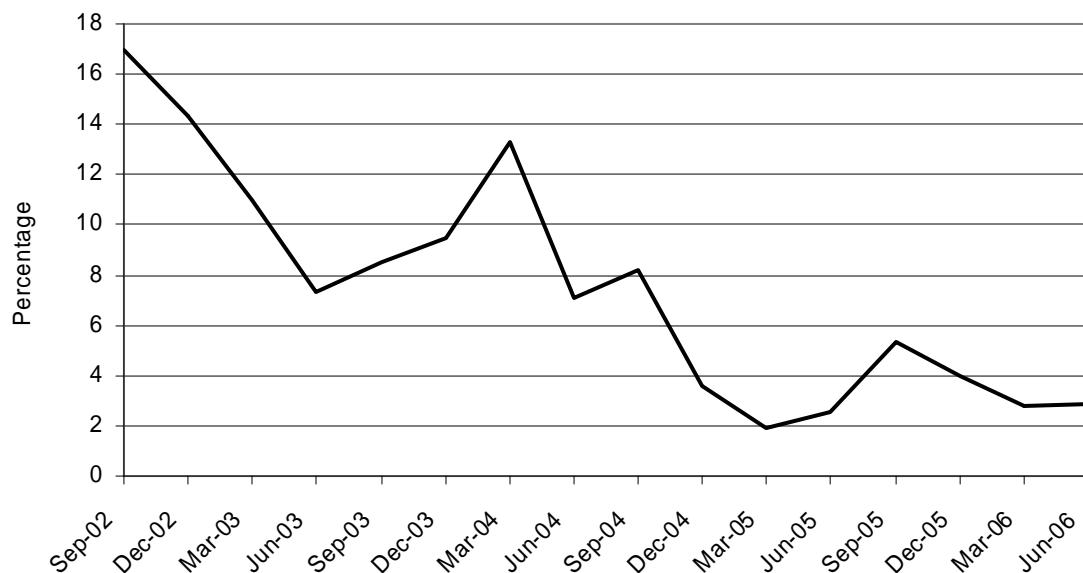
As shown in Figure 8, the length of time that customers have had to wait to speak to an operator when calling the call centre in 2005-06 was relatively steady at around 30 seconds. Prior to 2005-06, this measure had continually improved from the 183 seconds recorded in the September quarter 2002, excepting a 'blip' in the March quarter 2004 related to the severe storms and outages that placed significant pressure on the call centre at that time. Reflecting the recent steady performance in the average time taken to answer calls, 80.2 per cent of calls were answered within 30 seconds during the June quarter 2006 compared to 79.2 per cent of calls in the June quarter 2005.

Figure 8: Energex – average time waiting to speak to an operator



As shown in Figure 9, the percentage of calls abandoned deteriorated slightly from 2.6 per cent in the June quarter 2005 to 2.8 per cent in the June quarter 2006. However, this result still represents a significant improvement from the peak of 17 per cent of calls that were abandoned in the September quarter 2002. The improvement in this measure since the March quarter 2004 reflects measures taken by Energex to increase the capacity of its call centre following the severe storms in the March quarter 2004.

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



As shown in Table 11, the number of complaints that Energex received regarding the reliability of supply in 2005-06 decreased significantly in the June quarter 2006, to a level close to the lowest on record, which occurred in the September quarter 2004. However, because Energex

changed the reporting of this measure in the March quarter 2005, historical comparisons are no longer reliable. The way Energex had previously been reporting complaints resulted in complaints being under-reported.

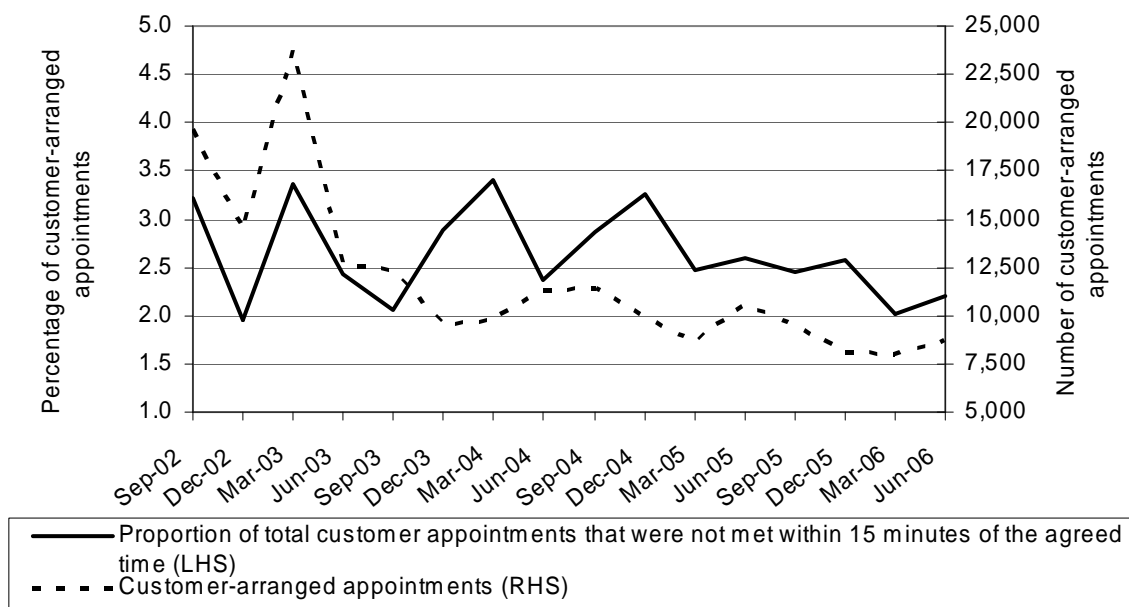
A new requirement of the Authority’s revised Service Quality Reporting Guidelines is the inclusion of complaints relating to momentary interruptions to supply as a sub-category of reliability complaints. Energex was unable to report complaints relating to momentary interruptions for the first two quarters of 2005-06 as upgrades were required to its complaint handling system. These upgrades were finished by December 2005, with Energex recording 7 complaints and 10 complaints in the March and June quarters.

Table 11: Energex – number of reliability complaints

| | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 | TOTAL |
|----------------------------------|----------|----------|----------|----------|-------|
| Number of reliability complaints | 122 | 173 | 184 | 52 | 531 |

The proportion of customer appointments that were not met by Energex within 15 minutes of the agreed time was 2.2 per cent in the June quarter 2006 compared to 2.6 per cent in the June quarter 2005 (Figure 10). The proportion of customer appointments not met within 15 minutes has become less volatile over the past 18 months. The total number of customer-arranged appointments in 2005-06 (34,249) was considerably lower than the total number of appointments in 2004-05 (40,602), which likely assisted the improvement shown in the proportion of customer-arranged appointments that were not met within 15 minutes over the same period. The number of customer-arranged appointments has continually declined each year over the past four years.

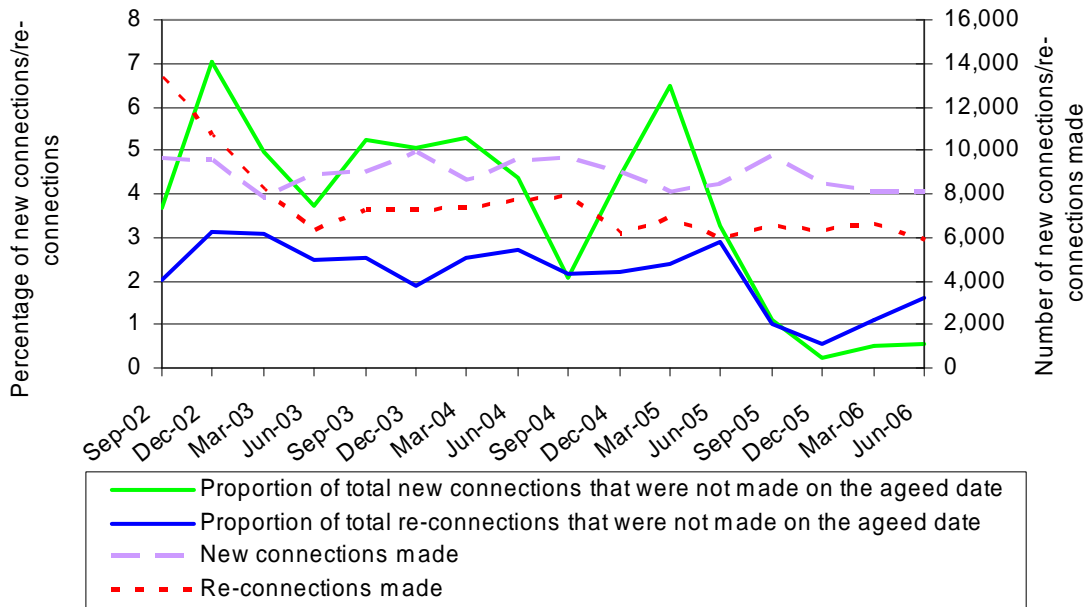
Figure 10: Energex – appointment punctuality



As shown in Figure 11, the proportion of total new supply connections that Energex failed to make by the agreed date fell significantly during 2005-06. The proportion of total re-connections of supply that were not made on the agreed date also fell during 2005-06, but increased somewhat towards the end of the year.

The timeliness of new connections and re-connections appears to have improved despite relatively steady levels of new connections and re-connections.

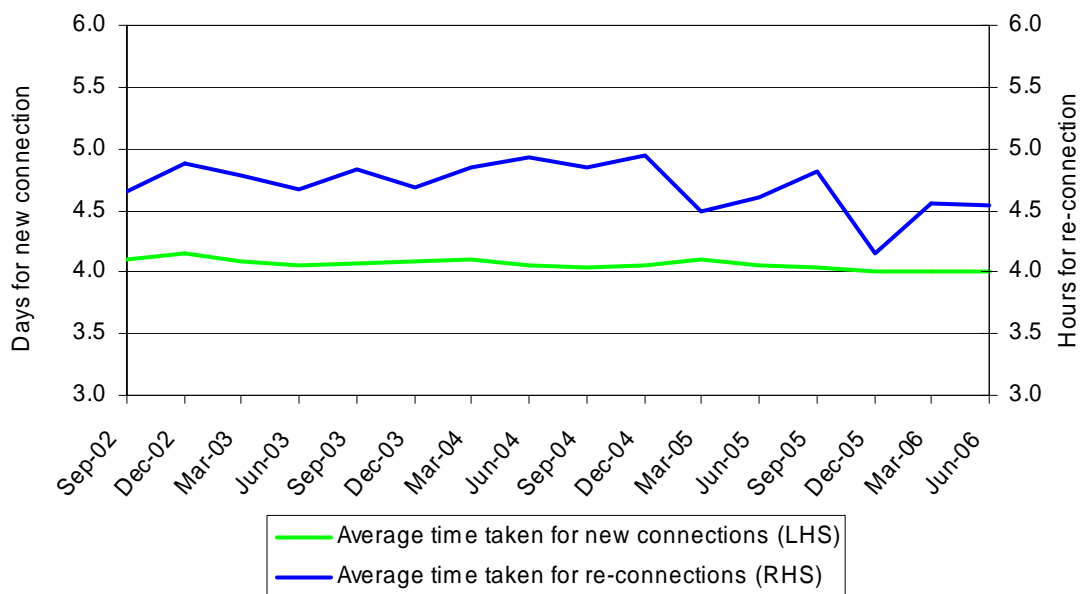
Figure 11: Energex – number of new and re-connections made, proportion of new connections and re-connections not made on the agreed date



As shown in Figure 12, the average length of time that customers had to wait for a new connection to the network has varied little over the last four years, at around 4 days, despite significant variation in the number of new connections made (see Figure 11).

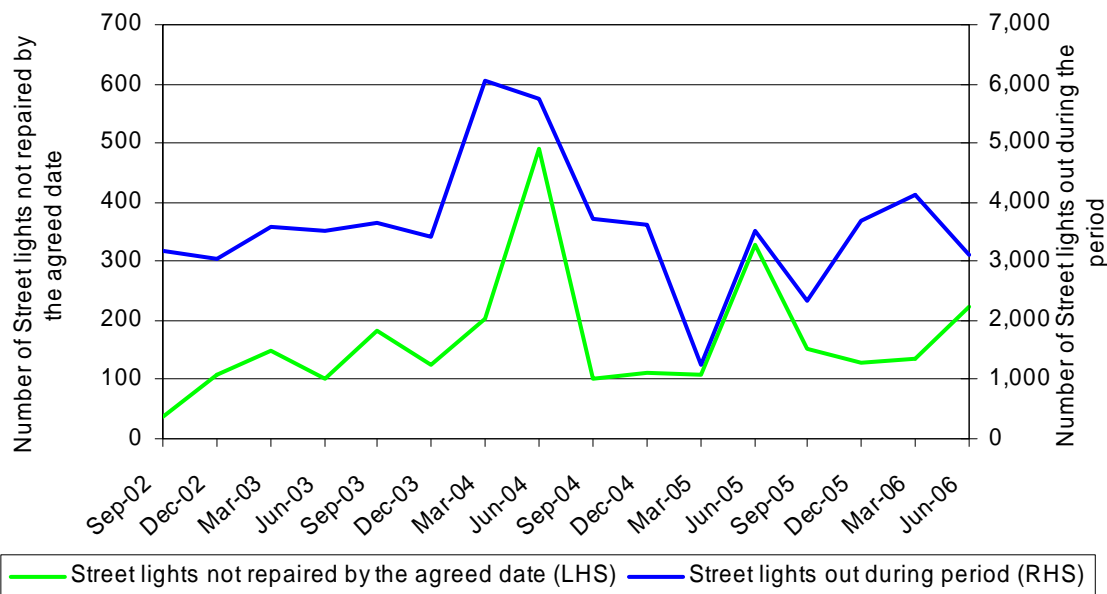
Figure 12 shows that the average time that customers had to wait to be re-connected has varied between 4.5 and 5 hours, with the exception of 4.15 hours recorded for the December quarter 2005.

Figure 12: Energex – average time taken for new connections and re-connections



The number of street lights reported as being out is quite variable, as shown in Figure 13. In 2005-06, the number of streetlights reported out was 10 per cent higher on average than in 2004-05. As in 2003-04 and 2004-05, the number of street lights not repaired by the agreed date peaked in the June quarter.

Figure 13: Energex – street light maintenance



The average time taken to repair faulty street lights was 5 days in the June quarter 2006 compared to 4 days in the June quarter 2005. This measure has varied between 3 days and 5 days since reporting began under the Guidelines.

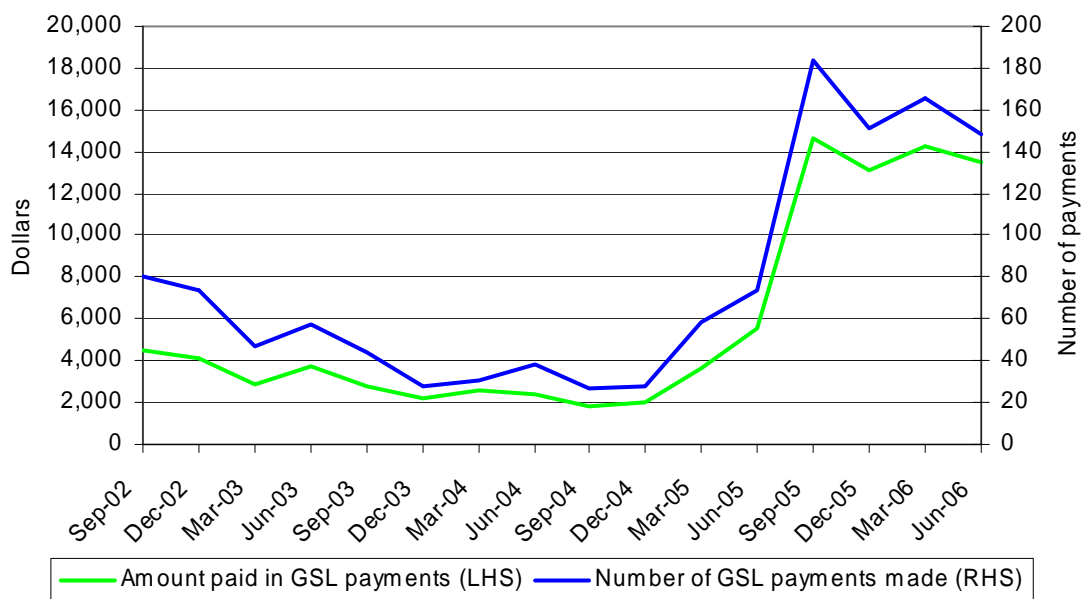
Table 12: Energex – average time taken to repair faulty street lights

| | JUN 2005 | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 |
|--|----------|----------|----------|----------|----------|
| Average number of days taken to repair street lights | 4 | 3 | 5 | 5 | 5 |

The number of Guaranteed Service Level (GSL) payments and the amounts paid for GSLs both increased significantly in 2005-06 compared to 2004-05 (Figure 14). This was due to the introduction of a GSL scheme mandated by the Queensland Government from 1 January 2005.³

³ 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. From 1 July 2005, the distributors must use their best endeavours to automatically make most GSL payments to customers, although a few GSLs will still require the customer to make a claim. Information on the Government’s GSL scheme is available at www.energy.qld.gov.au

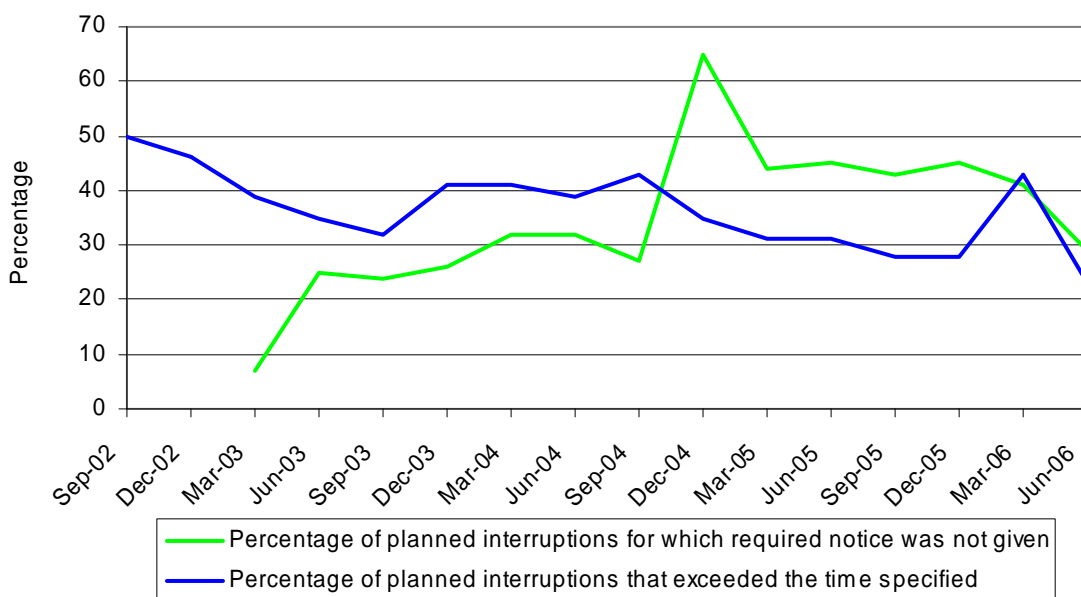
Figure 14: Energex – guaranteed service level payments



The proportion of occasions on which the required notice of a planned interruption to supply was not given (see Figure 15) was 29 per cent in the June quarter 2006 compared to 45 per cent in the June quarter 2005. Energex stated that the large increase in this measure for the December quarter 2004 was due to problems it encountered after changing the process for recording planned interruptions.

The proportion of occasions on which the duration of a planned interruption exceeded the time specified in the notification was at a record low of 23 per cent during the June quarter 2006, despite peaking to 43 per cent in the March quarter (Figure 15). Energex stated that the dip in performance during the March quarter was within the historical range for this measure.

Figure 13: Energex – notification of commencement and duration of planned interruptions



The basis for reporting customer service complaints was changed in the Authority's revised Service Quality Reporting Guidelines (August 2005). As a result, it is not possible to compare results from September quarter 2005 with earlier results. In addition, Energex commenced reporting complaints about meter reading from the March quarter 2006. This caused another break in the series.

As shown in Table 13, complaints about meter reading were the single most important cause of complaints since they were included in the reporting. Complaints regarding the timeliness of service delivery and trees interfering with power lines were other important causes of complaints during 2005-06.

Table 13: Energex – complaint resolution – reasons for complaints

| | SEP 2005 | DEC 2005 | MAR 2006 | JUN 2006 | TOTAL |
|--------------------------------|----------|----------|----------|----------|-------|
| Total number of complaints | 741 | 713 | 1,357 | 1,055 | 3,866 |
| Meter reading complaints | - | - | 591 | 456 | 1,047 |
| Timeliness of service delivery | 211 | 175 | 169 | 151 | 706 |
| Trees | 150 | 146 | 161 | 108 | 565 |
| Damage to property | 94 | 108 | 104 | 69 | 375 |
| Condition of worksite | 70 | 79 | 94 | 83 | 326 |
| General complaints | 80 | 74 | 69 | 74 | 297 |
| Staff behaviour | 71 | 61 | 82 | 53 | 267 |
| Driving | 18 | 17 | 26 | 20 | 81 |
| Poles | 9 | 17 | 30 | 18 | 74 |
| Streetlights | 25 | 10 | 20 | 9 | 64 |
| Vehicles | 8 | 13 | 6 | 8 | 35 |
| Transformer | 5 | 13 | 5 | 6 | 29 |

The rate at which Energex resolved complaints within 20 days was 97 per cent by the last quarter of 2005-06. The average time taken to resolve complaints fell from 9 days in the September quarter 2005 to 3 days in the June quarter 2006. This result is explained partly by the mid-year inclusion of meter reading complaints, which took only 2 days on average to resolve during the June quarter 2006.

The number of repeat complaints peaked at 13 in the March quarter 2006 before dropping significantly to 6 in the June quarter. The average time taken to resolve repeat complaints fell steadily over 2005-06, from 13 days in the September quarter 2005 to 9 days in the June quarter 2006.

APPENDIX A

FINANCIAL DATA TABLES – 2001-02 to 2004-05

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

| | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 |
|--|-----------|-----------|-----------|-----------|-----------|
| Revenue | | | | | |
| Forecast sales | 467.3 | 497.0 | 523.6 | 545.7 | 626.8* |
| Actual sales | 468.4 | 505.1 | 535.9 | 551.1 | 652.7* |
| Expenditure | | | | | |
| Forecast operating and maintenance expenditure | 161.7 | 168.9 | 176.4 | 184.2 | 225.9 |
| Actual operating and maintenance expenditure | | | | | |
| Operating expenditure | 49.7 | 15.1 | 13.0 | 19.2 | 70.5 |
| Maintenance expenditure | 80.5 | 105.9 | 122.4 | 151.0 | 163.6 |
| Total | 130.2 | 121.0 | 135.4 | 170.2 | 234.1 |
| Forecast depreciation | 157.0 | 165.3 | 173.1 | 179.9 | 225.9 |
| Actual depreciation | 130.6 | 156.7 | 163.7 | 167.6 | 211.1 |
| Total expenditure (forecast) | 318.7 | 334.2 | 349.5 | 364.1 | 451.8 |
| Total expenditure (actual) | 260.8 | 277.7 | 299.1 | 337.8 | 445.2 |
| Customer contributions | | | | | |
| Forecast | 23.3 | 24.0 | 24.6 | 25.1 | 35.9 |
| Actual | 23.9 | 24.8 | 45.8 | 40.8 | 38.8 |
| Tax paid | | | | | |
| Forecast | | | | | 7.6 |
| Actual | | | | | 24.0 |
| Capital expenditure | | | | | |
| Forecast | 254.3 | 257.9 | 253.3 | 256.0 | 578.7 |
| Actual | 270.6 | 281.7 | 302.9 | 526.5 | 725.0 |
| Fixed assets | | | | | |
| Forecast | 3,020.4 | 3,176.7 | 3,323.8 | 3,469.7 | 4,823.6 |
| Actual | 2,977.6 | 3,169.9 | 3,313.3 | 4,371.9 | 5,022.8 |
| Energy Sales (million MWh) | | | | | |
| Actual | 17.2 | 17.8 | 19.0 | 19.7 | 20.8 |
| Number of customers | | | | | |
| Actual | 1,105,100 | 1,129,940 | 1,160,112 | 1,190,237 | 1,217,193 |

* Includes network and non-network services

Table A2: Revenue – Energex (\$ million (nominal))

| Revenue source* | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 |
|---|---------|---------|---------|---------|---------|
| Sales | | | | | |
| Network services (excl public lighting) | 468.4 | 505.1 | 515.0 | 531.6 | 607.5 |
| Public lighting | n/a | n/a | 20.9 | 19.5 | 25.2 |
| Total network services | 468.4 | 505.1 | 535.9 | 551.1 | 632.7 |
| TUOS pass-through | 126.0 | 160.0 | 166.0 | 175.0 | 187.0 |
| Non Network Services | 9.4 | 14.2 | 11.7 | 7.7 | 20.0 |
| Total services | 603.8 | 679.3 | 713.6 | 733.8 | 839.7 |
| Capital contributions | 23.9 | 24.8 | 45.8 | 40.8 | 38.8 |
| Profit from sale of assets | 1.1 | 1.2 | 0.4 | (0.6) | 0.2 |
| Proceeds from sale of assets | 6.3 | 12.9 | 6.5 | 3.7 | 5.0 |
| Book value of assets sold | 5.2 | 11.7 | 6.1 | 4.3 | 4.8 |
| Other revenue | 2.3 | 2.4 | 2.1 | 1.7 | 2.2 |

* May not sum due to rounding.

Table A3: Operating and maintenance expenditure - Energex (\$ million (nominal))

| Expenditure* | |
|--|--------------|
| Operating expenditure | |
| Meter reading | 12.8 |
| Customer service | 11.1 |
| Advertising and marketing | 2.4 |
| Full retail contestability | 1.3 |
| Other – | |
| Network Operations | 15.2 |
| Recoverable works | 17.4 |
| Other | 10.4 |
| Total | 70.5 |
| Public street lighting | 0 |
| Total operating expenditure | 70.5 |
| Network maintenance expenditure | |
| Inspection | 12.6 |
| Maintenance and repair | 60.3 |
| Vegetation management | 67.9 |
| Emergency Response | 10.8 |
| Other | 0 |
| Total | 151.6 |
| Public street lighting | 12.0 |
| Total maintenance expenditure | 163.6 |
| Total operating and maintenance expenditure | 234.2 |

* May not sum due to rounding.

Table A4: Depreciation – Energex (\$ million (nominal))

| Asset | |
|------------------------------------|--------------|
| System Assets: | |
| overhead sub-transmission lines | 9.0 |
| underground sub-transmission lines | 15.1 |
| overhead distribution lines | 34.1 |
| underground distribution lines | 19.9 |
| distribution equipment | 6.9 |
| substation bays | 14.6 |
| substation establishment | 9.2 |
| substation switchgear | 1.5 |
| zone transformers | 8.1 |
| distribution transformers | 21.8 |
| low voltage services | 2.7 |
| meters | 7.9 |
| communications | 3.4 |
| street lighting | 19.3 |
| Non-System Assets: | |
| communications | 0.1 |
| control centre -SCADA | 3.7 |
| IT systems | 15.1 |
| office furniture and equipment | 0.3 |
| motor vehicles | 16.2 |
| research and development | 0.1 |
| buildings | 0.9 |
| easements | 0 |
| land | 0 |
| Total | 209.8 |

Table A5: Expected and remaining lives of assets - Energex

| Asset | Expected weighted average economic life (weighted by optimised replacement cost (ORC)) (years) | Weighted average remaining economic life (weighted by ORC) (years) |
|------------------------------------|---|---|
| System Assets: | | |
| overhead sub-transmission lines | 41 | 29 |
| underground sub-transmission lines | 54 | 40 |
| overhead distribution lines | 35 | 25 |
| underground distribution lines | 61 | 49 |
| distribution equipment | 35 | 28 |
| substation bays | 43 | 32 |
| substation establishment | 39 | 35 |
| substation switchgear | 40 | 30 |
| zone transformers | 40 | 34 |
| distribution transformers | 35 | 26 |
| low voltage services | 35 | 30 |
| meters | 25 | 17 |
| communications | 28 | 24 |
| street lighting | 20 | 14 |
| Non-System Assets: | | |
| communications | 7 | 5 |
| control centre -SCADA | 12 | 5 |
| IT systems | 5 | 3 |
| office furniture and equipment | 7 | 4 |
| motor vehicles | 8 | 7 |
| research and development | 5 | 0 |
| buildings | 40 | 33 |
| easements | - | - |
| land | - | - |

Table A6: Asset values – Energex (\$ million (nominal))

| Asset* | |
|------------------------------------|----------------|
| System Assets: | |
| overhead sub-transmission lines | 206.5 |
| underground sub-transmission lines | 307.3 |
| overhead distribution lines | 648.6 |
| underground distribution lines | 997.1 |
| distribution equipment | 62.6 |
| substation bays | 396.8 |
| substation establishment | 214.5 |
| substation switchgear | 54.1 |
| zone transformers | 258.1 |
| distribution transformers | 640.6 |
| low voltage services | 137.7 |
| meters | 133.6 |
| communications | 26.8 |
| street lighting | 237.0 |
| Non-System Assets: | |
| communications | 0.2 |
| control centre -SCADA | 12.5 |
| IT systems | 35.7 |
| office furniture and equipment | 0.9 |
| motor vehicles | 96.1 |
| research and development | 0 |
| buildings | 32.1 |
| easements | 217.7 |
| land | 21.0 |
| Work in progress | 285.4 |
| Total | 5,022.8 |

* May not sum due to rounding.

Table A7: Capital Expenditure and additions – Energex (\$ million (nominal))

| Capital expenditure* | |
|------------------------------------|--------------|
| System Assets: | |
| overhead sub-transmission lines | 45.1 |
| underground sub-transmission lines | 60.8 |
| overhead distribution lines | 90.1 |
| underground distribution lines | 123.6 |
| distribution equipment | 11.1 |
| substation bays | 60.0 |
| substation establishment | 16.1 |
| substation switchgear | 2.8 |
| zone transformers | 56.1 |
| distribution transformers | 72.3 |
| low voltage services | 44.2 |
| meters | 1.0 |
| communications | 4.0 |
| street lighting | 16.8 |
| Non-System Assets: | |
| communications | 0 |
| control centre -SCADA | 0 |
| IT systems | 28.3 |
| office furniture and equipment | 0.2 |
| motor vehicles | 58.3 |
| research and development | 0 |
| buildings | 0 |
| easements | 0.3 |
| land | 33.8 |
| Total | 725.0 |

* May not sum due to rounding.

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

| Capital expenditure | |
|--------------------------------------|--------------|
| Asset replacement | 39.9 |
| Demand related | 547.6 |
| Reliability and quality improvements | 14.3 |
| Other | 122.2 |
| Total | 725.0 |

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

| Transaction | |
|---|------|
| Total value of related party transactions | 39.0 |
