



ICRC

independent competition and regulatory commission

Licensed Electricity, Gas and Water and Sewerage Utilities Performance Report for 2005–06

Report 5 of 2008

December 2008

The Independent Competition and Regulatory Commission (the Commission) was established by the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act) to determine prices for regulated industries, advise government about industry matters, advise on access to infrastructure, and determine access disputes. The Commission also has responsibilities under the ICRC Act for determining competitive neutrality complaints and providing advice about other government-regulated activities. Under the *Utilities Act 2000*, the Commission has responsibility for licensing utility services and ensuring compliance with licence conditions.

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Foreword

This is the fifth annual performance report prepared by the Independent Competition and Regulatory Commission (the Commission) on utilities licensed under the Australian Capital Territory (ACT) *Utilities Act 2000*. The report complements the *Compliance report for 2005–06* published by the Commission in November 2007 (Report 10 of 2007).

The compliance report documents compliance with a broad range of obligations imposed on licensed utilities by ACT regulatory instruments: the Utilities Act, utility licences and industry codes made under the Utilities Act. The performance report has a broader focus in relation to utilities: in particular, financial performance, customer service standards, safety net arrangements and the environment. Much of the data contained in the performance report is derived from utility reporting against performance indicators that have been agreed nationally by the Utility Regulators' Forum, a cooperative arrangement of state and national utility regulators.

The Commission is the ACT's principal regulator of energy and water and sewerage businesses. At the time the report was completed, the Commission had responsibility for setting prices for water and sewerage and for retail electricity. The Commission's economic regulatory responsibilities for electricity and gas distribution businesses transferred to the Australian Energy Regulator (AER) in January 2008. The Commission also performs a non-economic regulatory function through its administration of the utility licence framework established under the Utilities Act. Its energy licensing functions will eventually transfer to the AER, in line with a nationally agreed timetable.

In its capacity as regulator, the Commission monitors and enforces utilities' compliance with obligations placed on them through the Utilities Act, utility licences, and industry and technical codes.

While reporting performance information is part of a utility's obligations under the conditions of its licence, reporting is also an important public accountability mechanism. It provides assurance that service quality and other service obligations are being met. Through these reports, regulators and consumers can judge whether utilities are meeting their service obligations, and assess how utilities in the ACT perform in comparison with the market in general.

This performance report provides a commentary on key indicators using year-by-year comparisons and trend analysis for the period from 2001–02 to 2005–06. Some limited benchmarking is undertaken through comparisons between the performance of ACT utilities and similar utilities in other jurisdictions.

In producing this report, the Commission also aims to provide a wider picture of the state of the ACT's energy and water markets.

The form of the report and the approach taken are broadly consistent with previous Commission reports.

Paul Baxter
Senior Commissioner

December 2008

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Executive summary

This report reviews the performance of licensed utilities that supplied the ACT during 2005–06. The utility services examined include electricity and gas distribution, the retailing (supply) of gas and electricity, and the provision of water and sewerage services.

The following areas of performance are reviewed:

- financial performance
- customer service
- non-price safety net arrangements
- environmental impact.

Financial performance information is provided for licensed energy retailers (for example, total revenue, customer characteristics, consumption, and average consumption, billing and costs), the ACT's sole electricity distributor (for example, revenue, operating costs and earnings), and the ACT's supplier of water and wastewater services (for example, revenue, consumption, operating costs and earnings). Customer service is primarily concerned with customer complaints, network service quality and call centre performance. The section on non-price safety net arrangements deals with indicators relevant to customer access to utility services and customers' ability to pay bills. The environmental impact of utilities is measured by greenhouse gas emissions, consumption efficiency and network losses. There is also a brief commentary on certain gas network operational matters.

General trends

Electricity

Most of the electricity sold in the ACT is sourced from National Electricity Market (NEM) generators elsewhere in Australia. Less than 2% of the ACT's total electricity is generated in the ACT. The ACT has one licensed electricity distributor: ActewAGL Distribution. Fifteen utilities were licensed to supply electricity in the ACT in 2005–06. Overall, electricity supply customer numbers increased by 2.1% over the 12 months ending June 2006 to 146,597. Customer numbers increased in the residential sector (by 3.4%) but decreased in the non-residential sector (by 11%). Electricity suppliers reported sales of 2821 gigawatt hours in 2005–06, an increase of 3.8% over sales for the preceding year.

In 2005–06, the average electricity consumption in the ACT was 19.2 megawatt hours per customer, up from 18.9 megawatt hours the previous year. Residential consumption averaged between 8.5 and 8.8 megawatt hours per year over the past five reporting periods, and has declined slightly over the past two years. Conversely, average non-residential consumption increased, from 109.6 megawatt hours per customer in 2001–02 to 142.8 megawatt hours in 2005–06.

At 8.4 megawatt hours per residential customer, the level of residential consumption in the ACT was higher than the Australian average of 6.9 megawatt hours and was one of the highest in Australia. Only Tasmania's and the Northern Territory's residential consumption were greater.

The ACT's high level of residential electricity consumption is linked to heating demands in winter and the lower penetration of gas in the ACT energy market compared with some other jurisdictions.

By contrast, the level of electricity consumption for all customers (residential and other) in the ACT (19.2 megawatt hours per customer) was less than the average for Australia of 20.6 megawatt hours per customer. This may be attributable to the ACT's relatively small industrial and manufacturing sector.

The ACT electricity retail market comprises mainly residential customers, accounting for 92.1% in 2005–06, a slight increase on the levels of earlier years. Non-residential customers, however, accounted for a greater share of electricity consumption, rising from 56.7% of total consumption in 2001–02 to 58.8% in 2005–06.

From 1998, the ACT's electricity market has been progressively opened to competition. In June 2003, the market was opened to small customers, enabling them to switch retailers. Since then, the number of customers switching has gradually increased after an initial period of limited activity. Between July 2004 and June 2006, around 5,800 small customers transferred to a new electricity supplier. Another 20,875 residential customers (about 16.3% of all ActewAGL's residential customers) switched from the standard customer contract to a negotiated contract with ActewAGL Retail during this period.

In 2005–06, only four retailers supplied more than 100 customers, unchanged from 2004–05. About half of the ACT's electricity suppliers supply fewer than 10 customers each.

Gas

Natural gas accounts for about 9.3% of total energy consumption in New South Wales and the ACT. During 2005–06, ActewAGL Distribution was the only entity that held a gas distribution licence in the ACT, authorising it to provide gas distribution and gas connection services.

ActewAGL Distribution's customer base for gas is smaller than for electricity but is steadily growing. Customer supply points increased from 88,659 to 91,330 (or about 3%) between 2004–05 and 2005–06. In 2005–06, 7,731 terajoules was distributed—9.7% more than in 2004–05.

During 2005–06, five entities were licensed to supply gas in the ACT. There were 88,966 gas supply customers in the ACT in 2005–06, an increase of 2.6% over 2004–05 (86,752). Approximately 98% of the customers were residential.

In 2005–06, 6,857 terajoules of gas was sold in the ACT, up 5.1% from 2004–05 (6,525 terajoules). Residential sales increased by 3.5% and non-residential sales increased by 7.9% over 2004–05. Average gas consumption also increased, from 75 gigajoules per customer in 2004–05 to 77 gigajoules per customer in 2005–06.

As with electricity consumption, the rate of residential gas consumption in the ACT is comparatively high, second only to Victoria. However, overall consumption in the ACT is still less than the Australian average (102.3 gigajoules per connection), although this difference is narrowing.

Water and sewerage

Water

ACTEW Corporation was the only entity licensed to supply water and sewerage services in the ACT in 2005–06. In 2005–06, ACTEW Corporation delivered 52,470 megalitres of water to ACT customers and 4,353 megalitres to Queanbeyan (bulk water). In addition, under the environmental flow requirements, ACTEW Corporation released 59,500 megalitres to the environment.

A total of 138,432 ACT properties were supplied with water in 2005–06, around 95% of which were residential. There was a slight increase (0.8%) between 2004–05 and 2005–06 in the overall number of properties (residential and non-residential) supplied.

There was a general downward trend in the amount of water supplied between 2001–02 and 2004–05, before a slight increase in 2005–06. Low-level water conservation measures were introduced in December 2002, and more severe water restrictions were in force from May 2003 to October 2005. From 2001–02 to 2005–06, ACT consumers reduced their use of water by an average of 14%. Residential premises consumed about 14% less water overall, while consumption for non-residential purposes declined by 13%.

Water supplied by ACTEW Corporation is mainly for residential purposes. This is similar to most other Australian water suppliers sampled. In 2005–06, the average volume of water supplied per residential property across the water suppliers sampled was 237 kilolitres if Power and Water (Northern Territory) is included, and 214 kilolitres if it is excluded. Average consumption per residential property for ACTEW Corporation was 261 kilolitres per property in 2005–06.

Average water consumption for all properties during the year (residential and non-residential) was 364 kilolitres per property for all the sampled water suppliers. Excluding Power and Water (Northern Territory), the average consumption for all properties was 321 kilolitres per property, while consumption averaged 379 kilolitres per property in the ACT.

Before 2003–04, the level of water consumption for ACT residential premises was consistently higher than for premises in other metropolitan areas of Australia, including Darwin. In 2004–05, the ACT average was less than the average water consumption in the other sample areas, and equal to the average if Darwin is excluded. However, by 2005–06 the ACT average again exceeded the national average.

Sewerage

The overall number of premises connected to the sewerage network increased from 132,842 in 2004–05 to 138,432 in 2005–06, an increase of 4.2%. Customer numbers increased by 2.2% to 133,217 over the same period.

In 2005–06, ACTEW Corporation operated 2,985 kilometres of sewerage mains and channels and collected 31,976 megalitres of sewage. The volume of sewage collected per property increased significantly in 2005–06, to reach 232 kilolitres per property in 2005–06.

Financial performance

Electricity supply

In 2005–06, 13 of the 15 companies licensed to supply electricity participated in the retail market. Most received less than \$5 million in revenue. In 2005–06, three companies earned revenue over \$10 million from the sale of electricity in the ACT, the same as in 2004–05. The most active market for electricity is the non-residential market, with a number of companies competing for market share.

Utilities reported that for 2005–06 the average delivered price for electricity ranged from 8.04 cents to 14.88 cents per kilowatt hour. The average price for the entire market was 10.40 cents per kilowatt hour. For residential customers, the average price was 11.01 cents per kilowatt hour, whereas for non-residential customers the average price was 9.96 cents per kilowatt hour. Total revenue rose by 9.3% to reach \$290 million, mainly because of increases in the total number of customers (2.1%) and total consumption (3.7%).

As a result of higher electricity consumption and a higher cost of electricity per megawatt, the average residential bill increased by 6.4% to \$948 and the average non-residential bill increased by 22% to \$13,900, resulting in an overall increase in the average customer bill of 7.0% from \$1,844 to \$1,975.

Electricity distribution

Overall, ActewAGL Distribution revenue has increased over the past few years, although in 2004–05 the revenue earned from regulated network charges dropped following the introduction of a new price direction. Operating costs have increased over recent years, reflecting increasing maintenance requirements of ageing assets and costs of operating an expanding network.

The total revenue earned from the distribution of electricity increased to \$114.8 million. Operating costs increased to \$45.2 million while depreciation fell slightly to \$21.6 million. ActewAGL Distribution spent \$31.9 million on capital expenditure in 2005–06.

The average residential network charge for electricity increased by 9.9% from 2004–05 to 2005–06, rising from 3.32 cents to 3.65 cents per kilowatt hour. The average non-residential charge decreased by 19.6%, from 4.44 cents to 3.57 cents per kilowatt hour.

Gas supply

The market for gas in the ACT has been steadily growing over the past few years, with residential customer numbers increasing by 2.5% and non-residential customer numbers up by 3.6% from 2004–05 to 2005–06.

From 2004–05 to 2005–06, the average residential bill increased by around 0.3% to \$750, while the average non-residential bill decreased by 11.5% to \$10,685. This resulted in an overall decrease in the average customer bill of 2.6% to \$969, down from \$995 in 2004–05.

Total revenue remained unchanged despite an increase in consumption. Average costs per gigajoule fell overall during 2005–06. The average non-residential cost of gas decreased by 15.0%

to \$8.30 per gigajoule, while residential costs fell by 0.7% to \$15.10 per gigajoule. The overall average cost declined 4.9% to \$12.58 per gigajoule.

Water and wastewater

ACTEW Corporation's water supply revenue increased by 21.5% to \$63.8 million in 2005–06, mainly due to an increase in water supplied and increases in prices reflecting an under-recovery of anticipated efficient costs due to water restrictions in previous years.

From 2004–05 to 2005–06, ACTEW Corporation's sewerage services revenue increased to \$72.4 million, an increase of 6.6%. This continued a trend of increasing revenues each year since 2002–03, reflecting the growth of the customer base.

Customer service

Complaints

The ACT's Consumer Protection Code establishes a range of minimum service standards. From 1 July 2005, service standard 3 (on responding to complaints) was extended to include verbal as well as written complaints. The figures and trends in this report must be viewed against the background of that change of definition.

The nature of the most common complaints in 2005–06 varied with the type of services:

- electricity distribution–customer service (32% of total complaints)
- gas distribution–metering and meter reading (61% of total complaints)
- electricity supply–marketing (51% of total complaints)
- gas supply–billing and affordability (71% of total complaints)
- water and sewerage–water quality (74% of total complaints).

During 2005–06, ActewAGL Distribution complaints ratio was 5.81 per 1,000 customers, the same ratio as in 2004–05, and one that is higher than those of other distributors surveyed. Customer service complaints increased significantly to reach almost 32% of all complaints, an increase which may be due to the change in the definition of 'complaint'.

The incidence of electricity supply complaints increased over each of the previous three reporting periods. In 2005–06, the number of complaints increased to 3.47 complaints per 1,000 customers. The increase coincided with increased activity in the competitive electricity market. While the rate of complaints received by ACT suppliers increased significantly, it remains low compared with other jurisdictions.

The second most marked increase in complaint activity was in relation to water and sewerage services, an increase which again may be due to the change in the definition of 'complaint'. Complaints increased about 67% from 5.03 per 1,000 customers in 2004–05 to 8.39 in 2005–06. As in 2004–05, around three-quarters of complaints related to water quality.

Network service quality

Electricity

ActewAGL Distribution made 3,202 new connections in 2005–06 (about 2.1% of its customer base), and reported that all new connections were made on or before the date agreed with the customer.

On average, each customer experienced 49.5 minutes off supply for planned interruptions in 2005–06. This was an increase over previous years and was attributable to a greater amount of planned maintenance and, to a lesser extent, to connections of new electricity load. Performance for rural short feeders and, to a lesser extent, urban feeders declined between 2004–05 and 2005–06.

Compared with 2004–05, the average duration of unplanned outages for each urban customer increased in 2005–06, but decreased significantly for rural short feeders. The frequency of outages increased both for urban feeders and for rural feeders, reaching almost three outages per customer for rural feeders. There was an increase in the average duration of outages for urban feeders and for the network as a whole, but a significant improvement for rural feeders.

The performance of the ACT electricity distribution network continued to compare favourably to that of distribution networks in other jurisdictions.

Gas

ActewAGL Distribution reported 0.02 interruptions per 1,000 customers (where five or more customers lost supply) in 2005–06. This rate is consistent with the low figures reported since 2001–02 (apart from the time of the 2003 bushfire).

In 2005–06, there were 195 mechanical or third-party damage incidents to ActewAGL Distribution's medium-pressure system mains and services. While such incidents are largely out of the control of the utility, their incidence is high by comparison to Victoria. No incidents were reported for the high-pressure system.

The incidence of gas leaks reported by the public decreased by 7% (to 1,060) in 2005–06. There were no reported leaks from the high-pressure system. A further 431 leaks were detected by survey. The total number of leaks detected by survey and reported by the public for 2005–06 equated to 413 leaks per 1,000 kilometres of pipeline, which is far lower than for Victorian gas distributors surveyed.

Water

In 2005–06, as in previous years, ACTEW Corporation's network performed well compared with the other water suppliers, as measured by customer minutes off supply. There was an increase in the frequency of planned interruptions in 2005–06. The average duration of planned water interruptions also increased. Nonetheless, this was relatively low (at 71 minutes) compared to sampled Victorian water suppliers.

The number of unplanned interruptions to water services also increased, as did the average outage time experienced by customers. In 2005–06, the average duration of interruptions was about 34 minutes per customer, compared to about 30 minutes in 2004–05 and 18 minutes in 2003–04.

Sewerage

The number of unplanned interruptions to sewerage services decreased by around one-third between 2004–05 and 2005–06, with ACTEW Corporation reporting 1,847 unplanned interruptions to sewerage services in 2005–06 compared with 2,777 in 2004–05. This equates to 13.3 unplanned interruptions per 1,000 properties. The average duration of outages and the total outage time experienced by an average customer both increased significantly compared to 2004–05. The average duration was 137.4 minutes per incident, and almost 2 minutes interruption for the average customer.

In 2005–06, there were 3,203 sewer main breaks or chokes (24 breaks or chokes per 1,000 properties) and a further 1,849 breaks or chokes to property connection branches or drains. This is significantly higher than for sampled utilities in other parts of Australia. Tree roots are a particular problem for ACTEW Corporation; they are estimated to be responsible for over 91% of the main breaks and chokes and 86% of the property connection breaks and chokes. ACTEW Corporation outperformed sampled utilities in the average repair time for breaks and chokes.

The incidence of sewage overflows steadily increased between 2000–01 and 2004–05, but fell by 28% in 2005–06. Despite this, in 2005–06, ACTEW Corporation had by far the highest incidence of overflows per 100 kilometres of sewer main (76.8) of sampled utilities. Again, tree roots are implicated.

Call centre performance

Telephone responsiveness is one of several indicators used to measure the quality of customer service. Call centre performance for ACT licensees varied significantly, both between and within utility sectors. It is difficult to draw overall conclusions about relative performance because of the differences in the types of services that utilities provide, the nature of the call centres, and the types of calls made to the various call centres.

While this is the case, some observations can be made. In 2005–06, ActewAGL Distribution recorded a rise (to 22%) in the percentage of calls related to electricity services being abandoned. ActewAGL Retail recorded a decrease in the percentage of calls answered within 30 seconds (to 77%).

Overall, ACTEW Corporation maintained its performance from 2004–05, answering 85% of non-emergency calls within 30 seconds (although average waiting time rose to 45 seconds) and holding the abandoned call rate to 3%. For emergency calls, 77% were answered within 30 seconds (with an average waiting time of 29 seconds) and an abandoned call rate of 4%.

Call centre performance for ACT electricity suppliers has generally improved across all indicators over the past four years.

Non-price safety net arrangements

Access to utility services is determined by the availability of the infrastructure and the ability of customers to pay bills (a function of the price of the service and of demand). Accessibility is also influenced by utilities' safety net arrangements (for example, availability of instalment plans and flexibility in payment arrangements) and credit management strategies (for example, security deposits).

Customers' ability to access services is measured by a suite of hardship indicators, such as disconnection for non-payment of accounts, reconnection of customers within seven days of disconnection, the use of instalment payment plans, direct debit defaults, and the use of security deposits.

Disconnection for non-payment of accounts

Disconnection for failure to pay an account is very much a last resort for suppliers attempting to recover a debt and, therefore, is a fair indicator of affordability. However, this indicator does not necessarily differentiate between households that can afford to pay and those that cannot. For this reason, a second indicator is used to more accurately identify customers in genuine hardship: reconnection of a customer with the same name at the same premises within seven days.

Electricity

Over the period in which the Commission has been collecting data, the rate of disconnection of residential electricity customers for non-payment of accounts has ranged between 3.2 and 4.1. In 2005–06 an average of 4.0 per 1,000 residential electricity customers were disconnected for non-payment of accounts. At 63.8%, the proportion of customers reconnected under the same name at the same premises within seven days remained the same as in 2004–05. The rate of disconnections for non-residential electricity supply customers was 5.6 per 1,000 customers in 2005–06 (an increase from 2.7 in 2004–05). Compared to other jurisdictions, there is a low rate of disconnection and a high rate of reconnection for the ACT's residential and non-residential electricity customers.

Gas

The reported incidence of disconnections of gas supply customers (residential and non-residential) for non-payment of an account was 32.0 per 1,000 customers in 2005–06, down from 37 in 2004–05. Of the customers disconnected for non-payment in 2005–06, 40% were subsequently reconnected at the same address and in the same name within seven days of the disconnection, significantly less than for the previous three years.

Compared with the disconnection rate for electricity customers (4.0 per 1,000), the rate of gas supply disconnections is significantly higher (32.0 per 1,000). According to ActewAGL Retail, the reason is that gas customers often choose to be disconnected after winter and then pay their outstanding account at the start of the following winter.

There is limited information available from gas suppliers in other jurisdictions. However, the available data suggest that the rate of disconnection by ACT gas suppliers is significantly higher than the rates in Victoria and South Australia. This may reflect the different demand pattern for gas in those states, where gas is more widely used for domestic purposes other than heating, which is its main use in the ACT.

Water

Under the Consumer Protection Code, a utility is not permitted to disconnect water supply or withdraw sewerage services for failure to pay an account. However, it may restrict the water flow to a level that allows for essential uses only. ACTEW Corporation did not restrict the water flow to any customer for failure to pay an account in 2005–06.

Direct debit defaults

Defaults on automatic direct debit account payments may indicate emerging payment difficulties. Of electricity and gas suppliers, only ActewAGL Retail was able to provide information about direct debit defaults in 2005–06.

The rate of defaults for ActewAGL Retail's electricity customers was 3.2% for all customers (3.3% for residential customers and 1.8% for non-residential customers). The percentage of ActewAGL Retail's electricity and gas customers defaulting on direct debit payments has declined significantly in recent years. The proportion of gas customers (residential and non-residential) defaulting on their direct debit payments has also fallen significantly, from 9.5% in 2004–05 to just 0.2% in 2005–06. While the proportion of ACTEW Corporation's water and sewerage customers defaulting on direct debit payments increased from 2.0% to 3.5% in 2005–06, this remains below the level of 5% in 2003–04.

Instalment plans

Instalment plans are one means by which utilities assist customers experiencing financial hardship. Although the number of customers on instalment plans is used as a measure of customer hardship, customers who are not in difficulty may choose to pay by instalment for reasons of budgeting or convenience.

Electricity

In 2005–06, 6.1% of ActewAGL Retail's residential electricity customers were on instalment plans, an increase from 1.1% in 2002–04 and 3.8% in 2004–05. EnergyAustralia recorded a two-thirds reduction in the number of residential customers on instalment plans in 2005–06. In 2005–06, 0.7% of ActewAGL Retail's non-residential customers were on instalment plans, down from 1.5% in 2004–05 and 0.8% in 2003–04. No other ACT supplier had non-residential customers on instalment plans.

Gas

In 2005–06, for every 1,000 residential gas customers, 9.1 customers paid their accounts through an instalment plan. This number does not include customers on account smoothing plans, such as ActewAGL Retail's 'Even Pay' scheme. This was a 20% increase from 7.6 per 1,000 in 2004–05. There were no non-residential customers on instalment plans in 2005–06.

The ACT had a lower rate of residential customers on instalment plans than South Australia and Victoria.

Water

At 30 June 2006, 749 water and sewerage customers were on instalment plans. This equated to 5.6 instalment plans per 1,000 residential customers (7.1 in 2004–05) and 2.4 per 1,000 non-residential customers (4.2 in 2004–05). These figures exclude customers on ACTEW Corporation's direct debit budget plan.

The proportions of residential and non-residential customers on instalment plans in the ACT are considerably smaller than for residential customers with South East Water and Victoria's Yarra Valley Water and for non-residential customers with Yarra Valley Water.

Security deposits

In 2005–06, only EnergyAustralia held security deposits for electricity supply (2.9 security deposits per 1,000 customers).

Environment and other issues

Water

‘Unaccounted-for’ (or ‘non-revenue’) water is the difference between the volume of water extracted and the amount of water for which the utility bills its customers. Unaccounted-for water is sometimes used as a measure of the condition and efficiency of a utility’s water network. It is also significant from an environmental perspective, as the water lost was extracted from river systems for consumptive purposes but not used for those purposes.

The annual quantity of unaccounted-for water in the ACT halved between 2001–02 and 2002–03, from just under 14% to 7% of the total volume of water extracted. In 2005–06, the percentage of unaccounted-for water was steady at 8.2%.

Environmental flows are the flows of water into rivers and streams that are necessary to maintain healthy aquatic ecosystems. ACTEW Corporation is one of only a few water utilities in Australia that is responsible for the release of water for environmental flows from the storage facilities that it manages. Although they have varied from year to year, environmental flows released by ACTEW Corporation from water storages have consistently been more than one-third of the total water abstracted in the ACT. In 2005–06, the level was 51%.

Energy

Greenhouse gas emissions

Very little electricity is generated and no natural gas is produced in the ACT. However, more than two-thirds of the greenhouse gas emissions attributable to the ACT derive from energy consumption.

Estimated greenhouse gas emissions increased in the ACT as a result of an increase in the volume of electricity sold. Although there was a significant increase (34%) in the volume of green power sold in the ACT from 32.4 gigawatt hours in 2004–05 to 43.5 gigawatt hours in 2005–06, the estimated volume of greenhouse gases emitted as a result of electricity consumption also increased by approximately 3.3% to 2,961,580 tonnes CO₂-e.

The estimated volume of greenhouse gas emitted as a result of the ACT’s natural gas consumption in 2005–06 was 484,037 tonnes CO₂-e, a 5.5% increase over the preceding year.

Consumption efficiency

Residential

ACT residential electricity consumption per person has ranged between 3.4 and 3.5 megawatt hours over the four-year period to 2005–06. In 2005–06 the level of electricity consumption in the ACT (3.5 megawatt hours per person) is slightly above the national average of 2.9. Data are more

limited for ACT residential gas consumption. This was 16 gigajoules per person in 2005–06—up from 12.8 gigajoules per person for 2004–05.

Businesses

‘Energy intensity’ is the quantity of energy required per unit of output or activity. The less the energy used per dollar produced (that is, the lower the intensity index), the more energy efficient the activity. For business energy use (taken to include government as well as private sector activities) it is more meaningful to examine the energy intensity of economic output than to examine the total energy use.

The electricity use intensity of ACT businesses has increased (and efficiency has decreased) by about 1.1% per year since 2002–03, from 81.37 megawatt hours per million dollars of gross state product in 2002–03 to 84.96 megawatt hours in 2005–06. Electricity consumption by businesses increased at a faster rate than growth in gross state product.

Efficiency in the use of natural gas by businesses declined in 2005–06 after improving in 2004–05. The intensity index increased from 124.76 gigajoules per million dollars of gross state product in 2004–05 to 129.55 gigajoules per million dollars in 2005–06.

Network losses

Electricity networks lose energy mainly through heat generated by resistance in wires and transformers. From an environmental perspective, the greater the electricity network losses, the more electricity needs to be generated to meet demand, and the greater the potential impact on the environment.

ActewAGL Distribution’s electricity network losses fluctuated between 4.6% and 5.7% for the years 2000–01 to 2005–06. In 2005–06, ActewAGL Distribution’s electricity network losses were 4.6% of total network inputs, falling roughly in the middle of a sample of other electricity distributors.

In 2005–06, 0.9% of the gas entering the network was unaccounted for (the same as in 2004–05). ActewAGL Distribution’s level of gas network losses is favourable when compared with losses for gas distributors in Queensland.

Gas operation and maintenance

The ‘gas specification’ is the energy content and purity of the natural gas in the pipeline. Where the gas is outside the specification, there are potential health and safety problems, such as the risk of damage to customers’ equipment. ActewAGL Distribution indicated that gas specification reached the maximum or minimum limits 72 times during 2005–06 (down by 23% from 2004–05, when gas specification reached the limits 94 times). There was no health and safety impact on customers or damage to their equipment.

ActewAGL Distribution replaced 621 gas regulators in 2005–06, up by 3.2% on the 2004–05 level. Of the regulators replaced, 576 were for residential customers and 45 were for non-residential customers. ActewAGL Distribution replaced 264 meters in 2005–06, a 6% decrease from 2004–05. Of those replacements, 232 or 87.9% were for residential customers and 32 or 12.1% were for non-residential customers.

Potential safety problems arise if the gas network operating pressure falls below the normal operating system minimum pressure. ActewAGL Distribution indicated that distribution network pressure fell below the minimum standard for high-pressure infrastructure once in 2005–06, noting that there were no associated consumer impacts. No events were reported for the medium pressure system, as was also the case in 2004–05.

1 Introduction

This report reviews the performance of licensed utilities that supplied the ACT during 2005–06. The utility services examined include electricity and gas distribution, the retailing (supply) of gas and electricity, and the provision of water and sewerage services.

The *Utilities Act 2000* (the Utilities Act) requires any person providing utility services in the ACT to hold an appropriate operating licence. The Independent Competition and Regulatory Commission (the Commission) is responsible for monitoring licensed utilities' compliance with the Utilities Act, licence conditions and relevant codes, as well as the utilities' performance of their functions under those instruments.

The information in this report is largely derived from the annual performance and compliance reports prepared by utilities for the Commission as a condition of their utility services licences. Where applicable, this has been supplemented with information from industry reports by the Water Services Association of Australia (WSAA) and the Energy Supply Association of Australia (ESAA)¹ and by information contained in the reports of other Australian utility regulatory bodies.

With the exception of the consumer complaints indicator described in Section 4.1, the Commission's reporting requirements for 2005–06 were not significantly different from those of previous years.

1.1 Structure of this report

The issues covered by each section of this report are as follows:

- Chapter 2 provides an overview of the utilities regulated by the Commission.
- Chapter 3 summarises the financial performance of regulated utilities.
- Chapter 4 details the licensees' customer service performance.
- Chapter 5 discusses non-price safety net arrangements.
- Chapter 6 considers the impact of utility services on the environment and certain natural gas operational and maintenance issues.

Appendix 1 describes the ACT's utilities regulatory framework and lists the industry and technical codes in force in 2005–06. Appendix 2 provides a summary listing of the utilities licensed in the ACT in 2005–06. Appendix 3 details the compiled performance data reported by licensees.

¹ WSAA (2006) and ESAA (2007).

1.2 Commercial-in-confidence information

To enable the Commission to undertake its responsibilities for compliance and performance reporting, licensees are required to provide information that may be commercially sensitive. Confidential information has been excluded from this report.

Data collected for some performance indicators have been published in an aggregated form to protect confidential commercial information. For example, this report gives the total volume of energy sold in the ACT, rather than the volume of energy sold by each supplier.

1.3 Use of jurisdictional comparisons

The Commission has compared the performance of ACT utilities, particularly in the area of customer service, with the performance of utilities operating in other jurisdictions. The Commission made fairly comprehensive comparisons of network asset indicators in the performance report for 2003–04.² Similar comparisons were not made in the 2004–05 report or in this report because such indicators do not change significantly from year to year.

The Commission notes that the availability of data from other jurisdictions limits the extent of the comparisons that can be made. If a broader range of information were available, the comparative ranking of the ACT utilities might differ. For this reason, the comparisons in this report provide indicative findings on relative performance.

1.4 Accuracy of data

The data presented in this report are largely as submitted by licensees and may include errors. The Commission sought to ensure that this report is accurate, and took steps to confirm data and clarify inconsistencies. Data for previous years have been rechecked and updated and, as a result, may differ from those presented in earlier reports.

² ICRC (2005a).

2 About the utilities industry

This chapter provides a brief overview of the utility services regulated by the Commission, presents information on customer numbers and consumption volumes, discusses overall trends, and compares key aspects of the utilities industry in the ACT with those in other jurisdictions.

2.1 Electricity

Most of the electricity sold in the ACT is sourced from National Electricity Market (NEM) generators elsewhere in Australia. Less than 2% of the ACT's total electricity is generated in the ACT.³

The ACT is supplied with electricity from the New South Wales transmission grid through two bulk supply substations:

- Canberra substation (330 kilovolt/132 kilovolt) at Holt
- Queanbeyan substation (132 kilovolt/66 kilovolt) at Oaks Estate.

The Canberra substation is supplied by four incoming 330 kilovolt transmission lines and has three outgoing 132 kilovolt subtransmission lines to the ACT. Other 132 kilovolt outgoing subtransmission lines supply New South Wales areas.

The Queanbeyan substation is supplied by several incoming 132 kilovolt subtransmission lines and has two outgoing 66 kilovolt subtransmission lines supplying ActewAGL Distribution's Fyshwick zone substation. Other 66 kilovolt outgoing subtransmission lines supply adjacent New South Wales areas.

The two bulk supply substations and the incoming lines are owned and operated by TransGrid. The Australian Energy Regulator (AER) regulates the transmission network.

The 132 kilovolt and 66 kilovolt subtransmission systems supplying the ACT are owned and operated by ActewAGL Distribution.

Electricity from the NEM is sold to customers, via the electricity transmission and distribution networks, by electricity suppliers (retailers).

2.1.1 Electricity distribution

The ACT has one licensed electricity distributor: ActewAGL Distribution.⁴ ActewAGL Distribution's licence authorises it to provide electricity distribution services and electricity connection services.

³ There are two small generators fired by reclaimed gas at the Mugga Way landfill tips and a mini-hydro generation plant at the Mt Stromlo Water Treatment Plant.

In 2005–06, ActewAGL’s distribution network comprised 2,440 kilometres of overhead cable, 2,251 kilometres of underground cable and 51,783 power poles. The high-voltage feeders supplied 4,495 distribution transformers and 28 subtransmission transformers. The network services an area of 2,358 square kilometres and, in 2005–06, supplied electricity to 154,510 supply points.⁵ ActewAGL Distribution’s network comprises mainly urban feeders and a small number of rural short feeders.

Ninety-one per cent of ActewAGL Distribution customers were residential. There were 23 high-voltage non-residential (commercial) customers in 2005–06. The remainder were low-voltage non-residential customers.

2.1.2 Electricity supply

Suppliers

Of the 15 utilities licensed to supply electricity in the ACT in 2005–06, all but two were active⁶:

- ActewAGL Retail (franchise⁷ and non-franchise customers)⁸
- AGL Electricity Ltd
- AGL Sales Pty Ltd
- Aurora Energy Pty Ltd
- Country Energy (franchise and non-franchise customers)⁹
- Ergon Energy
- EnergyAustralia Pty Ltd
- Energy One Pty Ltd
- ENERGEX Retail
- Integral Energy Australia Pty Ltd
- Origin Energy Electricity Ltd
- Powerdirect Pty Ltd
- Red Energy Pty Ltd
- TRUenergy Pty Ltd
- TRUenergy Yallourn Pty Ltd.

⁴ ACTEW Distribution Ltd and AGL Gas Company traded jointly as ‘ActewAGL Distribution’ in 2005–06. Country Energy has been granted an exemption from having to hold a licence to provide electricity distribution and connection services for the electricity distribution line that it owns and operates in the ACT. This line is approximately 12 kilometres long and runs along the ACT–New South Wales border.

⁵ This number is based on the number of metered supply points on the network, or ‘national metering identifiers’ (‘NMI’s’). It includes both connected and disconnected (non-active) supply points.

⁶ Energy One and Red Energy had no customers in 2005–06.

⁷ A franchise customer is any customer who consumes less than 100 megawatt hours of electricity per year and who remains on the standard customer contract offered by ActewAGL Retail.

⁸ ACTEW Retail Ltd and AGL ACT Retail Investments Pty Ltd traded jointly as ‘ActewAGL Retail’.

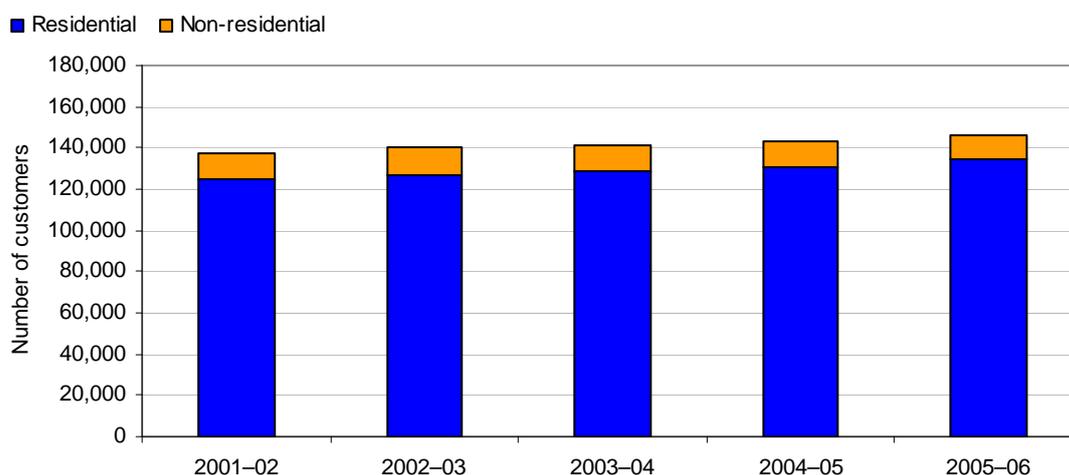
⁹ The right to supply to franchise customers applies only to those customers serviced by that part of Country Energy’s distribution network located within the ACT.

Customers and consumption

Figure 1 shows customer growth trends over the past five reporting periods.

ACT electricity supply customer numbers increased by 2.1% over the twelve months ending June 2006 to 146,597. Customer numbers increased in the residential sector (by 3.4%) but decreased in the non-residential sector (by 11%).

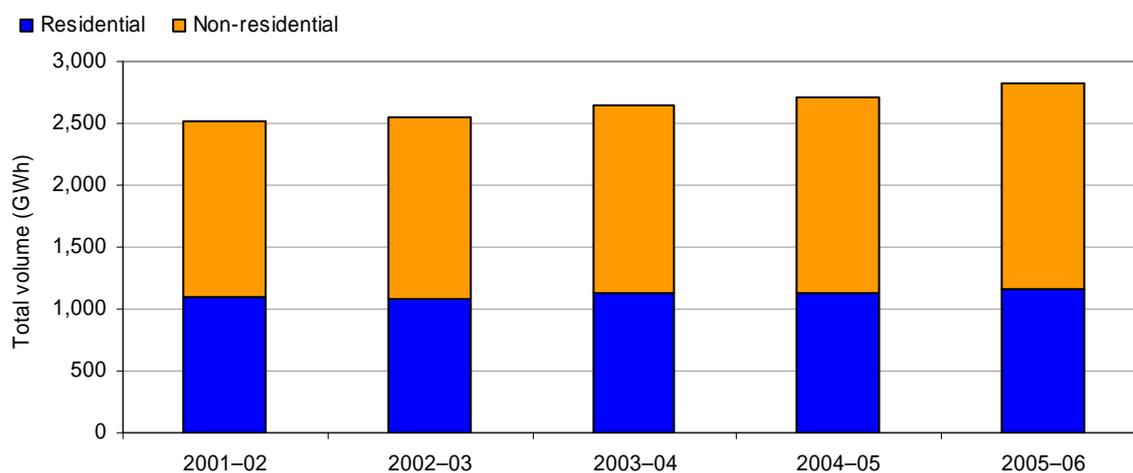
Figure 1 Customer numbers, electricity supply, ACT, 2001–02 to 2005–06



Source: Licensed utility reports to ICRC.

Figure 2 shows the total volume of electricity sold to residential and non-residential customers from 2001–02 to 2005–06. Electricity suppliers reported sales of 2821 gigawatt hours in 2005–06, an increase of 3.8% over sales for the preceding year.

Figure 2 Sales volume, electricity supply, ACT, 2001–02 to 2005–06



Source: Licensed utility reports to ICRC.

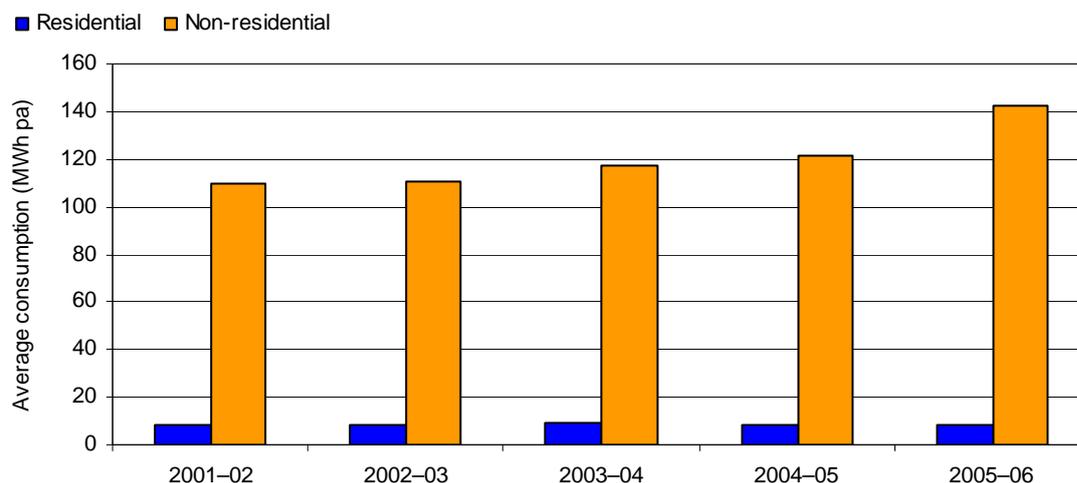
In 2005–06, the average electricity consumption in the ACT was 19.2 megawatt hours per customer, up from 18.9 megawatt hours the previous year.

As Figure 3 shows, residential consumption averaged between 8.5 to 8.8 megawatt hours per year over the past five reporting periods, and declined slightly over the past two years. Conversely,

average non-residential consumption increased, from 109.6 megawatt hours per customer in 2001–02 to 142.8 megawatt hours in 2005–06.

The marked increase in average non-residential customer consumption results from a 6.7% increase in total non-residential sales in combination with an 11% decrease in the number of non-residential customers (which may reflect a consolidation of accounts for such customers).

Figure 3 Average per customer consumption, electricity, ACT, 2001–02 to 2005–06



Source: Licensed utility reports to ICRC.

Figure 4 compares ACT electricity consumption with consumption in other jurisdictions in 2005–06.

Figure 4 Average per customer consumption, electricity, all states and territories, 2005–06



Source: Derived from ESAA (2007), ACT data from licensed utility reports to ICRC.

At 8.4 megawatt hours per residential customer, the level of residential consumption in the ACT was higher than the Australian average of 6.9 megawatt hours and was one of the highest in Australia. Only Tasmania’s and the Northern Territory’s residential consumption were greater. The ACT’s high level of residential electricity consumption is linked to heating demands in

winter and the lower penetration of gas in the ACT energy market compared with some other jurisdictions.

By contrast, the level of electricity consumption for all customers (residential and other) in the ACT of 19.2 megawatt hours per customer was less than the average for Australia of 20.6 megawatt hours per customer. This may be attributable to the ACT's relatively small industrial and manufacturing sector.

The ACT electricity retail market comprises mainly residential customers, accounting for 92.1% in 2005–06, a slight increase on earlier year levels. Non-residential customers, however, accounted for a greater share of electricity consumption, rising from 56.7% of total consumption in 2001–02 to 58.8% in 2005–06.

Table 1 provides details of customer numbers, customer sales and electricity consumption, broken down into residential and non-residential categories.

Table 1 Customer numbers and sales, electricity supply, ACT, 2001–02 to 2005–06

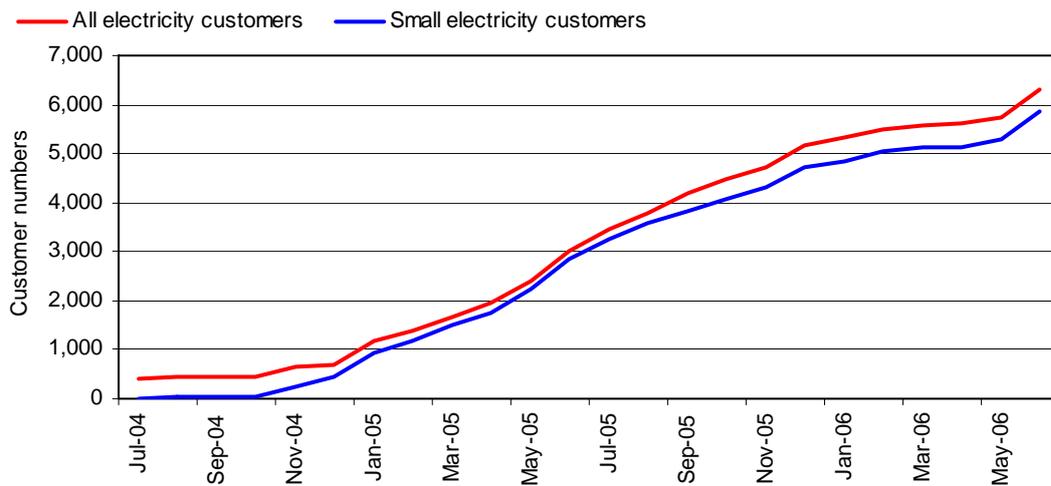
	2001–02	2002–03	2003–04	2004–05	2005–06
<i>Customer numbers</i>					
Residential	124,836	126,585	128,513	130,548	134,979
Non-residential	13,025	13,301	12,861	13,046	11,618
Total customers	137,861	139,886	141,374	143,594	146,597
<i>Customer sales (GWh)</i>					
Residential	1,089	1,079	1,134	1,134	1,162
Non-residential	1,427	1,467	1,503	1,583	1,659
Total sales	2,516	2,546	2,637	2,717	2,821
<i>Consumption (MWh/customer)</i>					
Residential	8.7	8.5	8.8	8.7	8.6
Non-residential	109.6	110.3	116.9	121.3	142.8
Total consumption / customer	18.3	18.2	18.7	18.9	19.2

Source: Licensed utility returns to ICRC.

Full retail contestability

Full retail contestability (FRC) commenced in the ACT in July 2003. Between July 2004 and June 2006, around 5,800 small customers transferred to a new electricity supplier. Another 20,875 residential customers (about 16.3% of all ActewAGL's residential customers) switched from the standard customer contract to a negotiated contract with ActewAGL Retail during this period. Customers for all other retailers are also on negotiated contracts.

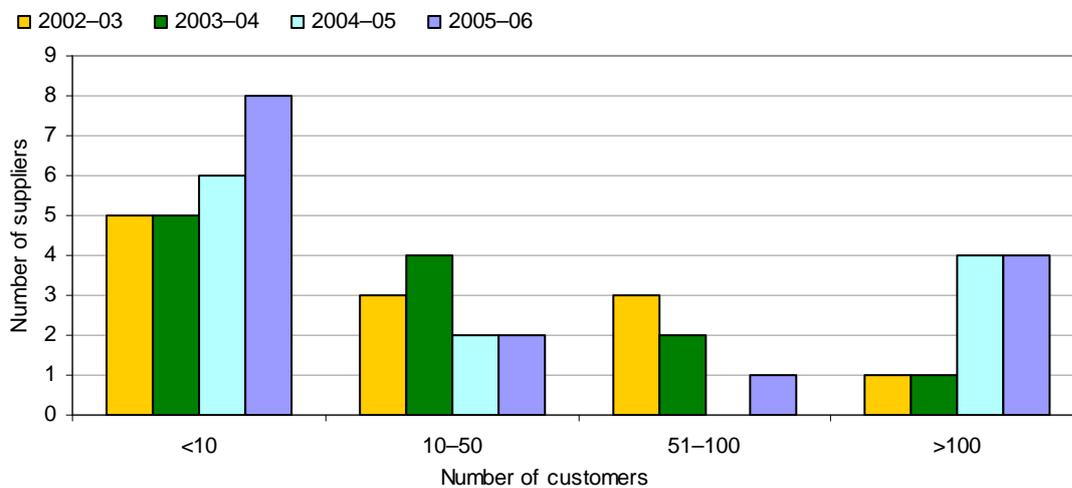
Figure 5 Cumulative customer churn, electricity supply, ACT, 2004–05 to 2005–06



Note: Data do not include ActewAGL Retail customers who switched from a standard to a negotiated customer contract.
Source: NEMMCO (unpublished data).

Figure 6 shows that the retail market for electricity supply is based on relatively few retailers. In 2005–06, only four retailers supplied more than 100 customers, unchanged from 2004–05. During this period, the number of electricity suppliers that supplied 10 to 100 customers increased to three, up from two in 2004–05. About half of the ACT’s electricity suppliers supply fewer than 10 customers each.

Figure 6 Customer and supplier numbers, electricity supply, ACT, 2002–03 to 2005–06



Source: Licensed utility reports to ICRC.

2.2 Gas

Natural gas accounts for about 9.3% of total energy consumption in New South Wales and the ACT.¹⁰

The gas sold in the ACT is sourced primarily from the Cooper Basin in South Australia and is transmitted through the Moomba to Sydney pipeline by East Australian Pipeline Limited.¹¹

Gas destined for the ACT is diverted from Young, in New South Wales, to the trunk receiving station at Watson, on the northern outskirts of the ACT. From that point, ActewAGL Distribution pipes the gas through its network to the ACT.

A second source of gas supply is from the Gippsland Basin in Victoria via the Eastern Gas Pipeline. An off-take is located at Hoskinstown near the ACT border. From there, the gas is transported to a pressure reduction station at Fyshwick and then into ActewAGL Distribution's network.

2.2.1 Gas distribution

During 2005–06, ActewAGL Distribution was the only entity that held a gas distribution licence in the ACT, authorising it to provide gas distribution and gas connection services.

ActewAGL Distribution's network comprises around 4,116 kilometres of medium-pressure and high-pressure mains. In 2005–06, ActewAGL distributed 7,731 terajoules of gas to 91,330 customer supply points (Figure 7).¹²

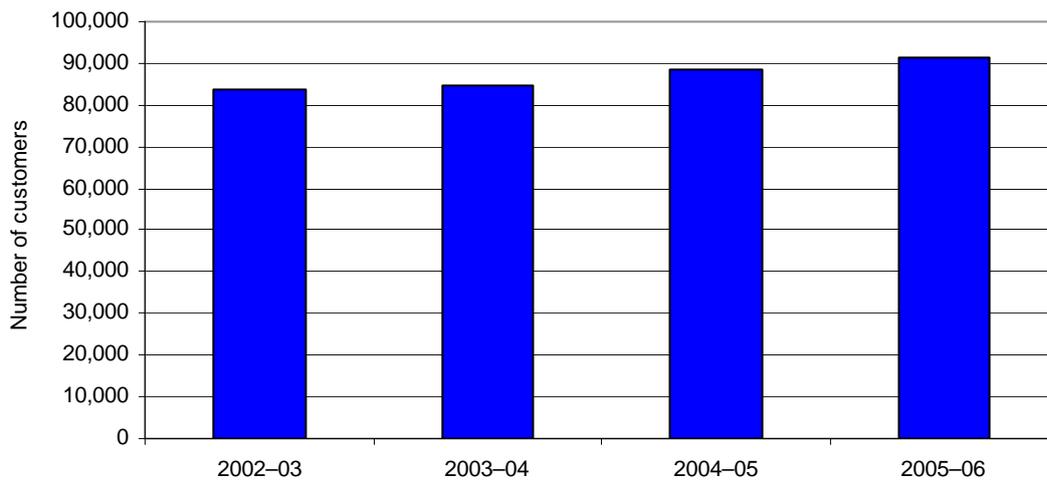
ActewAGL Distribution's customer base for gas is smaller than for electricity but is steadily growing (Figure 7). Customer supply point numbers increased from 88,659 to 91,330 (or about 3%) between 2004–05 and 2005–06.

¹⁰ Australian Bureau of Agricultural and Resource Economics (2007), Table C2.

¹¹ The Moomba to Sydney gas pipeline is owned by Australian Pipeline Trust. The transmission pipeline operated by East Australian Pipeline Limited in the ACT is a relatively short (6 kilometre) section of that pipeline.

¹² Note that the number of distribution customers (supply points) will not be the same as the number of customers with contracts for gas supply.

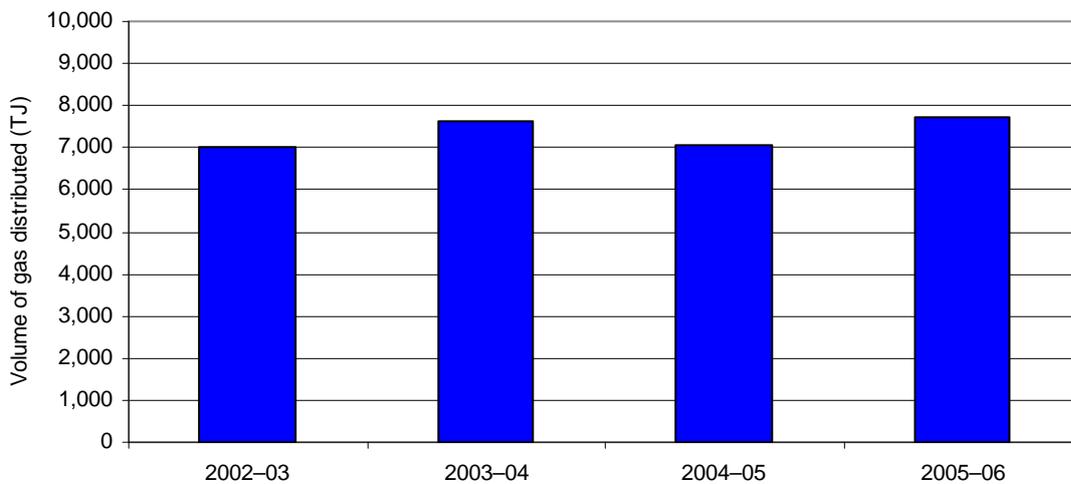
Figure 7 Customer supply point numbers, gas distribution, ACT, 2002–03 to 2005–06



Source: ActewAGL Distribution reports to ICRC.

Figure 8 shows that the volume of gas distributed in the ACT has fluctuated over the past four reporting periods. In 2005–06, 7,731 terajoules was distributed, 9.7% more than in 2004–05.

Figure 8 Volume distributed, gas distribution, ACT, 2002–03 to 2005–06

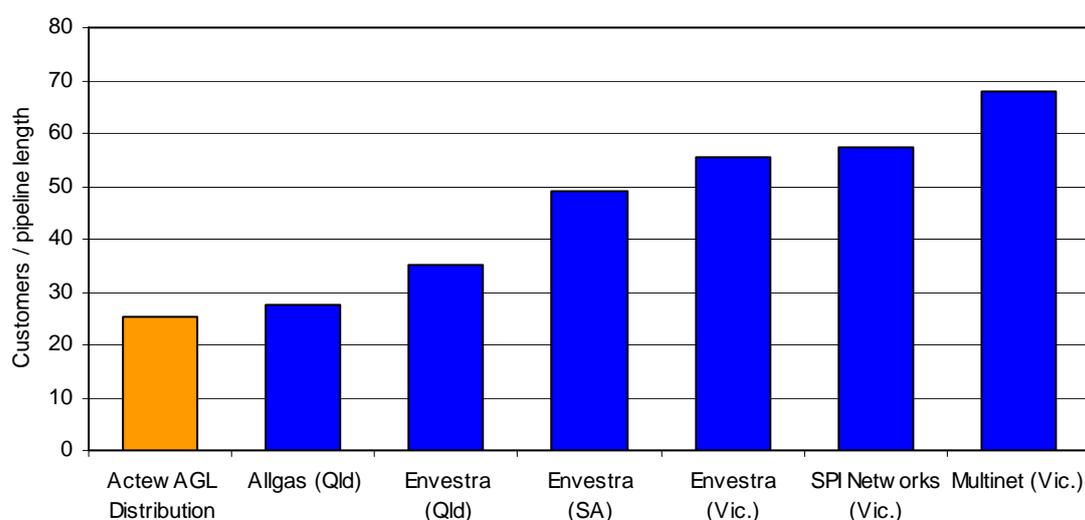


Source: ActewAGL Distribution reports to ICRC.

In 2005–06, there were 25.3 customers per kilometre of pipeline on ActewAGL Distribution’s gas network. This is a relatively low customer density, comparable only to those of Allgas and Envestra in Queensland.

Figure 9 compares the customer densities of ActewAGL Distribution with a sample of other distributors.

Figure 9 Customers per pipeline length, gas distribution, selected utilities, 2005–06



Note: Victorian data are for the calendar year 2006.

Source: ESC 2007a, ESCOSA 2006a, QCA 2006, ActewAGL Distribution reports to ICRC.

2.2.2 Gas supply

During 2005–06, five entities were licensed to supply gas in the ACT: ActewAGL Retail, Country Energy, EnergyAustralia, ENERGEX Retail and TRUenergy.

Despite the opening of the ACT’s gas retail market in January 2002, competition did not begin in earnest until late 2004, as Figure 10 shows. This coincides with increased activity in the electricity retail market, suggesting that the customers who were changing suppliers may have been purchasing ‘bundled’ energy services.

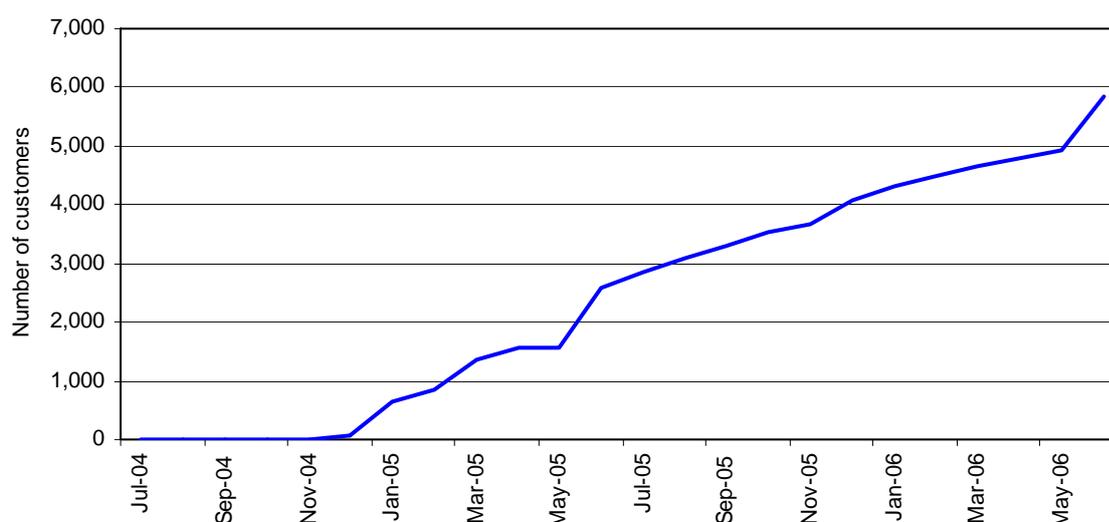
At the end of June 2006, approximately 5,800 gas supply customers had switched to another supplier. An estimated additional 5,500 ActewAGL Retail customers had switched from a standard customer contract to a negotiated customer contract.

There were 88,966 gas supply customers in the ACT in 2005–06, an increase of 2.6% over 2004–05 (86,752). Approximately 98% of the customers were residential.

In 2005–06, 6,857 terajoules of gas was sold in the ACT, up 5.1% from 2004–05 (6,525 terajoules). The difference between these figures and those for gas distributed in the ACT is made up of unsold gas and unaccounted-for gas (refer to details in Section 6.2). Residential sales increased by 3.5% and non-residential sales by 7.9% over 2004–05.

Average gas consumption also increased, from 75 gigajoules per customer in 2004–05 to 77 gigajoules per customer in 2005–06.

Figure 10 Cumulative customer churn, gas supply, ACT, July 2004 to June 2006



Note: Data do not include ActewAGL retail customers who have switched from a standard to a negotiated customer contract.
Source: Gas Market Company (unpublished data).

Table 2 compares gas consumption and sales data for residential and non-residential customers from 2003–04 to 2005–06.

Table 2 Customer numbers and sales, gas supply, ACT, 2003–04 to 2005–06

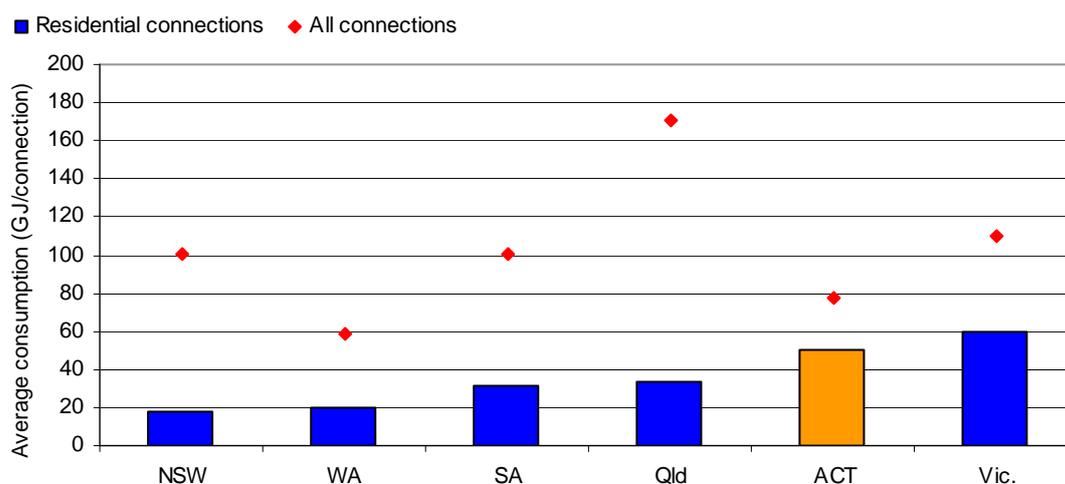
	2003–04	2004–05	2005–06
<i>Customer numbers</i>			
Residential	82,665	84,864	87,010
Non-residential	1,847	1,888	1,956
Total customers	84,512	86,752	88,966
<i>Customer sales (TJ)</i>			
Residential	4,290	4,187	4,335
Non-residential	2,349	2,338	2,522
Total sales	6,639	6,525	6,857
<i>Consumption (GJ/customer)</i>			
Residential	52	49	50
Non-residential	1272	1238	1289
Overall consumption / customer	79	75	77

Source: Licensed utility reports to ICRC.

Figure 11 compares gas consumption in the ACT with consumption in other jurisdictions. The rate of residential gas consumption in the ACT is relatively high at 77 gigajoules per connection, second only to Victoria. However, overall consumption in the ACT is still less than the Australian average of 102.3 gigajoules per connection, although this difference has been narrowing over recent years.

Due to the very high average gas consumption in the Northern Territory (more than 3,000 gigajoules per connection) and Tasmania (more than 750 gigajoules per connection), data for those jurisdictions have been excluded from Figure 11.

Figure 11 Average consumption per connection, gas, selected states and territories, 2005–06



Note: The number in the Western Australian sample reflects only connections to the AlintaGas distribution network.
 Source: ESAA (2007), licensed utility reports to ICRC.

2.3 Water and sewerage

ACTEW Corporation was the only entity licensed to supply water and sewerage services in the ACT in 2005–06. ACTEW Corporation owns and manages the entire water and sewerage supply chain in the ACT, including water storage and harvesting, treatment, bulk supply, reticulation and supply, sewage collection and treatment. As an entailment, it has a range of retail customer service functions such as reading meters, issuing accounts and handling customer complaints.

The ACT’s water is supplied principally by the Cotter catchment, which consists of three dams on the Cotter River in the ACT, supplemented by the Googong system on the Queanbeyan River to the east of Canberra. The Cotter catchment has an area of about 482 square kilometres and Googong has about 873 square kilometres. The three dams comprising the Cotter catchment system together provide about 86 gegalitres of storage while the Googong Dam provides approximately 121 gegalitres of storage.

Although it is the larger of the two systems, Googong typically supplies ACTEW Corporation with less than 10% of its water requirements and is generally used as a backup for the Cotter dams. For example, Googong was used extensively after the Cotter catchment was damaged by bushfires in January 2003.

Water from these dams is treated and delivered by gravity-fed bulk supply mains to 45 service reservoirs located around Canberra. From the reservoirs, it is distributed to ACT consumers through ACTEW Corporation’s network of reticulated pipes. The reticulation system is divided into pressure zones, with each zone served from one or more of the local service reservoirs.

ACTEW Corporation also provides bulk water to the Queanbeyan City Council but does not provide reticulated services to Queanbeyan.

Under its licence conditions, ACTEW Corporation is required to release water from the Cotter and Googong catchments for environmental purposes. The volume of water released as an environmental flow is in accordance with the Environmental Flow Guidelines approved by the minister responsible for water resources.

Sewage is collected by ACTEW Corporation through the sewerage network and treated at the Lower Molonglo Water Quality Control Centre.

2.3.1 Water

In 2005–06, ACTEW Corporation delivered 52,470 megalitres of water to ACT customers and 4,353 megalitres to Queanbeyan (bulk water). In addition, under the environmental flow requirements, ACTEW Corporation released 59,500 megalitres to the environment.

A total of 138,432¹³ ACT properties were supplied with water in 2005–06. There was a slight increase (0.8%) between 2004–05 and 2005–06 in the overall number of properties (residential and non-residential) supplied. Residential properties accounted for around 95% of all properties but for only 65% of the water supplied to ACT properties. Average water consumption per premises in 2005–06 was around 261 kilolitres for residential premises and 379 kilolitres for all premises.

Table 3 Premises supplied and consumption, water supply, ACTEW Corporation, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	2005–06
<i>Premises supplied (000)</i>					
Residential	123	124	127	129	132
Non-residential	8	9	6 ^a	7	6
Total premises	132^a	133^a	134^b	136	138
<i>Consumption (ML)</i>					
Residential	40,031	39,646	31,492	30,989	34,436
Non-residential	20,812	21,084	17,017	17,279	18,034
Total ACT consumption	60,843	60,730	48,509	48,268	52,470
Environmental flows ^c	51,200	39,500	58,400	30,200	59,500
Bulk water exports to Queanbeyan ^c	5,246	5,209	4,051	4,007	4,353
Total ACTEW Corporation^d	117,288	105,439	110,960	82,475	116,323
<i>Average consumption/premises (kL)</i>					
Residential	325	320	248	240	261
Non-residential	2,602	2,343	2,836	2,468	2,809
All premises	461	457	362	355	379

a Figures are based on customer numbers, not property numbers.

b The numbers for non-residential premises supplied and consumption for 2003–04 are based on revised data provided by ACTEW Corporation, and differ from the data reported in the Commission's performance report for 2003–04.

c National Water Commission (2007). See also Section 6.1, Environmental flows.

d Total water supplied total includes environmental flows and bulk water supplies.

Note: Figure for non-residential consumption includes commercial and industrial water and total estimated non-metered water supplied to other uses, such as fire fighting and mains flushing.

Source: ACTEW Corporation reports to ICRC, NWC (2007).

¹³ ACTEW Corporation report to ICRC

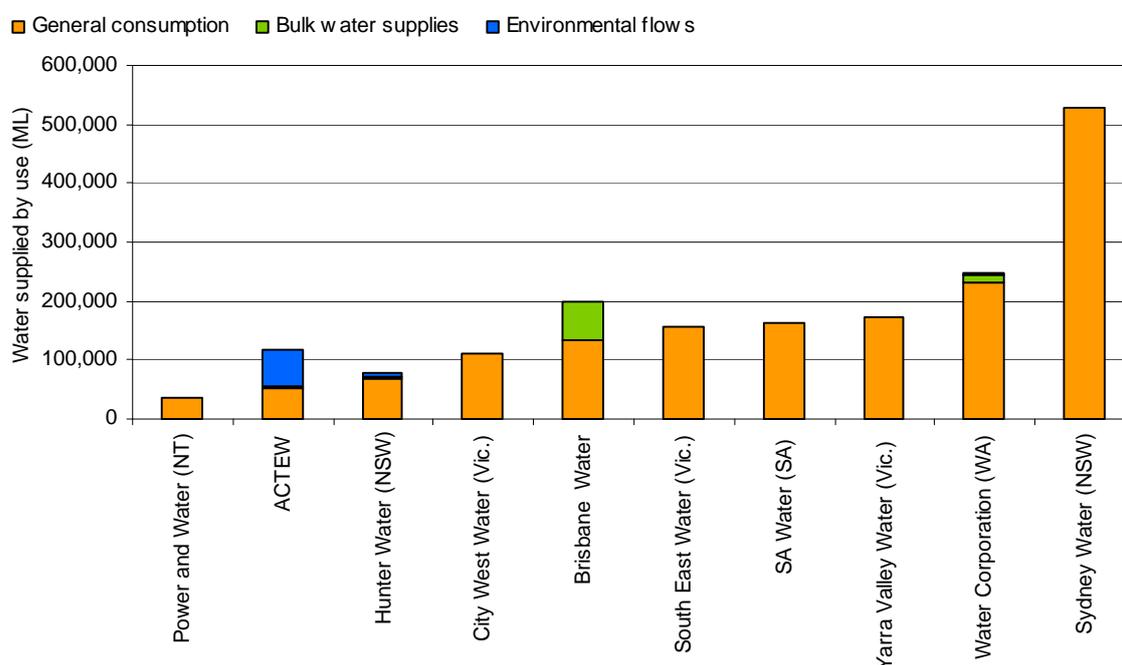
Table 3 shows that there was a general downward trend in the amount of water supplied between 2001–02 and 2004–05, before a slight increase in 2005–06. Low-level water conservation measures were introduced in December 2002, and more severe water restrictions were in force from May 2003 to October 2005. From 2001–02 to 2005–06, ACT consumers reduced their use of water by an average of 14%. Residential premises consumed about 14% less water overall, while consumption for non-residential purposes declined by 13%.

Australia’s water authorities vary widely in their size and functions.

Most metropolitan water suppliers provide reticulated services only. Few are responsible for catchment management activities or are located on systems where they are required to provide bulk water supplies and/or environmental flows—those functions tend to be performed by separate bodies. For example, in Sydney, the Sydney Water Authority supplies water to residential and non-residential properties in the greater Sydney region, while the Sydney Catchment Authority provides bulk water and is responsible for the release of water for environmental flows.

Water utilities vary in size, from supplying as few as 46,000 properties (Power and Water Corporation, Northern Territory) to supplying as many as 1,706,000 properties (Sydney Water Corporation). As Figure 12 shows, ACTEW Corporation is a relatively small water utility compared to its metropolitan counterparts, but relatively large compared to the regional water utilities.

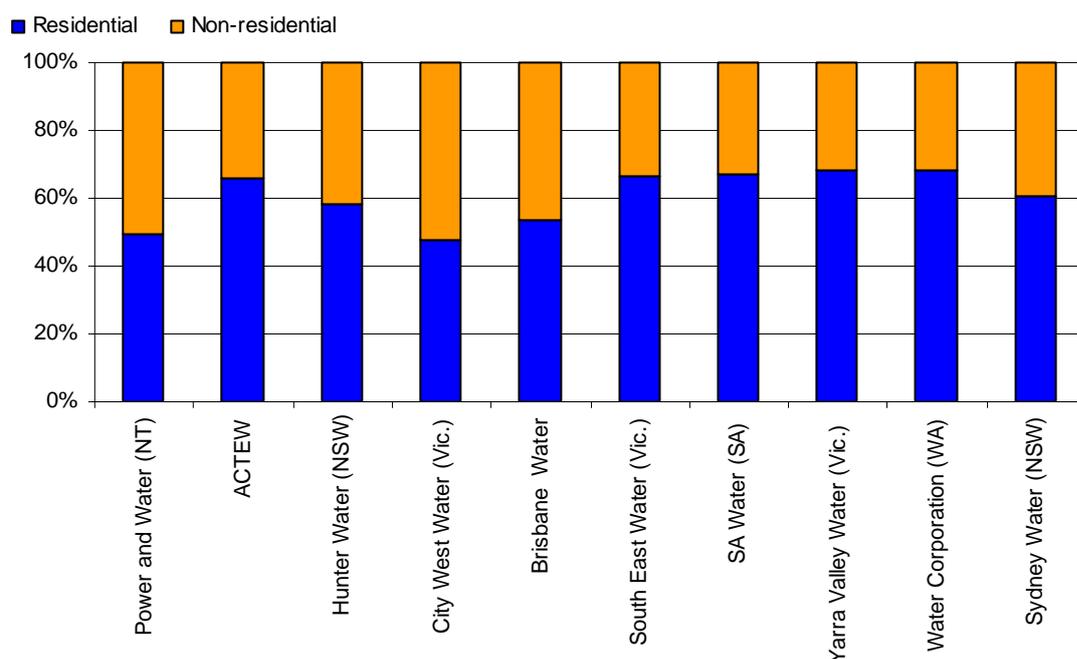
Figure 12 Water volumes by use, water supply, selected utilities, 2005–06



Source: WSAA (2006).

Figure 13 compares the water supply by customer group across a selection of Australian water suppliers for 2005–06. Water supplied by most of the suppliers, including ACTEW Corporation, was used mainly for residential purposes. In the case of Power and Water Corporation (Northern Territory) and City West Water (Victoria), just under half of the general water supply was for residential use.

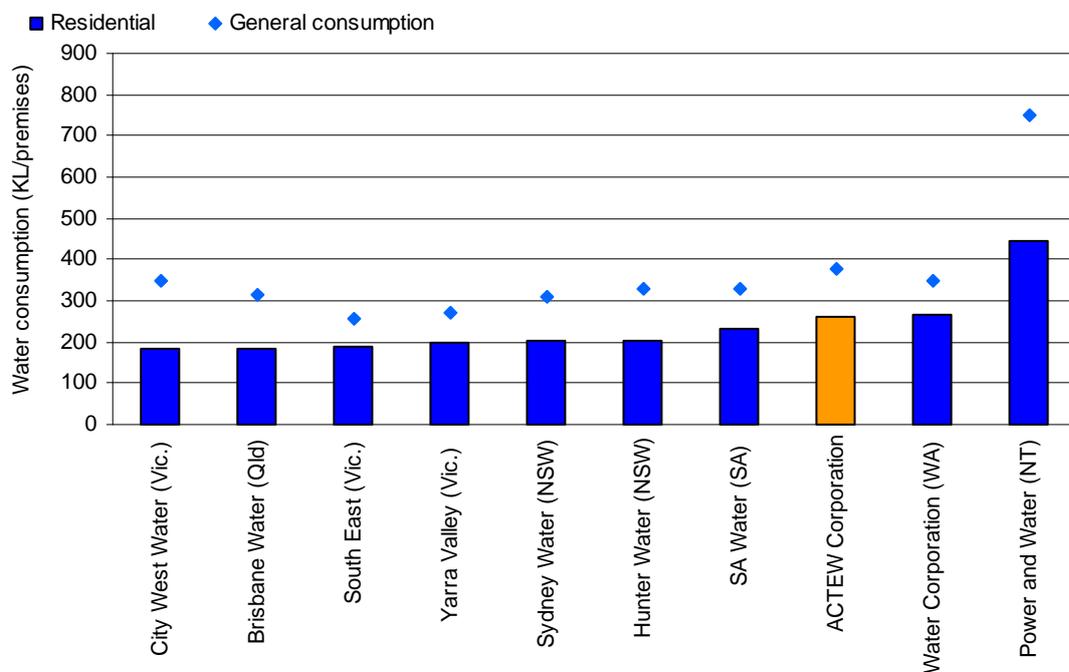
Figure 13 Water supply by customer (residential and non-residential), selected utilities, 2005–06



Source: WSAA (2006).

The average volume of water supplied and consumed per residential property was broadly consistent across selected water suppliers, as shown in Figure 14. The exception was Power and Water (NT), which supplied almost twice as much per residential property as the overall average.

Figure 14 Average consumption per residential premises, water supply, selected utilities, 2005–06



Source: WSAA (2006).

In 2005–06 the average volume of water supplied per residential property for all selected suppliers shown in Figure 14 was 237 kilolitres. If Power and Water is excluded the average is

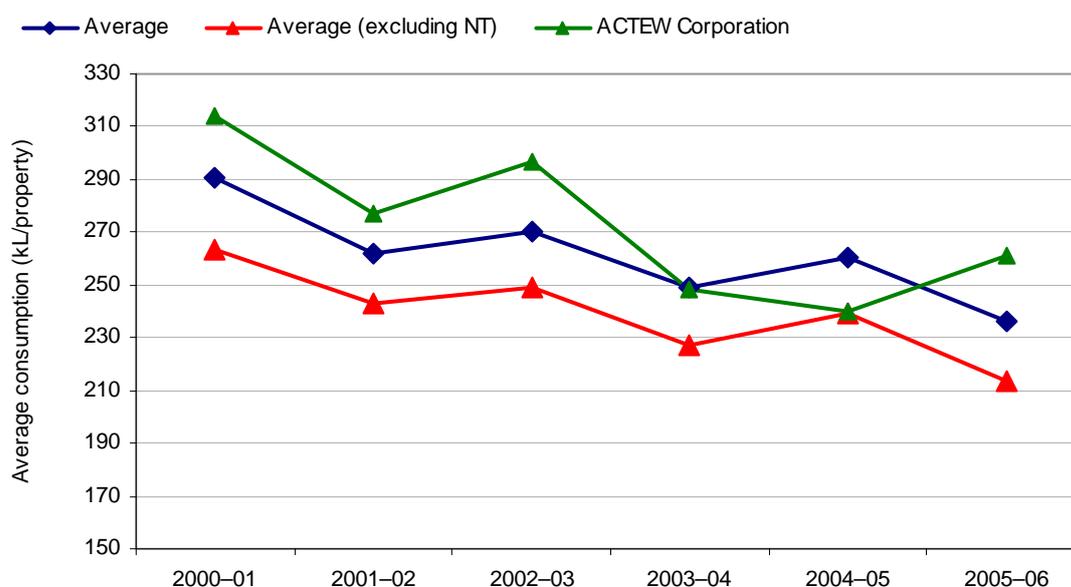
214 kilolitres. This compares with an average consumption per residential property for ACTEW Corporation of 261 kilolitres.

Average water consumption for all properties during the year (residential and non-residential) was 364 kilolitres per property for all the sampled water suppliers. Excluding Power and Water, the average consumption for all properties was 321 kilolitres per property, while consumption averaged 379 kilolitres per property in the ACT.

Figure 15 compares the average residential consumption in the ACT over the six years from 2000–01 to 2005–06 with the averages across selected suppliers (including and excluding Power and Water).

Before 2003–04, the level of water consumption for ACT residential premises was consistently higher than for premises in other metropolitan areas of Australia, including Darwin. In 2004–05, the ACT average was less than the average water consumption in the other sample areas, and equal to the average if Darwin is excluded. However, by 2005–06 the ACT average again exceeded the national average.

Figure 15 Average water consumption per residential property, selected utilities, 2000–01 to 2005–06



Source: Derived from NWC (2007).

2.3.2 Sewerage

The overall number of premises connected to the sewerage network increased from 132,842 in 2004–05 to 138,432¹⁴ in 2005–06, an increase of 4.2%. Customer numbers increased by 2.2% to 133,217 over the same period.

¹⁴ WSAA (2006).

In 2005–06, ACTEW Corporation operated 2,985 kilometres of sewerage mains and channels and collected and treated 31,976 megalitres of sewage. The volume of sewage collected per property increased significantly in 2005–06 to reach 232 kilolitres per property. Details are shown in Table 4.

Table 4 Sewage collected, ACTEW Corporation, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	2005–06
Total sewage collected (ML)	30,647	28,313	27,959	27,293	31,976
Sewage collected per property (kL)	233	214	211 ^a	201	232

a This figure is based on revised data provided by ACTEW Corporation, and differs from the figure reported in the Commission's performance report for 2003–04.

Source: WSAA (2006), NWC 2007, ACTEW Corporation report to ICRC.

3 Financial performance

3.1 Electricity supply

The retail market for electricity in the ACT is partially regulated. Any customer may elect to enter into a negotiated contract with a licensed electricity supplier. Franchise customers are able to access a regulated retail tariff if they do not wish to enter into a negotiated tariff. A franchise customer is any customer who consumes less than 100 megawatt hours per year and who remains on the standard customer contract. Franchise customers become non-franchise customers if they elect to enter into a negotiated supply contract with any electricity supplier. The retail tariff for non-franchise customers is not regulated.

3.1.1 Full retail contestability

From 1998, the ACT's electricity market has been progressively opened to competition. In June 2003, the market was opened to small customers, enabling them to switch retailers. Since then, the number of customers switching has gradually increased after an initial period of limited activity.

In 2005–06, 13 of the 15 companies licensed to supply electricity participated in the retail market. Most received less than \$5 million in revenue. In 2005–06, three companies earned revenue over \$10 million from the sale of electricity in the ACT, the same as in 2004–05.

The most active market for electricity is the non-residential market, with a number of companies competing for market share. ActewAGL Retail, AGL Electricity, Country Energy, EnergyAustralia, Origin Energy, TRUenergy Yallourn, Ergon Energy and Integral EnergyAustralia each generated revenue of over \$1 million dollars from the sale of electricity to non-residential customers in 2005–06.

3.1.2 Electricity prices, supply and customer numbers

Utilities reported that for 2005–06 the average delivered price for electricity ranged from 8.04 cents to 14.88 cents per kilowatt hour. The average price for the entire market was 10.40 cents per kilowatt hour. For residential customers, the average price was 11.01 cents per kilowatt hour, whereas for non-residential customers the average price was 9.96 cents per kilowatt hour.

Total revenue rose by 9.3% to reach \$290 million, reflecting an increase in the total number of customers (2.1%) and total consumption (3.7%) and higher energy prices.

The average price per megawatt hour increased by 7.4% for residential customers and by 3.7% for non-residential customers (a 5.2% overall increase). As a result of higher electricity consumption and the higher cost of electricity per megawatt, the average residential bill increased by 6.4% to \$948 and the average non-residential bill increased by 22% to \$13,900, resulting in an overall increase in the average customer bill of 7.0% from \$1,844 to \$1,975.

Table 5 provides information about revenue, customer numbers, consumption and electricity prices for the period from 2003–04 to 2005–06.

Table 5 Revenue, customers, consumption and prices, electricity supply, ACT, 2003–04 to 2005–06

	2003–04	2004–05	2005–06	Change (%) ^a
<i>Revenue (\$ million, nominal)</i>				
Residential	116.4	116.3	128.0	10.1
Non-residential	145.7	148.6	161.5	8.7
Total revenue	262.1	264.9	289.5	9.3
<i>Customers (numbers)</i>				
Residential	128,513	130,548	134,979	3.4
Non-residential	12,861	13,046	11,618	-10.9
Total customers	141,374	143,594	146,597	2.1
<i>Consumption (GWh)</i>				
Residential	1,134	1,134	1,162	2.5
Non-residential	1,503	1,583	1,659	4.8
Total consumption	2,637	2,717	2,821	3.8
<i>Average consumption/customer (MWh)</i>				
Residential	8.8	8.7	8.6	-0.9
Non-residential	116.9	121.3	142.8	17.7
Average consumption per customer	18.7	18.9	19.2	1.7
<i>Average bill (\$)</i>				
Residential	906	891	948	6.4
Non-residential	11,329	11,390	13,901	22.0
Average customer bill	1,854	1,845	1,975	7.0
<i>Average cost (\$ per MWh)</i>				
Residential	102.6	102.6	110.2	7.4
Non-residential	96.9	93.9	97.3	3.7
Average cost	99.4	97.5	102.6	5.2

a Change between 2004–05 and 2005–06.

Source: Licensed utility reports to ICRC.

3.2 Gas supply

Table 6 provides details on revenue, customer numbers, consumption levels and prices for gas for residential and non-residential customers from 2003–04 to 2005–06. The market for gas in the ACT has been steadily growing over the past few years with residential customer numbers increasing by 2.5% and non-residential customer numbers up by 3.6% from 2004–05 to 2005–06.

Table 6 Revenue, customers, consumption and prices, gas supply, ACT, 2003–04 to 2005–06

	2003–04	2004–05	2005–06	Change (%) ^a
<i>Revenue (\$ million, nominal)</i>				
Residential	61.5	63.5	65.3	2.8
Non-residential	21.9	22.8	20.9	-8.3
Total revenue	83.5	86.3	86.2	-0.1
<i>Customer numbers</i>				
Residential	82,665	84,864	87,010	2.5
Non-residential	1,847	1,888	1,956	3.6
Total customer numbers	84,512	86,752	88,966	2.6
<i>Consumption (TJ)</i>				
Residential	4,290	4,187	4,335	3.5
Non-residential	2,349	2,338	2,522	7.9
Total consumption	6,639	6,525	6,857	5.1
<i>Average consumption per customer (GJ)</i>				
Residential	51.9	49.3	49.8	1.0
Non-residential	1,271.8	1,238.3	1,289.4	4.1
Average consumption per customer	78.6	75.2	77.1	2.5
<i>Average bill (\$)</i>				
Residential	744	748	750	0.3
Non-residential	11,857	12,076	10,685	-11.5
Average customer bill	988.0	994.8	968.9	-2.6
<i>Average cost (\$ per GJ)</i>				
Residential	14.3	15.2	15.1	-0.7
Non-residential	9.3	9.8	8.3	-15.0
Average cost per GJ	12.6	13.2	12.6	-5.0

a Change between 2004–05 and 2005–06.

Note: All dollar values in nominal terms.

Source: Licensed utility returns to ICRC.

From 2004–05 to 2005–06, the average residential bill increased by around 0.3% to \$750, while the average non-residential bill decreased by 11.5% to \$10,685. This resulted in an overall decrease in the average customer bill of 2.6% to \$969, down from \$995 in 2004–05.

Total revenue remained unchanged despite an increase in consumption. Average costs per gigajoule fell overall during 2005–06. The average non-residential cost of gas decreased by 15.0% to \$8.30 per gigajoule, while residential costs fell by 0.7% to \$15.10 per gigajoule. The overall average cost declined 4.9% to \$12.58 per gigajoule.

3.3 Electricity distribution

ActewAGL Distribution is the regulated distributor of electricity to all customers in the ACT. Table 7 summarises ActewAGL Distribution's financial performance from 2002–03 to 2005–06. The total revenue earned in 2005–06 from the distribution of electricity increased to \$114.8 million. Operating costs increased to \$45.2 million in 2005–06, while depreciation fell slightly to \$21.6 million.

Table 7 Revenue, costs and earnings, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Total volume distributed (GWh)^a	2,537	2,619	2,629	2,773
<i>Revenue (\$ million, nominal)</i>				
Regulated network charges	96.4	104.9	103.6	109.6
Customer contributions	2.3	3.9	5.6	3.4
Other regulated revenue	10.5	1.8	1.9	1.9
Total revenue	109.2	110.7	111.1	114.8
<i>Operating costs (\$ million, nominal)</i>				
Network operating costs	27.6	12.5	11.9	13.8
Network maintenance costs	8.6	9.1	9.5	11.2
Other costs ^b	n.a.	17.7	19.6	20.2
Total operating costs	36.1	39.3	41.0	45.2
<i>Earnings and depreciation (\$ million, nominal)</i>				
Earnings before interest, tax, depreciation and amortisation	73.1	71.4	70.1	69.7
Depreciation	24.4	22.1	22.1	21.6
Earnings before interest and tax	48.7	49.3	48	48.1
Average regulatory asset base ^c	479.5	516.5	514.8	523.4
Pre-tax nominal return on assets (%) ^d	10.2	9.5	9.3	9.2

a The disparity between the figures for energy delivered and the total sales reported for electricity suppliers (Tables 1 and 5) is noted.

b Other costs include costs such as operating the emergency call centre; system control; the apprentice training program; regulatory overheads; financial and executive management; and general network operations. Other costs are included in network operating costs in 2002–03.

c Regulatory asset base determined by the Commission as part of the 2004 price review determination (see ICRC 2004a).

d Return on assets = EBIT ÷ average asset base × 100%.

Source: ActewAGL Distribution reports to ICRC.

Revenue has increased in nominal terms in recent years, although in 2004–05 the revenue earned from regulated network charges declined following the introduction of a new price direction.

Table 7 shows that operating costs have increased over recent years, reflecting increasing maintenance requirements of ageing assets and costs of operating an expanding network.

Table 8 summarises network charges financial performance indicators from 2002–03 to 2005–06.

Table 8 Network charges, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Residential				
Residential customer charges (\$ million, nominal)	n.a.	43.1	37.2	43.1
Energy delivered (GWh)	1,113	1,101	1,119	1,180
Average residential network charge (cents per kWh)	n.a.	3.91	3.32	3.65
Non-residential				
Non-residential customer charges (\$ million, nominal)	n.a.	61.8	66.4	56.9
Energy delivered (GWh)	1,424	1,518	1,510	1,593
Average non-residential network charge (cents per kWh)	n.a.	4.07	4.40	3.57
Network charges—total (\$ million, nominal)	96.4	104.9	103.6	109.6
Energy delivered—total (GWh)^a	2,537	2,619	2,629	2,773
Average network charge (cents per kWh)	3.80	4.01	3.94	3.95

a The disparity between the figures for energy delivered and the total sales reported for electricity suppliers (Tables 1 and 5) is noted.

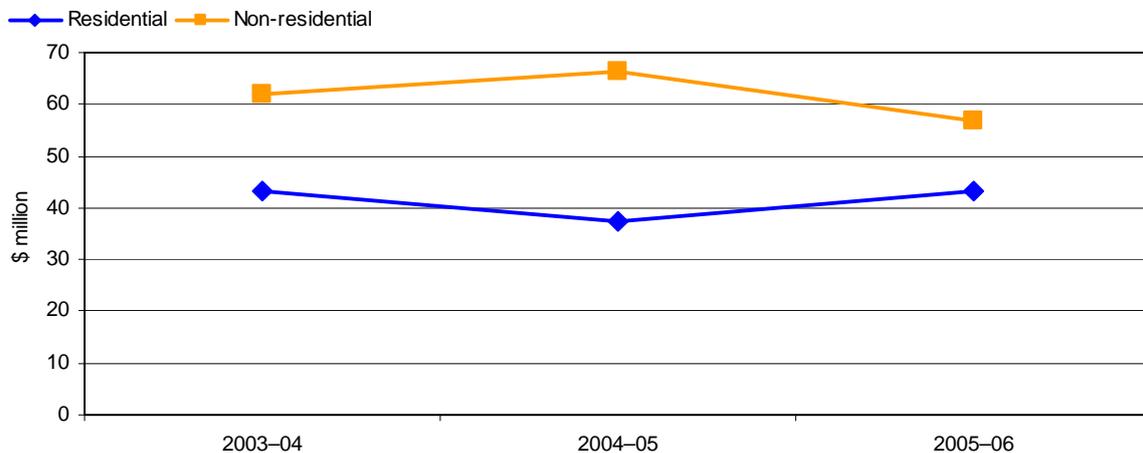
Note: The average charges provide a high-level basis for comparison only. They have not been calculated based on, and do not represent, actual tariff structures.

Source: ActewAGL Distribution reports to ICRC.

The average residential network charge for electricity increased by 9.9% from 2004–05 to 2005–06, rising from 3.32 cents to 3.65 cents per kilowatt hour. The average non-residential charge decreased by 19.6%, from 4.44 cents to 3.57 cents per kilowatt hour.

Network charge revenues are illustrated in Figure 16. Year-on-year changes reflect changes in consumption levels and price for distribution services.

Figure 16 Total network revenue, electricity distribution, ActewAGL Distribution, 2003–04 to 2005–06

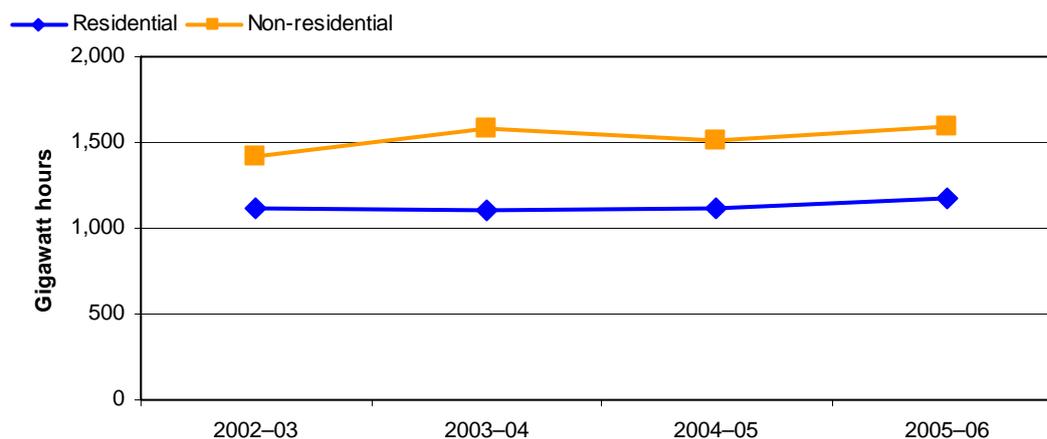


Note: The 2002–03 figures are not available.

Source: ActewAGL Distribution reports to ICRC.

Figure 17 shows the change in the levels of consumption as reported for distribution services.

Figure 17 Energy distributed, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06



Source: ActewAGL Distribution reports to ICRC.

Table 9 compares actual capital expenditure from 2002–03 to 2005–06 with the capital expenditure forecasts included in the price determinations. Capital expenditure is undertaken by either ActewAGL or via customer contributions. The latter are usually for system augmentation for the benefit of specific customers.

Table 9 Capital expenditure, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Capex funded by ActewAGL Distribution (<i>\$ million, nominal</i>)	29.1	22.7	21	28.6
Variation from price determination (%) ^a	42.6%	134.0%	6.9%	25.8%
Capex funded by customer contributions (<i>\$ million, nominal</i>)	2.3	3.9	5.6	3.4
Variation from price determination (%) ^a	-62.4%	-36.6%	-14.0%	-66.4%
Total capital expenditure (<i>\$ million, nominal</i>)	31.4	26.3	26.7	31.9
Total variation from price determination (%)^a	27.5%	55.0%	-8.4%	-2.3%

a See IPRC (1999) and ICRC (2004a) price determinations. A positive number indicates that the actual number is higher than the price determination. Source: ActewAGL Distribution reports to ICRC.

ActewAGL Distribution spent \$31.9 million on capital expenditure in 2005–06. In 2005–06, total capital expenditure was slightly less than the amount anticipated by the price determination, although customer contributions were less than expected and ActewAGL's portion was greater.

3.4 Water and wastewater services

Water and wastewater services in the ACT are provided by ACTEW Corporation and managed by the ActewAGL joint venture.

Table 10 provides information on ACTEW's Corporation's revenue, expenses, and pre-tax rate of return on assets in respect of its water and wastewater services. It is not readily possible to compare the corporation's rate of return on assets as calculated using its public accounts with the figure calculated by the Commission in its price determination. This is because the Commission uses an economic valuation of the water and wastewater assets, whereas the rate of return that ACTEW Corporation reports in its annual financial statements is based on its accounting values. In

addition, the accounting values used to calculate ACTEW Corporation's profits often take into account some of the corporation's unregulated business ventures. As a result, a number of different rates of return for ACTEW Corporation have been quoted in the media, but not all are comparable to the Commission's approved rate of return for the corporation.

For purposes of regulating the monopoly services provided by ACTEW Corporation, the Commission uses its determined regulatory asset base valuation.

Table 10 Pre-tax rate of return on assets, water and wastewater, ACTEW Corporation, 2000–01 to 2005–06^a

	\$million (nominal)					
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Water revenue	56.3	62.8	66.5	62.5	65.5	81
Wastewater revenue	56.8	60.5	64.2	68.7	68.7	73.1
Commonwealth subvention payments	8.3	8.4	8.6	8.9	9.1	9.3
Other regulated revenue	n.a.	n.a.	n.a.	n.a.	1.1	1.1
Total revenue	121.3	131.6	139.3	140	144.4	164.5
Cost of sales	5.7	5.9	6	7.7	9.6	13.1
Administration	n.a.	3	4.4	5.1	4.4	4.2
Depreciation	18.6	20.1	20.3	20	20.9	21.9
Project related expenses	57	51.5	55.3	61.3	62.1	67.9
Other expenses	17.2	4.3	3.1	2.1	2.5	3
Total expenses	98.4	84.8	89.1	96.2	99.4	110.1
Profit before tax	22.3	46.8	50.2	43.8	44.8	54.3
Average asset base ^b	754	780.2	796.2	836.9	890.8	922.2
Pre-tax rate of return on regulated asset values (%)	3.0	6.0	6.3	5.2	5.0	5.9

a ACTEW Corporation annual reports, 2000–01 to 2005–06.

b ICRC, *Final Report and Price Decision, Investigation into prices for water and wastewater services in the ACT*, March 2004.

Source: ACTEW Corporation reports to ICRC.

Table 10 shows that in 2005–06 profit before tax increased by \$9.5 million over the preceding year as a result of increases in revenue of \$20.1 million outpacing increases in expenses of \$10.7 million. Revenue increased mainly due to higher regulated water and wastewater prices and higher levels of water consumption. The drought and the January 2003 bushfires have contributed to a significant public focus on water prices in the ACT. In part, the increases that occurred up to 2005–06 reflect an increase in the water abstraction charge, from 10 cents per kilolitre in 2001 to 25 cents per kilolitre during 2005–06.¹⁵

The water tariffs applied by ACTEW have also been increased to allow recovery of primarily fixed costs which have continued to be incurred despite reduced water consumption in severe drought conditions. There have also been significant increases in costs associated with the repair work undertaken in catchment areas following the 2003 bushfires.

¹⁵ The water abstraction charge subsequently increased to 55 cents per kilolitre on 1 July 2006.

The increase in total expenses from \$99.4 million in 2004–05 to \$110.1 million in 2005–06 is largely attributable to increases in catchment treatment expenses and catchment recovery work.

3.5 Water supply

Table 11 shows the components of ACTEW Corporation’s water supply revenues and capital expenditure from 2002–03 to 2005–06. The structure of water prices changed from 2003–04 to 2004–05. The fixed water supply charge approved in the 1999 price direction was \$125 per year, which was reduced to \$75 per year in the 2004 price determination. This is counterbalanced by an increase in the volumetric charge, also approved in the 2004 price direction, to create an incentive for consumers to use less water.¹⁶

Table 11 Revenue and capital expenditure, water services, ACTEW Corporation, 2002–03 to 2005–06^a

	2002–03	2003–04	2004–05	2005–06
Number of properties	130,027	131,991	133,431	135,462
Volume of water (kL)	54,895,668	43,526,595	43,466,958	47,790,980
<i>Revenue (\$ million, nominal)</i>				
Volumetric charge	40.0	33.6	42.1	53.3
Supply charge	15.5	16.5	9.6	9.8
Miscellaneous services	0.2	0.3	0.8	0.7
Total revenue (\$ million, nominal)	55.7	50.4	52.5	63.8
<i>Average charges</i>				
Volumetric charge (\$/kL)	0.7	0.8	1.0	1.1
Supply charge (\$/property)	119.2	125.0	71.9 ^b	72.3 ^b
Overall total charge (\$/property)	428.4	381.8	393.5	471.0
Capital expenditure (\$ million, nominal)	4.6	39.0	9.7	10.6

a Figures are taken from ACTEW Corporation’s 2004–05, 2005–06 and 2006–07 water and wastewater tariff proposals to the Commission and, as such, are not the same as figures in Table 3 and elsewhere that are based on ACTEW Corporation reports on performance.

b This is less than \$75 (the supply charge set in the Commission’s determination) because pensioners obtain a discount.

Note: The data in this table are based on financial information provided by ACTEW Corporation for its annual pricing proposal.

Source: ACTEW Corporation reports to ICRC.

ACTEW Corporation’s total water supply revenue decreased by 9.3% from \$55.7 million in 2002–03 to \$50.5 million in 2003–04. The decrease appears principally to reflect a 21% fall in water consumption due to water restrictions. Revenue increased in 2004–05 to \$52.5 million, based on the Commission’s new price direction and restructured water tariffs. The water restrictions and changes in consumption led to a reduction, to below expected levels, in the total volume of water supplied in 2004–05. ACTEW Corporation’s water supply revenue increased by 21.5% to \$63.8 million in 2005–06, mainly due to an increase in water supplied and increases in prices reflecting an under-recovery of anticipated efficient costs due to water restrictions in previous years. The adjustments were allowed under the provisions of the Commission’s price determination.

¹⁶ See ICRC (2004b).

Capital expenditure in each year varied significantly from the capital expenditure forecasts included in the price determination. Capital expenditure of \$10.6 million in 2005–06 was mainly for the completion of a water transfer system from the Cotter catchment to the Googong reservoir.

3.6 Sewerage services

Sewerage services consist of two fixed charges: one for residential properties (the supply charge), and one for non-residential properties (the fixtures charge). The pricing structure of wastewater was fundamentally unchanged by the 2004 price direction.

Table 12 shows that in 2005–06 ACTEW Corporation’s sewerage services revenue increased by \$4.5 million over the preceding year, an increase of 6.6%. This continued a trend of increasing revenues each year since 2002–03, reflecting the growth of the customer base.

Table 12 Properties served, revenue and charges, sewerage services, ACTEW Corporation, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Number of properties	125,824	131,870	129,489	132,706
Number of billable fixtures	46,821	46,431	46,978	50,396
<i>Revenue (\$ million, nominal)^a</i>				
Supply charge	43.7	46.7	50.5	53.0
Fixtures charge	14.8	17	17.2	19.2
Miscellaneous services	0.0	0.3	0.3	0.2
Total revenue (\$ million, nominal)^a	58.5	64.0	68.0	72.4
<i>Average charges</i>				
Supply charge (\$/property)	347	354	390	399
Fixtures charge (\$/fixture)	316	366	366	381

Note: The data in this table are based on financial information provided by ACTEW Corporation for its annual pricing proposal, and, as such, are not the same as figures in Table 3 and elsewhere that are based on ACTEW Corporation reports on performance.

Source: ACTEW Corporation information provided to ICRC.

4 Customer service

This chapter presents information on licensees' customer service performance and compares it to previous periods. The collection of customer service data supports establishment of a base of information on the operation of the market, and subjects the performance of utilities to regulatory, customer and public scrutiny.

The performance measures considered in this chapter are:

- customer complaints (as an indicator of the extent to which services meet customers' expectations)
- the reliability of utility services
- the efficiency of call centre services.

Comparative data for utilities in other jurisdictions are presented where available.

4.1 Complaints

The ACT's Consumer Protection Code establishes a range of minimum service standards. From 1 July 2005, service standard 3 (on responding to complaints) was extended to include verbal as well as written complaints. Alignment of licensees' complaints definitions with the code's amended service standard has resulted in the recording of a larger number of complaints. The figures and trends in this report must be viewed against the background of that change of definition.

Table 13 compares numbers of complaints made to licensed utilities in 2004–05 and 2005–06, and summarises the nature of the most common complaints made in 2005–06.

Table 13 Complaints, ACT utilities, 2004–05 to 2005–06

Licensee	Complaints per 1,000 customers		Most common complaints in 2005–06	
	2004–05	2005–06	Nature	Proportion of total %
ActewAGL Distribution (electricity)	5.8	5.8	Customer service	32
ActewAGL Distribution (gas)	1.0	1.4	Metering and meter reading	61
ACT electricity suppliers	1.2	3.5	Marketing	51
ACT gas suppliers	2.3	1.2	Billing and affordability	71
ACTEW Corporation (water & sewerage)	5.0	8.4	Water quality	74

Source: Licensed utility reports to ICRC.

4.1.1 Electricity distribution

During 2005–06, ActewAGL Distribution received 898 complaints (881 in 2004–05). This equates to 5.81 complaints for every 1,000 customers for both years.

Table 14 summarises trends in complaints received from 2002–03 to 2005–06.

Table 14 Complaints, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06

Nature of complaint	2002–03	2003–04	2004–05	2005–06
	No./1,000 customers	No./1,000 customers	No./1,000 customers	No./1,000 customers
Customer service	1.0	1.1	0.43	1.85
Notices	n.a.	1.23	1.78	1.53
Property damage / restoration of property	n.a.	0.5	0.48	0.74
Reliability of supply	0.35	0.22	0.12	0.49
Other network operations	n.a.	0.88	1.51	0.41
Technical quality of supply	0.1	0.04	0.03	0.06
Other	1.11	0.27	1.48	0.72
Total	2.56	4.24	5.83	5.81
Proportion (%)	%	%	%	%
Customer service	38.9	25.8	7.3	31.8
Notices	n.a.	28.9	30.5	26.4
Property damage /restoration of property	n.a.	11.8	8.2	12.8
Reliability of supply	13.7	5.2	2	8.5
Other network operations	n.a.	20.8	26	7
Technical quality of supply	3.9	1.0	0.6	1.0
Other	43.4	6.5	25.4	11.1
Total	100	100	100	100

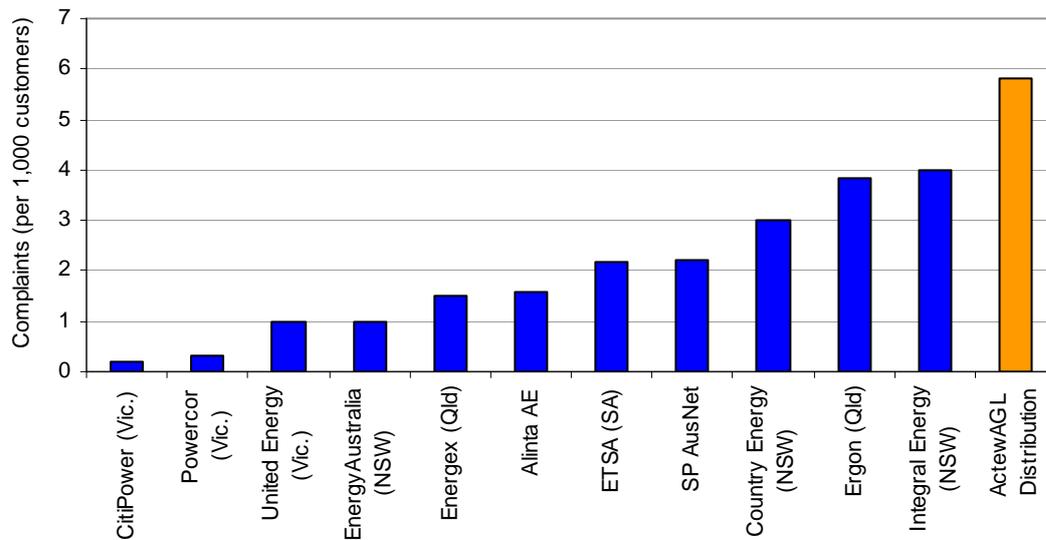
Source: ActewAGL Distribution reports to ICRC.

Customer service complaints increased significantly (from 0.43 to 1.85 per 1,000 customers) to reach almost 32% of all complaints in 2005–06, after making up only 7.3% of the total in 2004–05. ActewAGL advised that the increase was due to a change in the definition of complaint used in the 2005–06 report (that is, to include verbal complaints), and not necessarily from a decline in customer service performance.

Complaints about ‘notices’ (that is, failure to provide notice, or provision of insufficient notice, about interruptions to supply and performance of works) accounted for 26.4% of the complaints, second only to customer service complaints. Despite making up the second largest number of complaints, the number of ‘notices’ complaints fell in absolute and relative terms compared with 2004–05.

Figure 18 shows that, as a proportion of its customer base, ActewAGL Distribution’s complaints ratio of 5.8 per 1,000 customers is higher than those of other distributors surveyed. Complaints ratios for the sampled distributors range from 0.2 per 1,000 customers for CitiPower (Victoria) to 4 per 1,000 customers for Integral Energy (New South Wales). The average for the distributors included in the sample is 2.2 complaints per 1,000 customers.

Figure 18 Complaints, electricity distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2006.

Sources: ESC (2007c), ESCOSA (2006a), IPART (2006b), OCA (2007a), OCA (2007b), ActewAGL Distribution report to ICRC.

Quality of supply complaints

During 2005–06, ActewAGL Distribution received 24 complaints (0.155 per 1,000 customers) relating to the technical quality of supply, higher than the 14 complaints received in both 2003–04 and 2004–05.

ActewAGL Distribution indicated that the most likely causes of the problems leading to the complaints included network limitations (17%), internal customer problems (12.5%) and faulty network equipment (8.3%). No network problems were identified in 58% of the complaints investigated.

Table 15 details complaints about quality of supply, by type.

Table 15 Complaints, quality of supply, electricity distribution, ActewAGL Distribution, 2002–03 to 2005–06

Nature of complaint	2002–03	2003–04	2004–05	2005–06
	No./1,000 customers	No./1,000 customers	No./1,000 customers	No./1,000 customers
Voltage swells	n.a.	n.a.	0.02	0.03
Voltage spikes	n.a.	n.a.	0.02	0.01
Low supply voltage	n.a.	n.a.	0.02	0.01
Voltage dips	n.a.	n.a.	0.01	0.01
TV or radio interference	n.a.	n.a.	0.01	0.01
Other ^a	n.a.	n.a.	0.02	0.08
Total	0.11	0.10	0.09	0.16
Proportion (%)	%	%	%	%
Voltage swells	n.a.	n.a.	21.4	20.8
Voltage spikes	n.a.	n.a.	21.4	8.3
Low supply voltage	n.a.	n.a.	21.4	8.3
Voltage dips	n.a.	n.a.	7.1	4.2
TV or radio interference	n.a.	n.a.	7.1	4.2
Other ^a	n.a.	n.a.	21.4	54.2
Total^b	100	100	100	100

a 'Other' consists of overload-related issues and halogen lamp problems.

b Apparent errors in addition are due to rounding.

Source: ActewAGL Distribution reports to ICRC.

Table 16 compares ActewAGL Distribution's performance in this area to the performance of selected distributors.

Table 16 Complaints, quality of supply, frequency and most common complaints, electricity distribution, selected utilities, 2005–06

Distributor	No./1,000 customers	Most common complaint	
		Nature	Proportion of total (%)
ETSA Utilities (SA)	0.09	Low supply voltage	50
ActewAGL Distribution (ACT)	0.16	Other ^a	54
ENERGEX (Qld)	1.51	Voltage dips	39
Ergon Energy (Qld)	3.83	Low supply voltage	37

a 'Other' consists of overload-related issues and halogen lamp problems.

Sources: ESCOSA (2006a), QCA (2007a), QCA (2007b), ActewAGL Distribution report to ICRC.

ActewAGL Distribution received 0.16 complaints per 1,000 customers about supply quality. This was considerably lower than the Queensland electricity distributors, but higher than ETSA Utilities. The most common cause of quality of supply complaints for ActewAGL was 'Other' (identified as being primarily overload-related issues). Problems associated with voltage swells (20.8%), spikes (8.3%) and low-voltage supply (8.3%) were other causes of complaints.

4.1.2 Electricity supply

Table 17 shows that the number of electricity supply complaints increased over each of the previous three reporting periods, rising from 0.73 per 1000 customers in 2002–03 to 3.47 in

2005–06. The increase over that time period coincides with increased activity in the competitive electricity market.

Table 17 Complaints, electricity supply, ACT suppliers 2002–03 to 2005–06

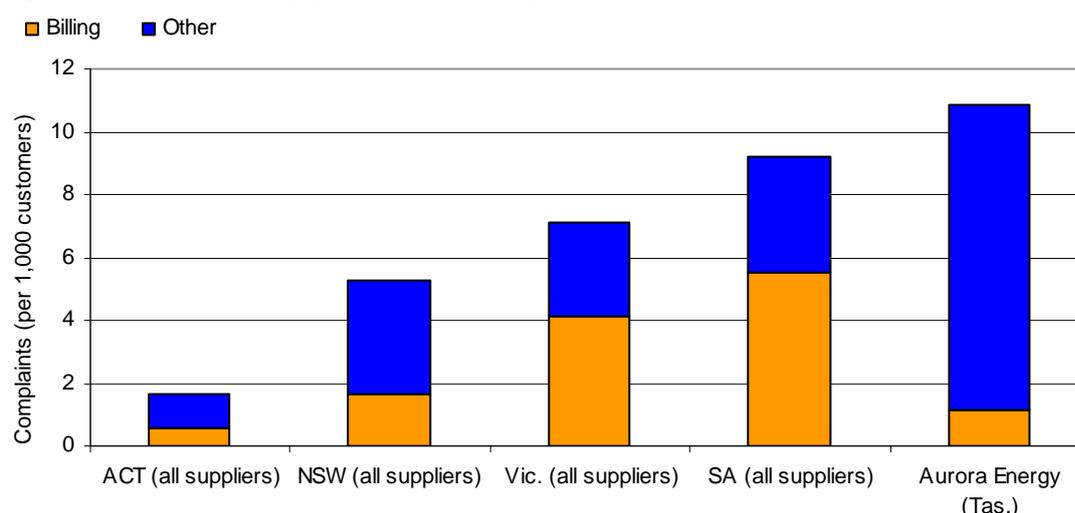
Nature of complaint	2002–03	2003–04	2004–05	2005–06
	No./1,000 customers	No./1,000 customers	No./1,000 customers	No./1,000 customers
Marketing	n.a.	n.a.	0.42	1.78
Billing	0.54	0.37	0.28	0.57
Other	0.19	0.49	0.47	1.12
Total	0.73	0.86	1.17	3.47
Proportion (%)	%	%	%	%
Marketing	n.a.	n.a.	36	51
Billing	74	43	24	16
Other	26	57	40	32
Total	100	100	100	100

Source: Licensed utility reports to ICRC.

Table 17 indicates that ‘marketing’ complaints accounted for 51% of the ACT’s electricity retail complaints and ‘other’ complaints (generally customer service complaints) accounted for 32% in 2005–06. Complaints relating to billing accounted for 16%, down from 24% in 2004–05 and 43% in 2003–04.

While the number of complaints received by ACT suppliers has increased significantly over recent years, it remains comparatively low, compared with other jurisdictions. Figure 19 shows that the incidence of complaints varied from 5.2 complaints per 1,000 customers for New South Wales retailers to 10.9 complaints per 1,000 customers in Tasmania.

Figure 19 Complaints by type, electricity supply, selected utilities, 2005–06



Sources: Derived from OTTER (2006), ESC (2006), ESCOSA (2006b), IPART (2006a), licensed utility reports to ICRC.

Jurisdictions’ regulatory frameworks have an impact not only on the way utilities handle complaints, but also on the number of complaints utilities receive. For example, ACT customers with hardship or billing complaints can lodge their complaints directly with the Essential Services Consumer Council, rather than with the utility. This, and gradually emerging competition in the

ACT energy market, may partly explain the relatively low ratio of electricity retail complaints in the ACT.

4.1.3 Gas distribution

In 2005–06, ActewAGL Distribution received 1.37 complaints per 1,000 gas customers, up from 0.98 in 2004–05.¹⁷ The complaints are summarised in Table 18.

Table 18 Complaints, gas distribution, ActewAGL Distribution, 2002–03 to 2005–06

Nature of complaint	2002–03	2003–04	2004–05	2005–06
	No./1,000 customers	No./1,000 customers	No./1,000 customers	No./1,000 customers
Metering and meter reading	0.71	0.64	0.60	0.83
Connections	0.26	0.17	0.07	0.21
Property damage and site restoration	0.29	0.08	0.21	0.16
Contractor performance	0.45	0.17	0.00	0.00
Other	0.25	0.25	0.10	0.16
Total	1.96	1.30	0.98	1.37
Proportion (%)	%	%	%	%
Metering and meter reading	36.0	49.1	60.9	60.8
Connections	13.4	12.7	6.9	15.2
Property damage and site restoration	14.6	6.4	21.8	12.0
Contractor performance	23.2	12.7	0.0	0.0
Other	12.8	19.1	10.3	12.0
Total	100.0	100.0	100.0	100.0

Source: ActewAGL Distribution reports to ICRC.

Metering and meter reading were the basis for 61% of the complaints (unchanged from 2004–05) and were the main source of complaints in 2005–06 and the previous three years.

Connection complaints trebled between 2004–05 and 2005–06, when 0.21 customers per 1,000 customers complained about connections. Conversely, the number of complaints related to ‘property damage and site restoration’ decreased by 24% to 0.16 complaints per 1,000 customers. There were no complaints about ‘contractor performance’ in 2005–06, as was the case in 2004–05.

Table 19 compares the numbers and most common causes of complaints between gas network operators. Envestra in South Australia and Queensland had the lowest incidence of complaints. ActewAGL Distribution’s incidence of complaints was broadly comparable to that of Victorian

¹⁷ The definition used for billing complaints is that recommended by the Utility Regulators Forum: ‘Account or billing complaints include matters directly relating to the amount of a bill, as well as any ensuing matters such as disconnection due to an unpaid disputed bill and complaints relating to affordability or hardship. This includes complaints about difficulty in paying accounts, overcharging, prices, payment terms and methods, and debt recovery practices’. Utility Regulators Forum (2002), p. 24.

distributors but significantly higher than Envestra in South Australia and Queensland. ActewAGL's relative performance was similar to its 2004–05 performance.

While the most common cause of complaint in the ACT was 'metering and meter reading', elsewhere complaints related mainly to 'connections' and 'quality of supply'.

Table 19 Complaints, frequency and most common complaints, gas distribution, selected utilities, 2005–06

Distributor	No./1,000 customers	Most common complaints
Envestra (SA)	0.10	Reliability of supply
Envestra (QLD)	0.21	Connection/disconnection
Envestra (Vic.)	1.21	Connection and augmentation
ActewAGL Distribution (ACT)	1.37	Metering and meter reading
TXU (Vic.)	1.51	Quality and reliability of supply
Multinet (Vic.)	2.22	Quality and reliability of supply

Sources: ESC (2007a), ESCOSA (2006a), QCA (2006).

4.1.4 Gas supply

In 2005–06, ACT gas suppliers received 1.2 complaints for every 1,000 customers, a decrease of about 48% from the previous year (Table 20). Complaints were primarily about 'billing and affordability' and 'other' factors (for example, staff behaviour, and metering and meter reading). The number of 'marketing' complaints was negligible.

Table 20 Complaints, issues, gas supply, ACT suppliers, 2002–03 to 2005–06

	2002–03 ^a	2003–04 ^a	2004–05	2005–06 ^a
Nature of complaint	No./ 1,000 customers	No./ 1,000 customers	No./ 1,000 customers	No./ 1,000 customers
Billing and affordability	0.60	0.30	1.20	0.86
Marketing	n.a.	n.a.	0.03	0.04
Other	1.20	1.40	1.10	0.31
Total	1.80	1.70	2.33	1.21
Proportion (%)	%	%	%	%
Billing and affordability	32.9	19.7	49.5	71.3
Marketing	n.a.	n.a.	1.5	3.1
Other	67.1	80.3	49.0	25.6
Total	100.0	100.0	100.0	100.0

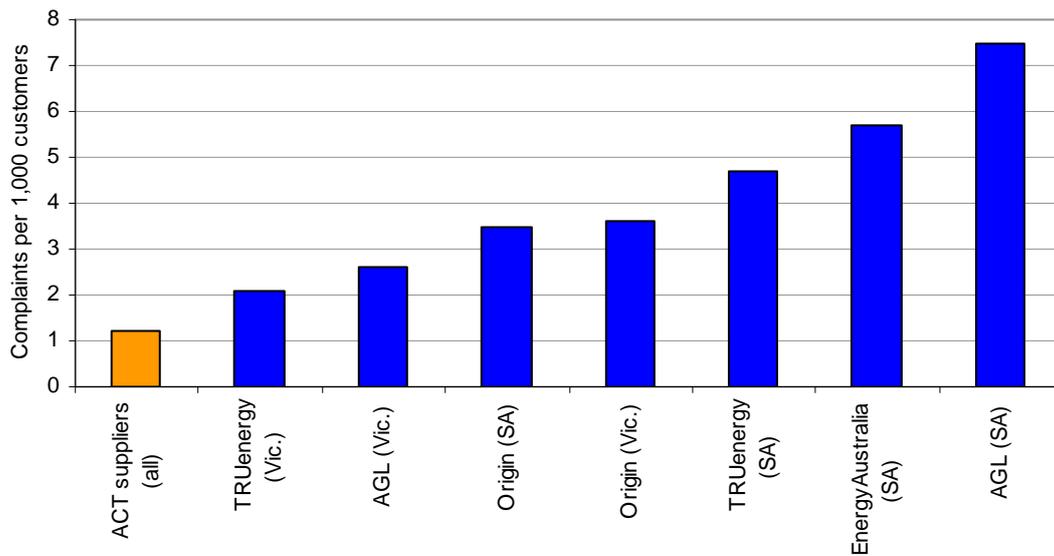
a ActewAGL Retail only; includes Queanbeyan.

Source: Licensed utility reports to ICRC.

The total incidence of gas supply complaints during 2005–06 received by ACT suppliers of 1.21 per 1,000 customers, was markedly lower than the level for electricity supplies of 3.47 per 1,000 customers.

The incidence of complaints received by ACT gas suppliers was the lowest compared with other jurisdictions (Figure 20)—an improvement from the previous year. The incidence for other suppliers ranged from just over 2.1 per 1,000 customers (TRUenergy in Victoria) to about 7.5 per 1,000 customers (AGL in South Australia).

Figure 20 Complaints, gas supply, selected utilities, 2005–06



Sources: ESC (2006), ESCOSA (2006b), licensed utility reports to ICRC.

4.1.5 Water and sewerage

In 2005–06, ACTEW Corporation received 1,149 complaints about its water and sewerage services (1,075 water and 74 sewerage). This equates to 8.39 complaints per 1,000 customers and is an increase of about 67% since 2004–05. Table 21 summarises the complaints related to water and sewerage services received by ACTEW Corporation in the three years to 2005–06.

Table 21 Complaints, water and sewerage services, ACTEW Corporation, 2003–04 to 2005–06

Nature of complaint	2003–04	2004–05	2005–06 ^a
	No./1,000 customers	No./1,000 customers	No./1,000 customers
Water quality	1.89	2.57	6.22
Property damage and site restoration	0.50	0.58	0.72
Sewerage services	0.16	0.05	0.32
Metering/meter reading	0.12	0.08	0.30
Other—networks	0.37	0.97	0.24
Water supply reliability	0.53	0.27	0.20
Billing and affordability	0.26	0.23	0.18
Other—retail	0.19	0.05	0.11
Notices	0.07	0.22	0.10
Total	4.07	5.03	8.39

Continued on next page.

Table 21 Complaints, water and sewerage services, ACTEW Corporation, 2003–04 to 2005–06 (continued)

	2003–04	2004–05	2005–06 ^a
Proportion (%)	%	%	%
Water quality	46.3	51.1	74.1
Property damage and site restoration	12.2	11.6	8.6
Sewerage services	3.9	1.1	3.8
Metering/meter reading	3.0	1.7	3.6
Other—networks	9.0	19.3	2.9
Water supply reliability	12.9	5.4	2.3
Billing and affordability	6.3	4.5	2.2
Other—retail	4.7	0.8	1.3
Notices	1.8	4.3	1.2
Total	100.0	100.0	100.0

a 136,890 water customers for this year.

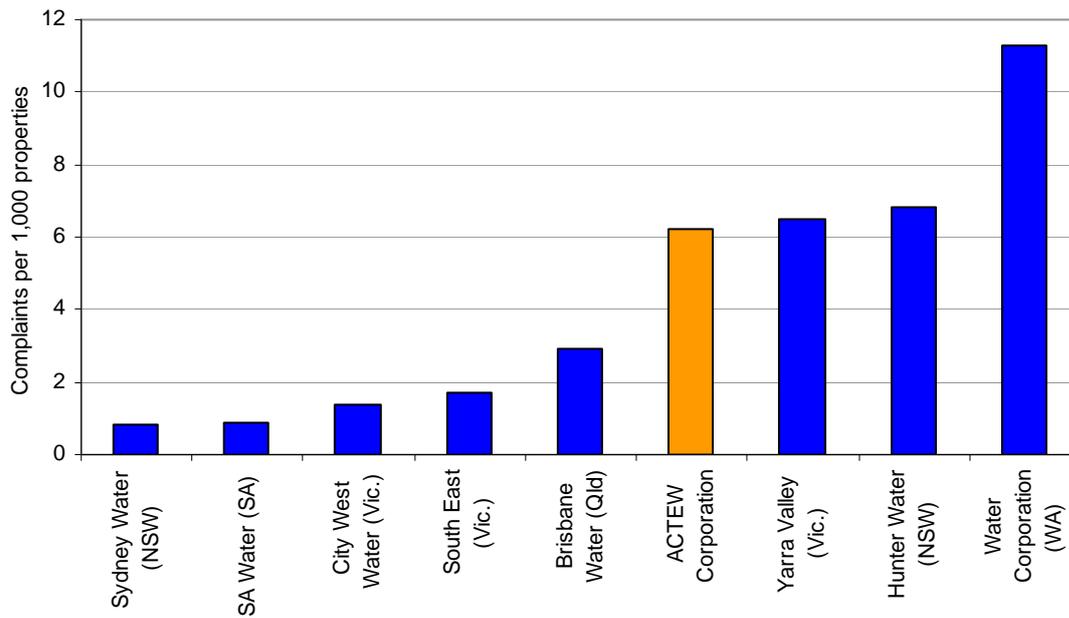
Source: ACTEW Corporation reports to ICRC.

Complaints increased for most categories, in particular ‘water quality’ (140%). ACTEW Corporation advised that the increase was the result of a change in the definition of ‘complaint’ used in the 2005–06 report (that is, to include verbal as well as written complaints) and not necessarily declining performance.

‘Water quality’ accounted for 74.1% of complaints received in 2005–06, and was the main basis for complaints in the two earlier years. The next most common basis was ‘property damage and site restoration’ at 8.6%.

The only information about complaints to water utilities in other jurisdictions with which to compare ACTEW Corporation’s performance is for water quality complaints. Figure 21 compares the incidence of water quality complaints between a number of water suppliers. At 6.2 complaints per 1,000 customers, ACTEW Corporation’s incidence of complaints was higher than those of most other water utilities, but comparable with those of Yarra Valley Water and Hunter Water and considerably lower than that of the Water Corporation in Western Australia.

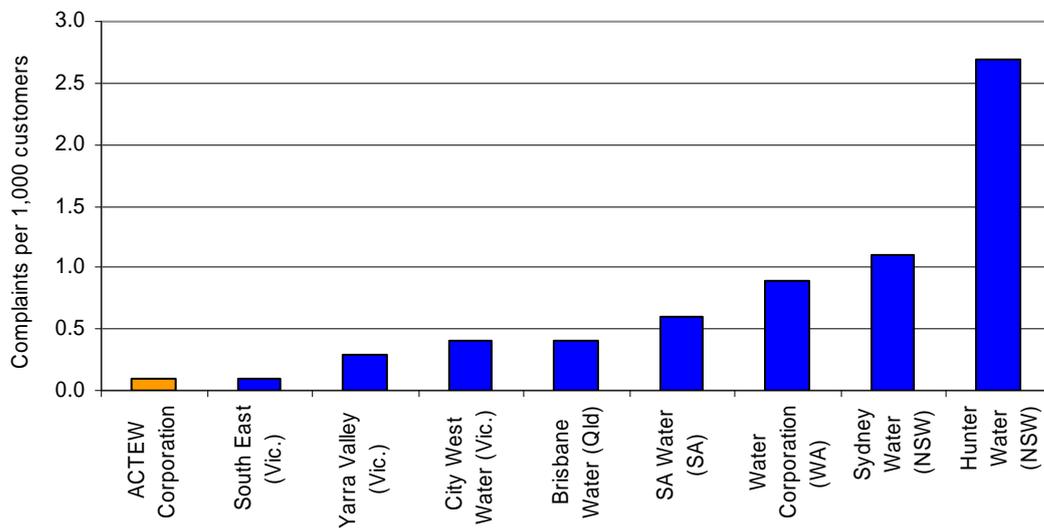
Figure 21 Complaints, water quality, selected utilities, 2005–06



Source: WSAA (2006), ACTEW Corporation report to ICRC.

Figure 22 compares the incidence of complaints about sewage odour between utilities during the year. With only seven complaints in total, ACTEW Corporation had a low incidence of complaints shared with only one of all the other selected water and sewerage utilities.

Figure 22 Complaints, sewage odour, selected utilities, 2005–06



Source: WSAA (2006).

4.2 Network service quality

4.2.1 Electricity distribution

New connections

During the year ActewAGL Distribution made 3,202 new connections (2.1% of its customer base), and reported that all new connections were made on or before the date agreed with the customer. This compares favourably with other utilities shown in Table 22 which shows that a small number of connections were not made by the agreed date in New South Wales and South Australia.

Table 22 New connections, numbers and timeliness, electricity distribution, selected utilities, 2005–06

Distributor	New connections as proportion of customer base (%)	Proportion of connections not made on or before agreed date (%)
NSW—all utilities	10.0	0.02
Vic.—all utilities	8.7	0.21
SA—ETSA Utilities	5.2	1.33
ACT—ActewAGL Distribution	2.1	0.00

Note: Victorian data are for calendar year 2006.

Sources: ESC (2007c), ESCOSA (2006a), IPART (2007b), ActewAGL Distribution report to ICRC.

Reliability of supply, by feeder type

ActewAGL Distribution provided information on the reliability of electricity supply for:

- overall interruptions—all sustained interruptions, including transmission, directed load shedding, planned and unplanned interruptions
- planned interruptions
- unplanned interruptions, excluding transmission outages and directed load shedding
- normalised unplanned interruptions—interruptions that did not exceed a threshold system average interruption duration index (SAIDI) of three minutes, or were not caused by exceptional natural or third-party events, or were such that the distributor could not reasonably be expected to mitigate the effect of the event by prudent asset management.

Typically, three indicators are used to measure network performance: SAIDI, SAIFI and CAIDI:

- SAIDI measures the total number of minutes in a given year, on average, that a customer on a distribution network is without electricity.
- SAIFI (system average interruption frequency index), measures the average number of interruptions per customer per year.
- CAIDI (the customer average interruption duration index) measures the average duration of each interruption in minutes.

Table 23 provides the annual performance figures for planned interruptions for ActewAGL Distribution's rural and urban feeders for the past three reporting years.

Table 23 Planned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2003–04 to 2005–06

Index	2003–04	2004–05	2005–06
SAIDI (average minutes per customer per year without power)			
Urban	40.7	47.1	49.8
Rural	40.5	31.4	49.5
Network total	40.6	46.6	49.5
SAIFI (average number interruptions per customer per year)			
Urban	0.2	0.2	0.2
Rural	0.2	0.2	0.2
Network total	0.2	0.2	0.2
CAIDI (average duration in minutes per interruption)			
Urban	190.5	215.9	216.5
Rural	191.4	204.5	206.1
Network total	190.5	215.5	215.2

Source: ActewAGL Distribution reports to ICRC.

On average, each customer experienced 49.5 minutes off supply for planned interruptions in 2005–06 (SAIDI). This was an increase over previous years and was attributable to a greater amount of planned maintenance (in particular, pole replacement and vegetation management) and, to a lesser extent, to connections of new electricity load. Performance for rural short feeders and, to a lesser extent, urban feeders declined between 2004–05 and 2005–06 (SAIFI).

The average number of planned interruptions per customer increased for urban and rural short feeders between 2004–05 and 2005–06, rising by about 30 seconds for urban feeders and 90 seconds for rural short feeders (CAIDI).

Table 24 shows performance information for unplanned interruptions for 2003–04 to 2005–06. Compared with the preceding year, the duration of outages for each urban customer increased overall in 2005–06, but decreased significantly for rural short feeders (SAIDI). The frequency of outages increased both for urban feeders and for rural feeders, reaching almost three outages per customer for rural feeders (SAIFI). There was an increase in the average duration of outages for urban feeders and for the network as a whole, but a significant improvement for rural feeders (CAIDI).

Table 24 Unplanned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2003–04 to 2005–06

Index	2003–04	2004–05	2005–06
SAIDI (average minutes per customer per year without power)			
Urban	36.3	28.6	45.5
Rural	40.0	93.5	42.9
Network total	36.6	31.0	44.1
SAIFI (average number interruptions per customer per year)			
Urban	0.7	0.5	0.8
Rural	0.4	2.2	2.9
Network total	0.7	0.6	0.8
CAIDI (average duration in minutes per interruption)			
Urban	49.4	52.7	59.8
Rural	116.6	43.3	15.0
Network total	50.9	51.5	55.1

Source: ActewAGL Distribution reports to ICRC.

The decline in the overall performance of ActewAGL’s network in 2005–06 is very likely the consequence of a severe storm in December 2005 that resulted in several extended outages (ActewAGL attributed 34 of the 42 unplanned outages that lasted more than 12 hours to the storm).

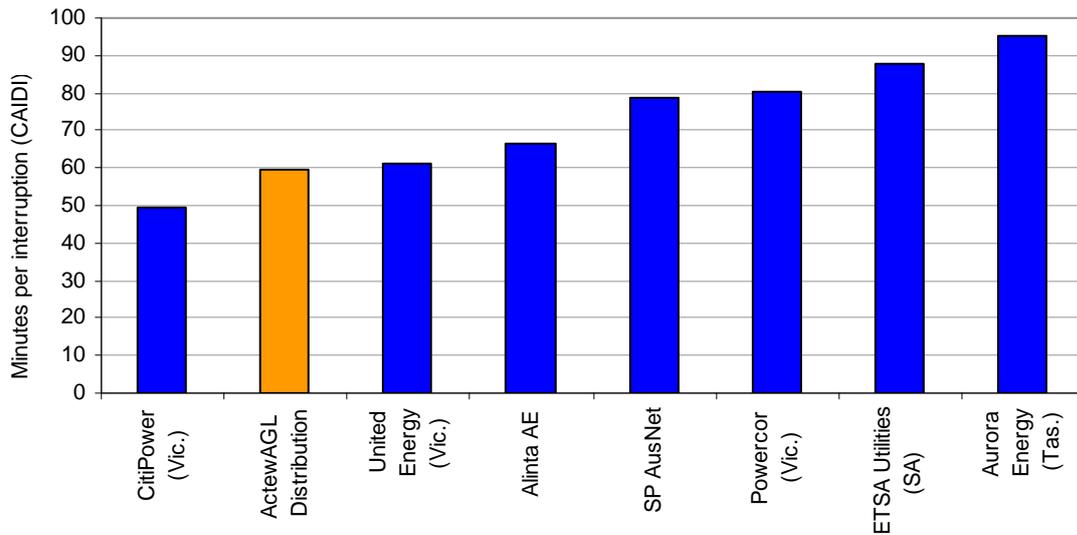
Year-to-year reliability figures can be volatile because of weather conditions and other external factors. A study by the Energy Networks Association indicates that data over a number of years are needed to account for random variations and to establish a trend.¹⁸ The study considered that five years is the minimum period necessary to identify trends in data.

Figures 23 to 26 compare ActewAGL Distribution’s performance for urban and rural short feeders in 2005–06 with the results achieved by interstate electricity distributors.

The average duration of unplanned interruptions to ActewAGL Distribution’s urban network was the second lowest among the sample (Figure 23).

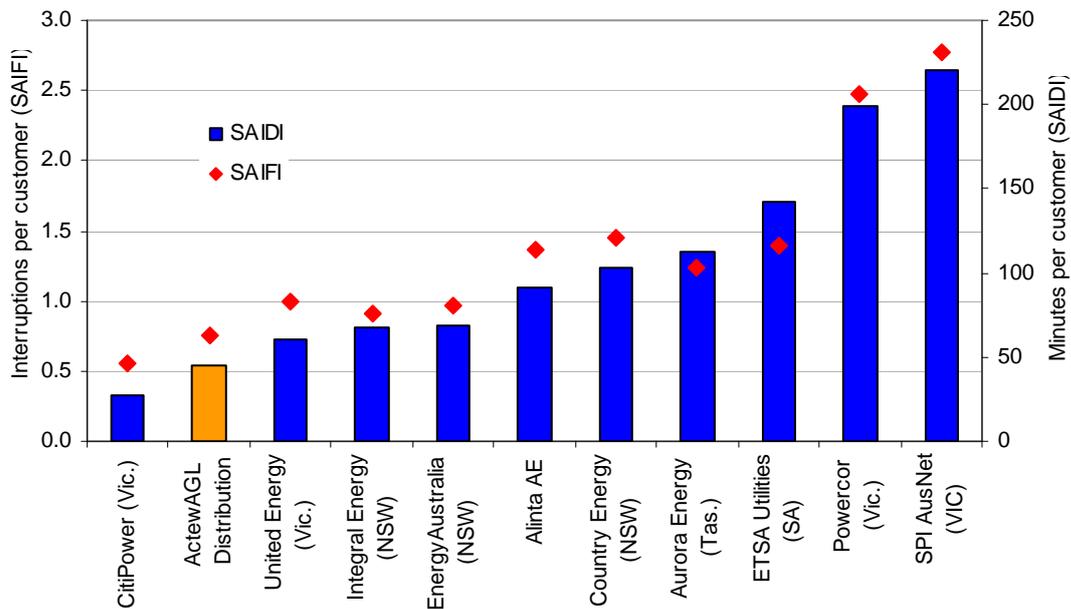
¹⁸ Energy Networks Association (2007).

Figure 23 Unplanned interruptions, duration, urban feeders, electricity distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2006.
Sources: OTTER (2006), ESC (2007c), ESCOSA (2006a).

Figure 24 Unplanned interruptions, frequency and minutes off supply per customer, urban feeders, electricity distribution, selected utilities, 2005–06

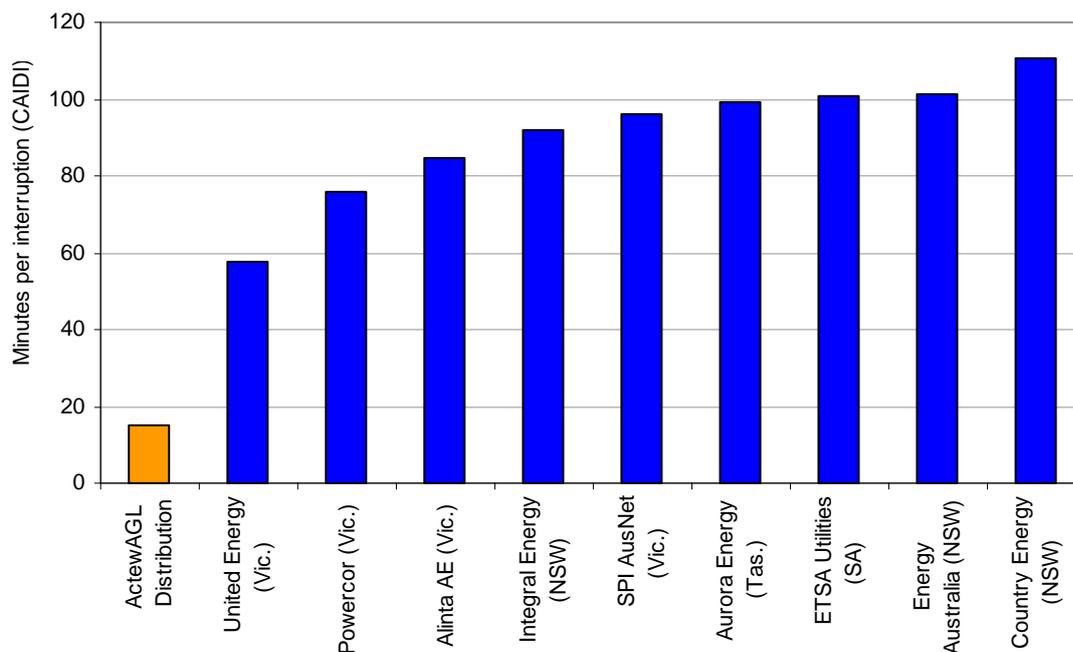


Note: Victorian data are for calendar year 2006.
Sources: OTTER (2006), ESC (2007c), ESCOSA (2006a), IPART (2007), ActewAGL Distribution report to ICRC.

Figure 24 shows that, in its impact on individual customers, ActewAGL Distribution’s urban network was also one of the best performing networks in 2005–06. Interruptions averaged 50 minutes per customer and less than one (0.76) interruption per customer. Only CitiPower in Victoria had fewer minutes off supply per customer for its urban network and fewer interruptions. Powercor and SP AusNet in Victoria had the longest interruptions to their urban networks, at 199 and 221 minutes, respectively.

Figure 25 shows that, at 15 minutes, the average duration of unplanned interruptions to ActewAGL Distribution’s short rural network was the lowest of all the electricity distributors for which information was available in 2005–06. The average duration of interruptions to interstate distributors’ short rural networks ranged from 58 minutes for United Energy in Victoria to 111 minutes for Country Energy in NSW. However, ActewAGL Distribution has a relatively small short rural network, and the CAIDI results vary dramatically between years.

Figure 25 Unplanned interruptions, duration, short rural feeders, electricity distribution, selected utilities, 2005–06

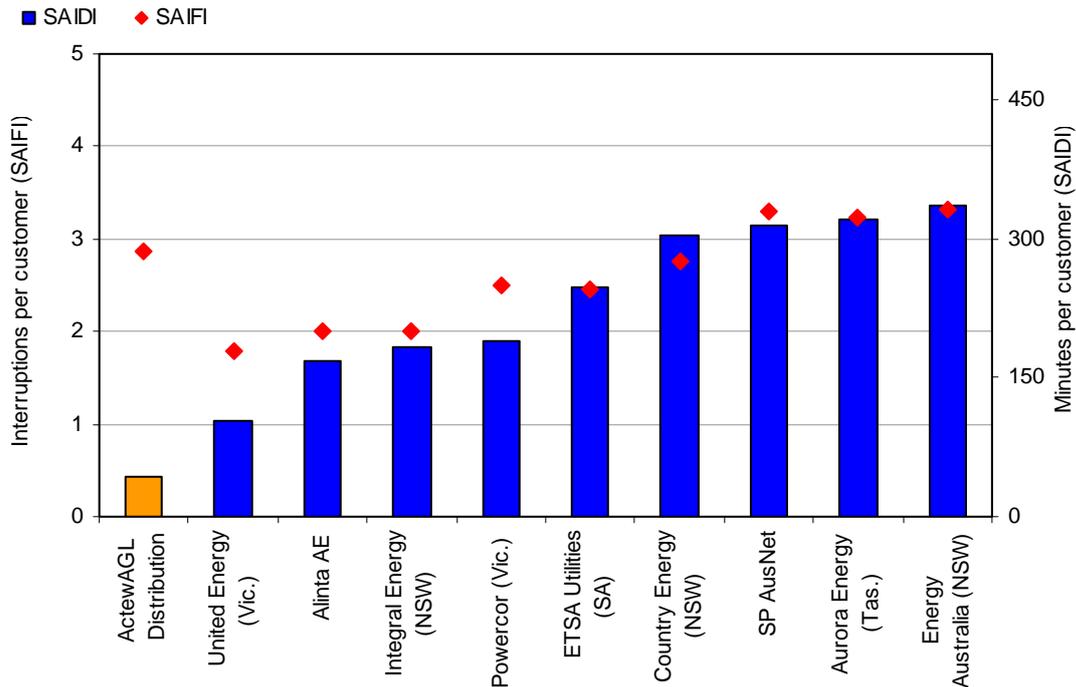


Note: Victorian data are for calendar year 2006.

Sources: OTTER (2006), ESC (2007c), ESCOSA (2006a), IPART (2007), ActewAGL Distribution report to ICRC.

ActewAGL Distribution’s performance was also the best in terms of minutes off supply for short rural feeders with customers experiencing an average of only 50 minutes off supply (Figure 26). However, ActewAGL Distribution’s short rural feeders had a relatively high number of interruptions, averaging 2.9 unplanned interruptions per customer.

Figure 26 Unplanned interruptions, frequency and minutes off supply per customer, short rural feeders, electricity distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2006.

Sources: OTTER (2006), ESC (2007b), ESCOSA (2006a), IPART (2007), ActewAGL Distribution report to ICRC.

4.2.2 Gas distribution

Reliability of supply

ActewAGL Distribution reported 0.02 planned or unplanned interruptions (in which five or more customers lost supply) per 1,000 customers in 2005–06. Table 25 shows ActewAGL Distribution’s supply reliability performance over the five years to 2005–06. The number of interruptions per 1,000 customers was low throughout the period, although the hours ‘off-supply’ were high in 2002–03, the year of a major bushfire.

Table 25 Unplanned interruptions, frequency and duration, gas distribution, ActewAGL Distribution, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05 ^a	2005–06
Number of interruptions per 1,000 customers	0.03	1.20	1.00	0.00	0.02
Total hours off-supply per 1,000 customers	5.9	8.5	0.9 ^a	0.0	0.0

a Interruptions affecting five or more customers.

Source: ActewAGL Distribution reports to ICRC.

In other jurisdictions, interruptions to supply varied from 0.02 per 1,000 customers in South Australia (Envestra) to 19 per 1,000 customers in Victoria (SPI Networks).¹⁹ This ranks ActewAGL as one of the better performing gas distributors.

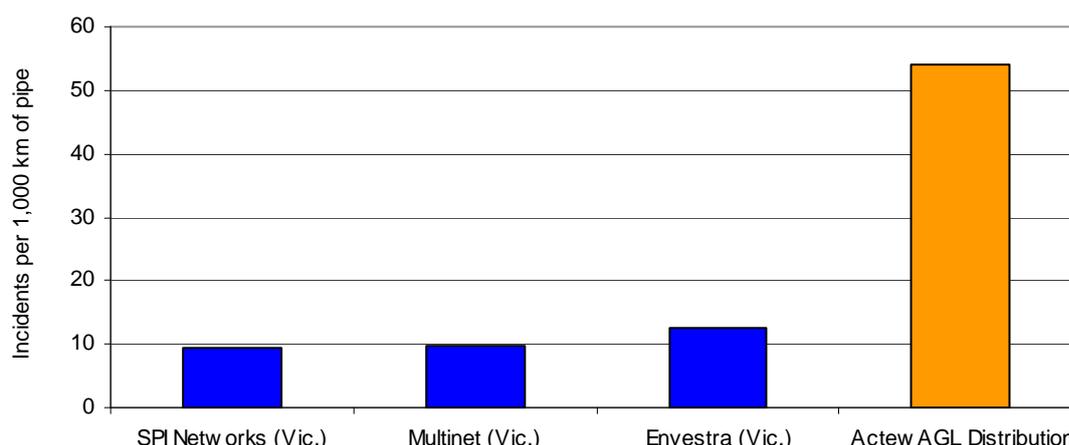
Mechanical damage incidents

In 2005–06, there were 195 mechanical or third-party damage incidents to ActewAGL Distribution’s medium-pressure system mains and services. This equates to 54.1 incidents per 1,000 kilometres of pipe. No mechanical damage incident was reported for the high-pressure system.

In 2005–06, the incidence of mechanical damage incidents to ActewAGL Distribution’s network was higher than those of the Victorian gas distributors considered in this report (Figure 27). The next highest was Envestra (Victoria), with 12.5 incidents per 1,000 kilometres.

While performance against this indicator is largely beyond the control of the distributor, there are measures that a utility can take to reduce the potential for damage—for example, encouraging members of the public to ‘dial before digging’.

Figure 27 Mechanical damage incidents, gas distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2006.

Source: ESC (2007a), ActewAGL Distribution report to ICRC.

Gas leaks

The number of gas leaks identified on a distributor’s network is used as a measure of the network’s integrity and the effectiveness of the distributor’s maintenance strategies. Such factors as the distributor’s renewal strategies, the condition of the assets and the extent and effectiveness of leakage surveys, as well as seasonal and environmental factors, influence this measure. Leakages are identified mainly by members of the public or through distributors’ leakage surveys.

¹⁹ ESCOSA (2006a), ESC (2006).

In 2005–06, members of the public reported 1,060 gas leaks on ActewAGL Distribution’s gas network (a decrease of 7%). All reported gas leaks related to the medium-pressure system; none involved the high-pressure system. Table 26 also shows trends in the incidence of reported gas leaks for the five years to 2005–06 as a proportion of customers and of kilometres of pipe. Gas leaks decreased between 2001–02 and 2003–04, before significantly increasing in 2004–05. Numbers dropped again in 2005–06, but remained higher than in the years to 2004–05.

Table 26 Reported leaks, gas distribution, ActewAGL Distribution, 2001–02 to 2005–06

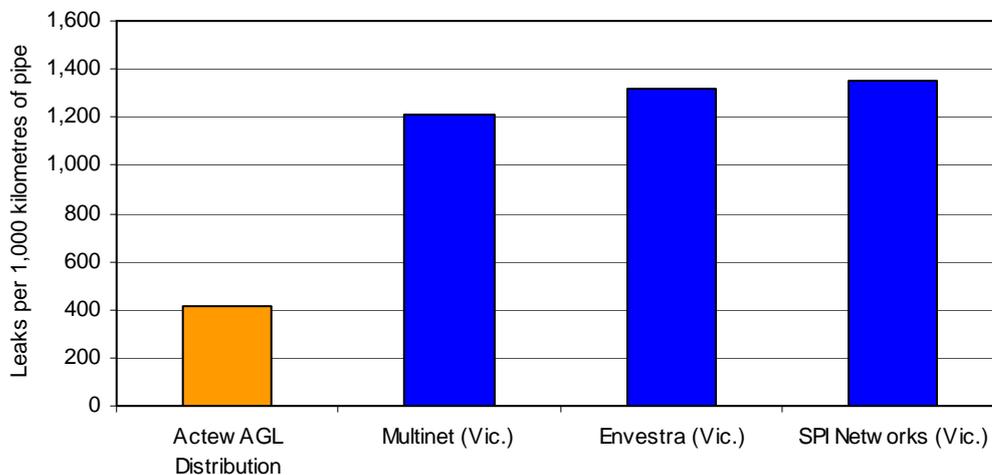
	2001–02	2002–03	2003–04	2004–05	2005–06
Number of reported leaks	859	773	767	1,140	1,060
Leaks per 1,000 customers	9.7	9.2	9.1	12.9	11.6
Leaks per 1,000 kilometres of pipe	246	245	241	315	294

Source: ActewAGL Distribution reports to ICRC.

In 2005–06, ActewAGL Distribution detected 431 gas leaks by survey, significantly less than the 885 leaks detected in 2004–05. Leaks detected by survey amounted to 119.6 leaks per 1,000 kilometres of distribution mains pipe in 2005–06 (244.4 in 2004–05).

Figure 28 compares the incidences of gas leaks (reported by the public and detected by survey) per kilometre of pipe for ActewAGL Distribution and the three Victorian gas distributors. With 413 gas leaks per 1,000 kilometres of pipe, ActewAGL Distribution’s overall incidence was around a third of each of the other distributors included in the sample. Comparable data were not available for distributors in other states.

Figure 28 Leaks per 1,000 kilometres of pipe, gas distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2006.

Source: ESC (2007a), ActewAGL Distribution reports to ICRC.

4.2.3 Water

Planned interruptions

ACTEW Corporation reported 462 planned interruptions to water supply affecting 5,637 properties in 2005–06, including interruptions for the replacement of water meters. Table 27 shows that, excluding interruptions to replace water meters, 144 interruption events affected 3,287

properties. Most of these outages were needed because of new subdivisions or large connections to water mains and service line repairs.

The average total outage time for customers in 2005–06 of 2.9 minutes compares with the just over 1 minute the preceding year. At 71 minutes, the average duration of planned interruptions was almost three times longer than the 2004–05 average, but lower than the average duration for the two years before that.

Table 27 Planned interruptions, frequency and duration, water supply, ACTEW Corporation, 2001–02 to 2005–06

	2001–02	2002–03	2003–04	2004–05	2005–06
Total number of interruptions ^a	n.a.	19	24	66	144
Average duration of outages (minutes)	39	116	89	24	71
Average number of outages per 1,000 customers	1,250	0	5	51	41
Total outage time experienced by an average customer (minutes)	0.5	0.02	0.02	1.24	2.90

a Excludes interruptions for water meter replacements.

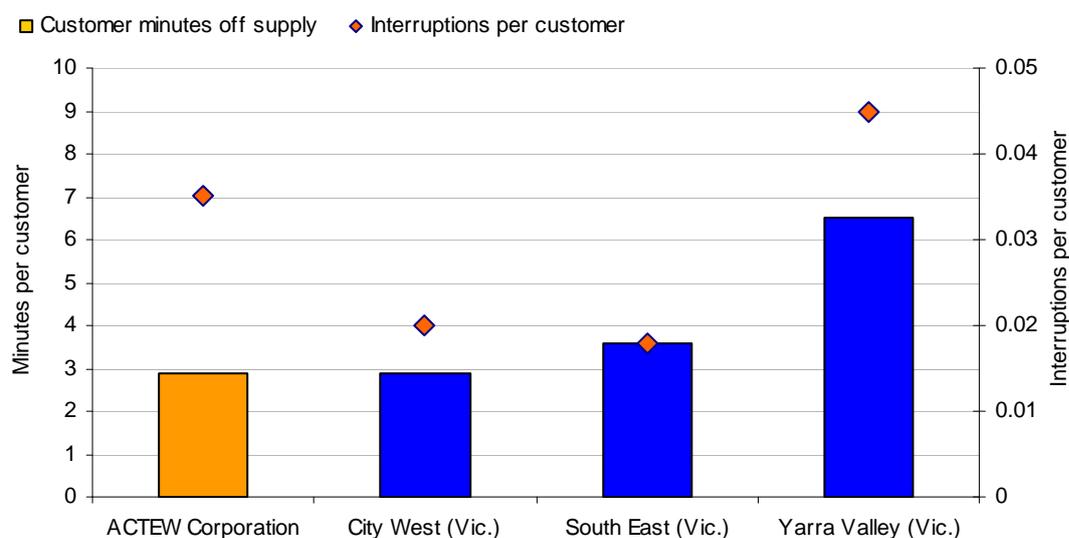
Source: ACTEW Corporation reports to ICRC.

Figures 29 and 30 compare the duration and frequency of planned interruptions for ACTEW Corporation’s water network with the results for the Victorian water suppliers.

In 2005–06, as in previous years, ACTEW Corporation’s network performed well compared with the other water suppliers, as measured by customer minutes off supply (Figure 29). This was countered, to some extent however, by the increase in the frequency of planned interruptions in 2005–06.

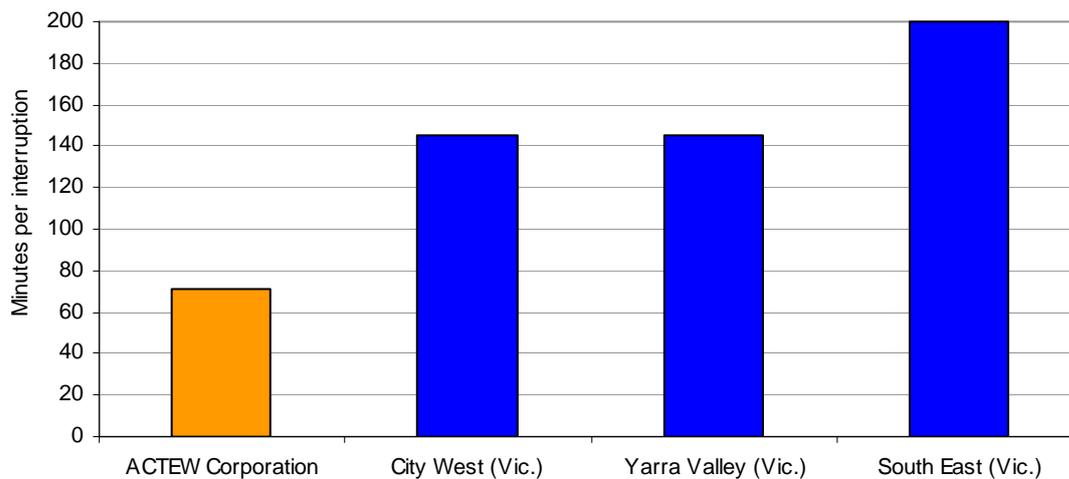
The average duration of each ACTEW Corporation planned interruption was also relatively low, at 71 minutes (Figure 30), compared to more than two hours for Yarra Valley Water and City West Water, and more than three hours for South East Water.

Figure 29 Planned interruptions, frequency and customer minutes off supply, water supply, selected utilities, 2005–06



Source: ESC (2007b), ACTEW Corporation report to ICRC.

Figure 30 Planned interruptions, average duration, water supply, selected utilities, 2005–06



Source: ESC (2007b), ACTEW Corporation report to ICRC.

Unplanned interruptions

In 2005–06, ACTEW Corporation experienced 798 unplanned interruptions, which together affected 19,213 properties. Table 28 shows ACTEW’s performance for unplanned interruptions over the past five reporting periods.

Table 28 Unplanned interruptions, frequency and duration, water supply, ACTEW Corporation, 2001–02 to 2005–06

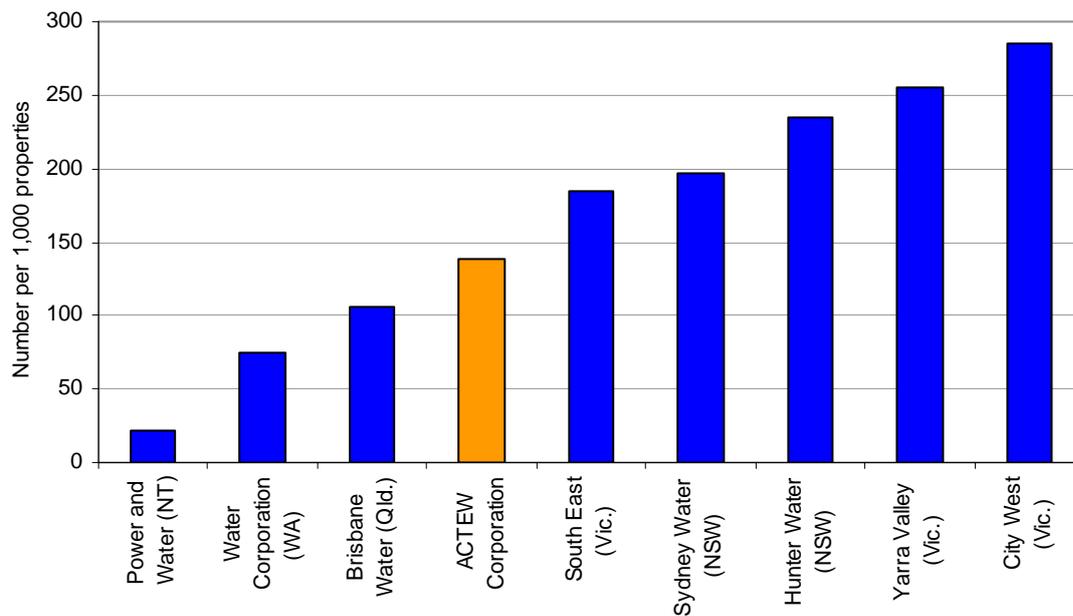
	2001–02	2002–03	2003–04	2004–05	2005–06
Total number of interruptions	752	780	787	713	798
Average duration of outages (minutes)	102	96	120	84	98.7
Average number of outages per 1,000 properties	91.8	151.8	151.3	136.1	139.0
Average outage time experienced by an average customer (minutes)	0.6	0.5	18	30.6	34.2

Source: WSAA (2006), ACTEW Corporation reports to ICRC.

The number of unplanned interruptions to water services has fluctuated since 2001–02 ranging from a low of 713 in 2004–05 to a high of 798 in 2005–06. The average outage time has continued to increase over the five year period rising to 34.2 minutes in 2005–06.

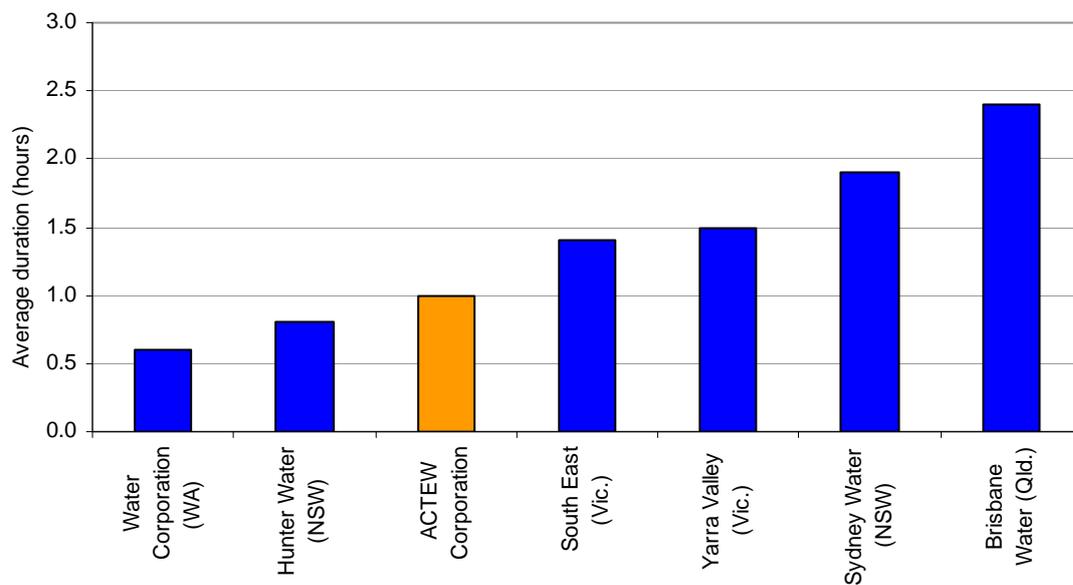
Figures 31 and 32 compare the frequency and duration of unplanned interruptions for ACTEW Corporation’s water network with the results achieved by other metropolitan water suppliers.

Figure 31 Unplanned interruptions per 1000 properties, water supply, selected utilities, 2005–06



Source: WSAA (2006).

Figure 32 Unplanned interruptions, average duration, water supply, selected utilities, 2005–06



Source: WSAA (2006).

These figures show that ACTEW Corporation’s performance compares favourably in the frequency of unplanned interruptions and the duration of interruptions. In 2005–06, the corporation had the fourth lowest number of unplanned interruptions and, at one hour, the third lowest average interruption duration among a selection of interstate water utilities.

4.2.4 Sewerage

Planned work on the sewerage system does not usually mean that customers lose the use of facilities such as toilets or sinks. During planned work, it is usually possible to divert flow from

the customer's premises so that there is minimal inconvenience to the customer. Customers are asked to reduce water use on the day that the work is carried out, and the work is usually completed by close of business.

Unplanned interruptions are usually the result of blockages in customer drains or in the sewer main, resulting in sewage spills onto customers' properties or into their buildings. This often impairs the customers' ability to dispose of sewage. A blocked main usually affects only a small number of properties.

The number of unplanned interruptions to sewerage services decreased by around one-third between 2004–05 and 2005–06, with ACTEW Corporation reporting 1,847 unplanned interruptions to sewerage services in 2005–06 compared with 2,777 in 2004–05. This equates to 13.3 unplanned interruptions per 1,000 properties. The average duration of outages and the total outage time experienced by an average customer both increased significantly compared to 2004–05. The average duration was 137.4 minutes per incident, and almost 2 minutes interruption for the average customer.

There were 3,203 sewer main breaks and chokes in 2005–06 (24 breaks or chokes per 1,000 properties). ACTEW Corporation estimates that tree roots were responsible for 91% of the breaks and chokes. This is significantly higher than for sampled utilities in other parts of Australia. There were an additional 1,849 breaks or chokes to property connection branches or property drains, the vast majority of which (86%) were also attributed to tree roots.

Table 29 shows the frequency and duration of unplanned interruptions to sewerage services from 2001–02 to 2005–06. However, the information is incomplete, making it difficult to draw any conclusions. The average duration of outages and the total outage time experienced by an average customer both increased significantly in 2005–06 compared with 2004–05.

Table 29 Unplanned interruptions, frequency and duration, sewerage services, ACTEW Corporation, 2001–02 to 2005–06

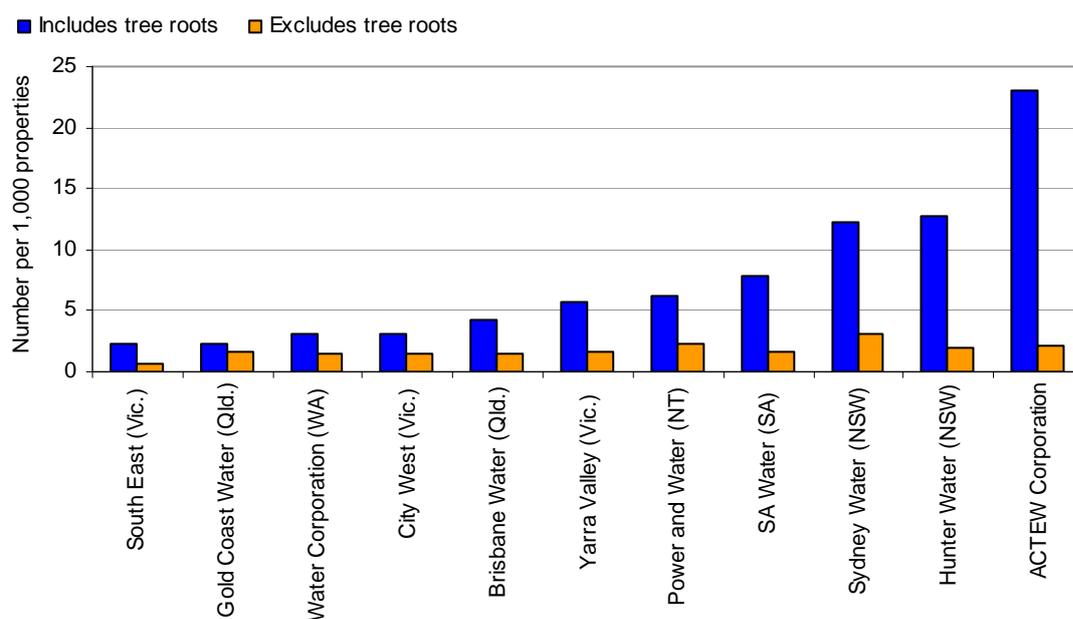
	2001–02	2002–03	2003–04	2004–05	2005–06
Total number of interruptions	n.a.	2,505	2,394	2,777	1,847
Average duration of outages (minutes)	2.5	127.8	n.a.	31.8	137.40
Average number of outages per 1,000 properties	n.a.	18.9	17.7	21.6	13.9
Average outage time experienced by an average customer (minutes)	0.04	2.4	n.a.	0.6	1.83

a Calculated as total time of all unplanned interruptions ÷ total number of properties.

Source: ACTEW Corporation reports to ICRC.

Figures 33 to 35 compare ACTEW Corporation's performance with that of other sewerage utilities.

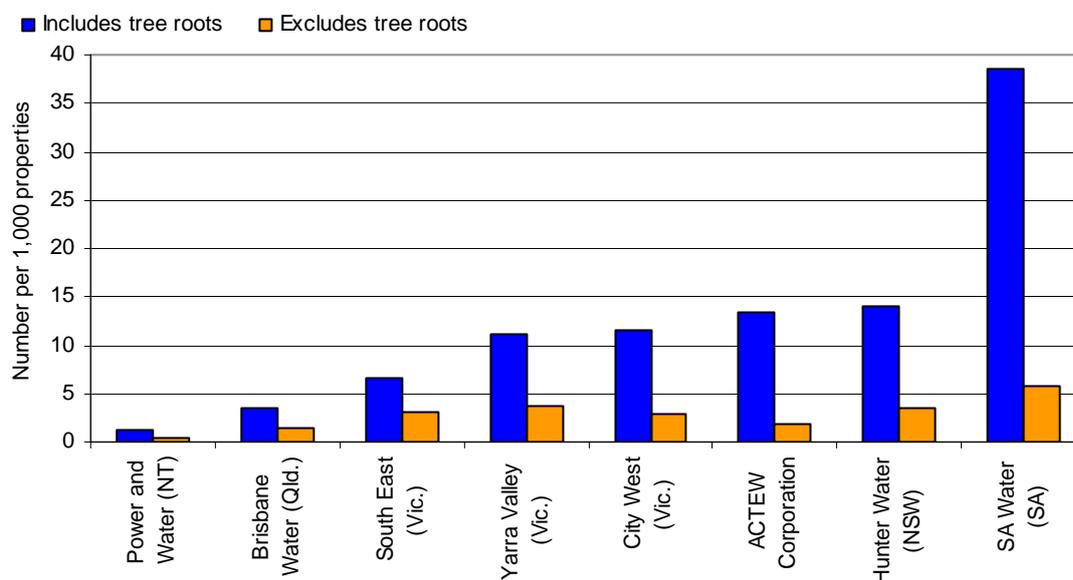
Figure 33 Sewer main breaks and chokes per 1000 properties, sewerage, selected utilities, 2005–06



Source: WSAA (2006).

Figure 33 shows that the incidence of main breaks and chokes was significantly higher for ACTEW Corporation in 2005–06 compared with other selected utilities. Similarly, Figure 34 shows that ACTEW Corporation’s incidence of property connection sewer breaks and chokes was very high compared with other utilities (Figure 34).

Figure 34 Property connection sewer breaks and chokes per 1000 properties, sewerage, selected utilities, 2005–06

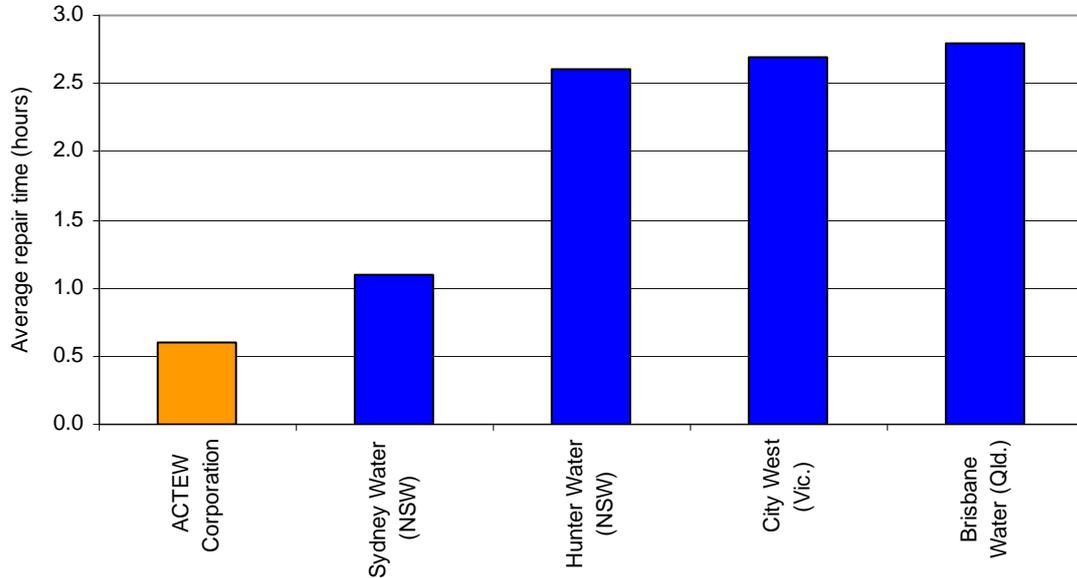


Source: WSAA (2006).

Figures 33 and 34 also compare the incidence of breaks and chokes after the effect of tree roots has been excluded, indicating the importance of this problem for ACTEW and for some other utilities. When these incidents are excluded, ACTEW Corporation’s performance for breaks and chokes for

property connections compares more favourably with that of the other sewerage utilities. Moreover, if the effect of tree roots is excluded, ACTEW Corporation had one of the lowest incidences of main breaks and chokes in 2005–06.

Figure 35 Break/choke repairs, average times, sewerage, selected utilities, 2005–06

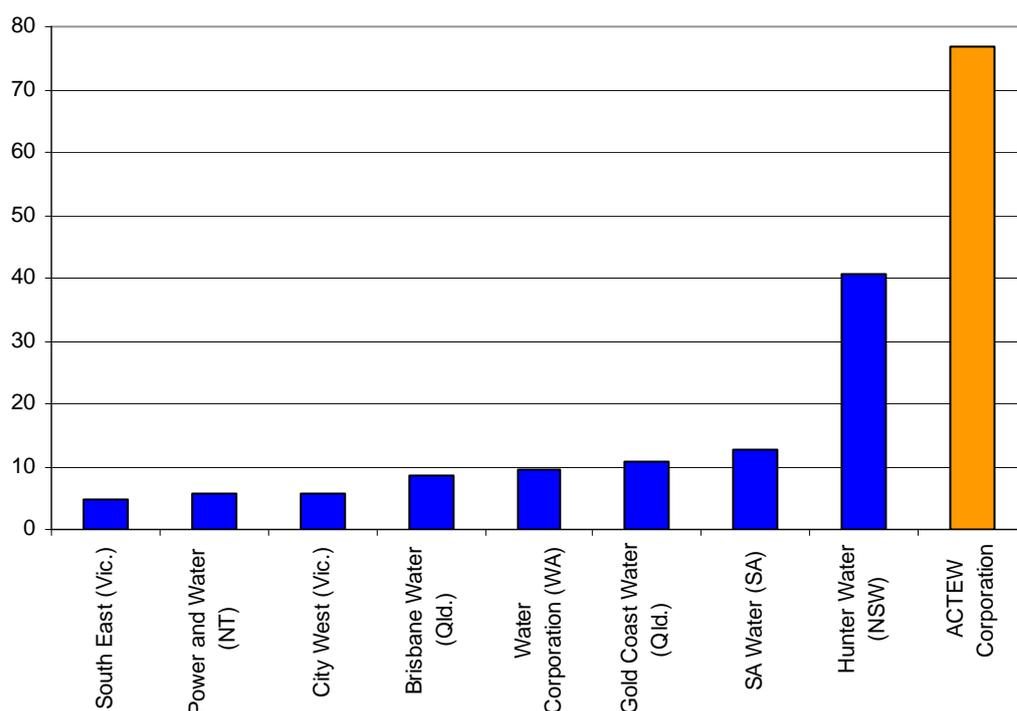


Source: WSAA (2006).

Figure 35 compares the average time taken by utilities to repair breaks and chokes. With an average repair time of 36 minutes in 2005–06, ACTEW Corporation outperformed the other utilities, whose average repair times ranged from 66 minutes (Sydney Water) to almost three hours (Brisbane Water).

As shown in Figure 36, in 2005–06, ACTEW Corporation had by far the highest incidence of overflows per 100 kilometres of sewer main (76.8) of sampled utilities, compared to less than 20 for all but Hunter Water in New South Wales which came in at 40.7.

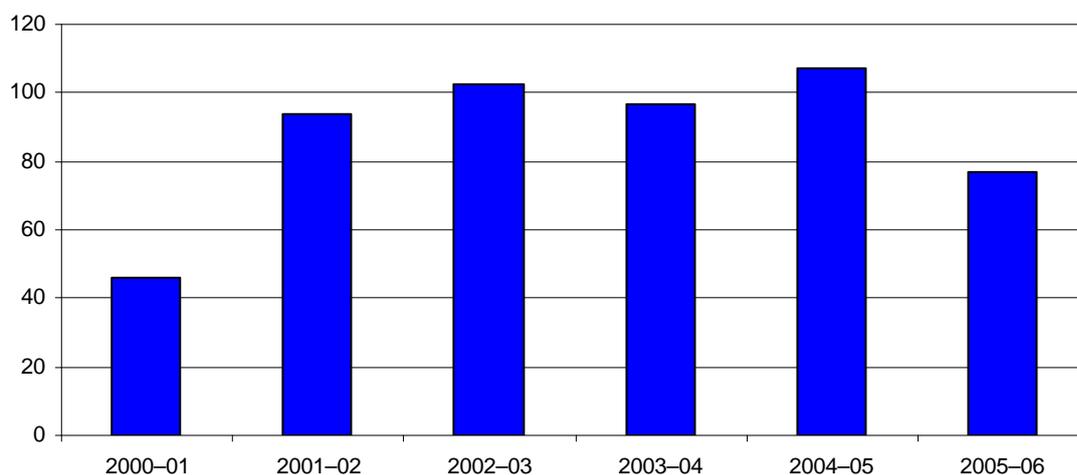
Figure 36 Overflows per 100 kilometres of main, sewerage, selected utilities, 2005–06



Source: WSAA (2006).

Figure 37 shows that ACTEW Corporation’s incidence of sewage overflows was significantly less in 2005–06 than it had been in any of the preceding four years. The incidence of sewage overflows increased between 2000–01 and 2004–05, but fell by 28% in 2005–06.

Figure 37 Overflows per 100 kilometres of main, sewerage, ACTEW Corporation, 2000–01 to 2005–06



Source: WSAA (2006).

ACTEW Corporation attributes the high incidence of sewer overflows to problems with tree roots. The problem is worse in Canberra than in other cities because of extensive plantings on Canberra’s nature strips, a relatively low average rainfall (compared to other major cities) and an extended period of drought.

The Commission's recent report and price determination for water and wastewater includes detailed discussion of sewerage system interruptions from a service standards perspective.²⁰ The Commission observes that those making submissions for the determination did not raise questions about interruptions and that, as noted above, ACTEW's response time is better than that of its peers. However, ACTEW will need to pay more attention to reducing sewer breaks and chokes, where it is effective to do so, to prevent performance from deteriorating.

4.3 Call centre performance

Telephone responsiveness is one of several indicators used to measure the quality of customer service. Table 30 summarises call centre performance for all ACT utilities.

In the ACT, ActewAGL Retail (electricity) and ACTEW Corporation share a call centre for retail enquiries. Call centres for other ACT retailers are provided either on a national basis or for combined ACT and New South Wales regions, and separate ACT data have not been reported. The network operators—ACTEW Corporation, ActewAGL Distribution (gas) and ActewAGL Distribution (electricity)—have separate call centres and separate numbers for general and emergency network enquiries and notifications. ACTEW Corporation also has a drought advisory line.

Call centre performance for ACT licensees varied significantly, both between and within utility sectors. It is difficult to draw overall conclusions about relative performance because of the differences in the types of services that utilities provide, the nature of the call centres, and the types of calls made to the various call centres.

While this is the case, some observations can be made. In 2005–06, ActewAGL Distribution recorded a rise (to 22%) in the percentage of calls related to electricity services being abandoned (up from 17% in 2004–05 and 13% in 2003–04). ActewAGL Retail recorded a decrease in the percentage of calls answered within 30 seconds (from 91% in 2004–05 to 77% in 2005–06). Overall, ACTEW Corporation maintained its performance from 2004–05, answering 85% of non-emergency calls within 30 seconds (although average waiting time rose to 45 seconds) and holding the abandoned call rate to 3%. For emergency calls, 77% were answered within 30 seconds (with an average waiting time of 29 seconds) and an abandoned call rate of 4%.

²⁰ ICRC (2008).

Table 30 Call centre performance, all ACT utilities, 2004–05 to 2005–06

Licensee	2004–05			2005–06		
	Calls answered within 30 seconds %	Average waiting time (seconds)	Calls abandoned before being answered %	Calls answered within 30 seconds %	Average waiting time (seconds)	Calls abandoned before being answered %
ActewAGL Distribution (electricity)	66	29	17	60	34	22
ActewAGL Retail (electricity)	83	60	2	82	57	2
Country Energy (gas and electricity)	76	28	3	77	22	4
EnergyAustralia (electricity)	57	85	n.a.	66	63	4
ENERGEX (electricity)	98	n.a.	2	99	n.a.	1
EnergyAustralia (gas)	57	38	5	66	57	2
ActewAGL Retail (gas)	91	17	1	77	45	3
ACTEW Corporation						
Non-emergency call centre	85	30	2	85	45	3
Emergency call centre	77	30	4	77	29	4

Source: Licensed utility reports to ICRC.

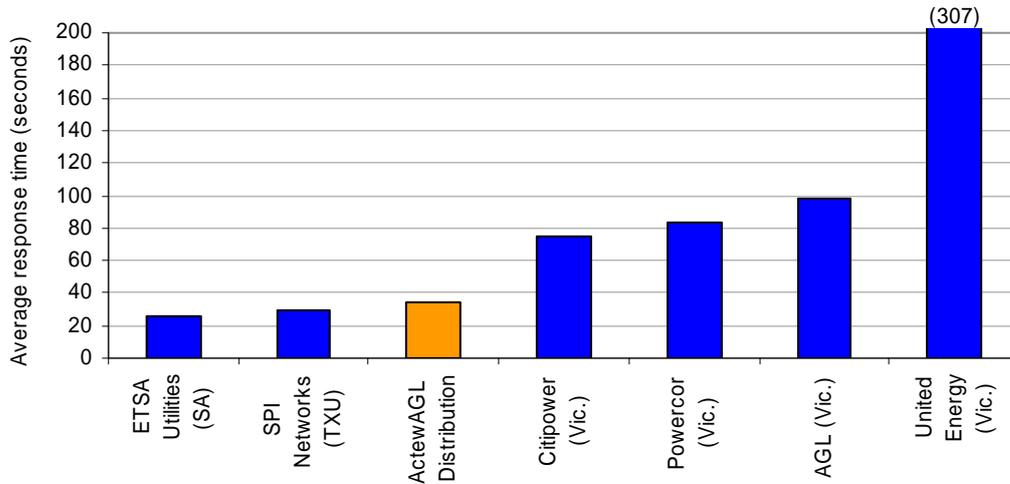
4.3.1 Electricity distribution

ActewAGL Distribution’s call centre answered 46,155 (78%) of 59,552 calls received in 2005–06. Of the calls received, 60% were answered within 30 seconds. This proportion is lower than for previous years (66% in 2004–05 and 76% in 2003–04). The average waiting time for customers was 34 seconds.

In 2005–06, 22% of calls to ActewAGL Distribution were classed as ‘abandoned’, although ActewAGL Distribution states that this figure includes calls from customers whose query may have been answered by a recorded message and so were not really ‘abandoned’. ActewAGL Distribution reported 19 ‘overload events’ in 2005–06. An overload event occurs when incoming calls exceeds the capacity of the call centre. During an overload event, calls are either diverted to another call centre or not answered.

Figures 38 and 39 compare the performance of ActewAGL Distribution’s call centre with the results achieved by distributors in other jurisdictions. Figure 38 shows that ActewAGL Distribution performed well in response times. At 34 seconds, the average waiting time for customers phoning the call centre was one of the lowest in the sample. As Figure 39 shows, the call centre performed well in the proportion of calls answered within 30 seconds, but less well in the proportion of calls abandoned.

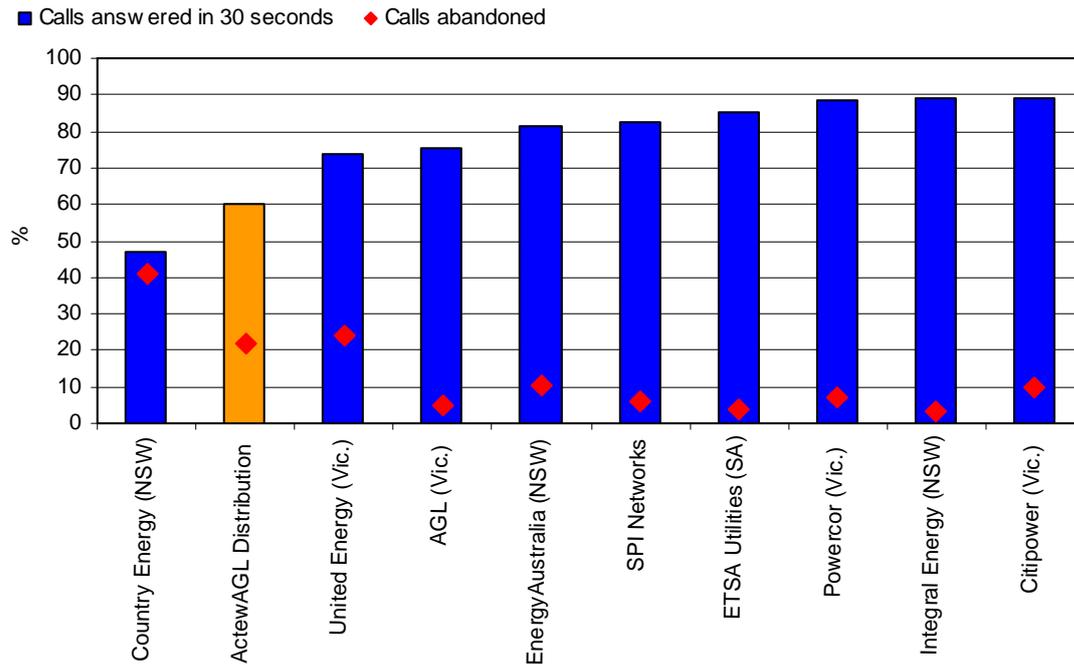
Figure 38 Call centre performance, average response time, electricity distribution, selected utilities, 2005–06



Note: Data for Victoria is for calendar year 2006.

Sources: ESC (2007c), ESCOSA (2006a), ActewAGL Distribution report to ICRC.

Figure 39 Call centre performance, response within 30 seconds, electricity distribution, selected utilities, 2005–06



Note: Victorian data are for calendar year 2005.

Sources: ESCOSA (2006a), IPART (2006b), ActewAGL Distribution report to ICRC.

4.3.2 Electricity supply

Because the vast majority of the electricity suppliers licensed in the ACT operate in a number of jurisdictions, information is typically provided for either suppliers' national call centres, or, for New South Wales and the ACT. While ActewAGL Retail has provided data specific to the ACT, the ActewAGL Retail call centre answers queries relating to water and sewerage in addition to

electricity supply queries. Retailers to large customers do not usually provide a call centre, because such customers tend to contact their account managers directly.

Table 31 shows that call centre performance varied significantly between the ACT electricity suppliers for which call centre data are available.

Table 31 Call centre performance, response times and calls abandoned, electricity supply, ACT suppliers, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Calls responded to in 30 seconds (%)				
ActewAGL Retail	78	85	84	82
EnergyAustralia	n.a.	54	57	66
Country Energy	53	72	76	77
ENERGEX	n.a.	95	98	99
Average waiting time (seconds)				
ActewAGL Retail	79	64	60	57
EnergyAustralia	n.a.	67	85	63
Country Energy	131	38	28	22
ENERGEX	n.a.	n.a.	n.a.	n.a.
Calls abandoned (%)				
ActewAGL Retail	4	2	2	2
EnergyAustralia	n.a.	97	n.a.	4
Country Energy	8	4	3	4
ENERGEX	n.a.	5	2	1

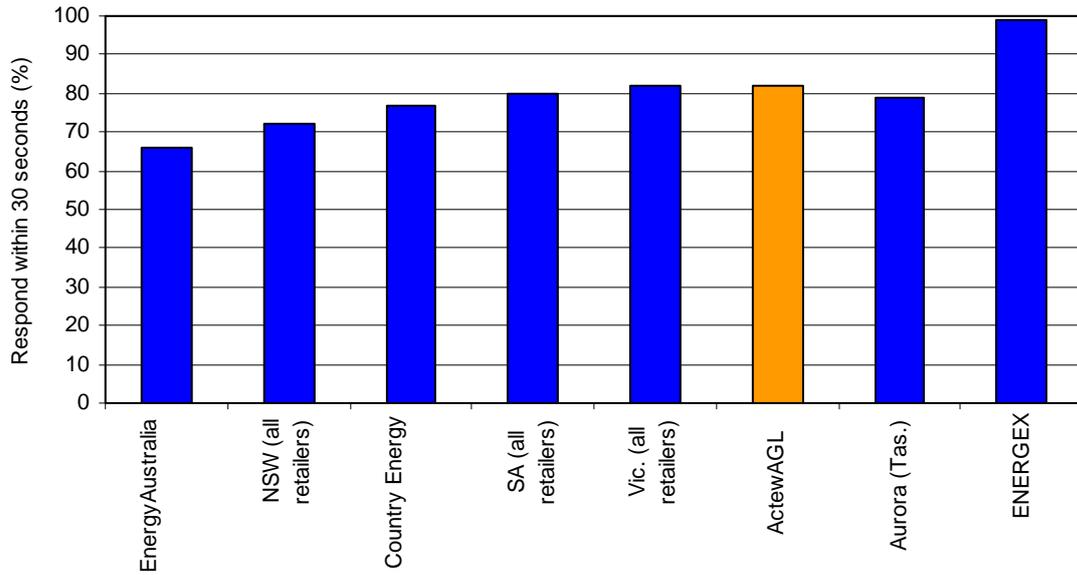
Source: Licensed utility reports to ICRC.

The proportion of calls responded to in 30 seconds varied from 99% for ENERGEX to 66% for EnergyAustralia. The average waiting time for calls to be answered ranged from 22 seconds for Country Energy to 63 seconds for EnergyAustralia; the percentage of abandoned calls ranged between 1% and 4%.

Table 31 also shows that call centre performance for ACT electricity suppliers has generally improved across all indicators over the past four years.

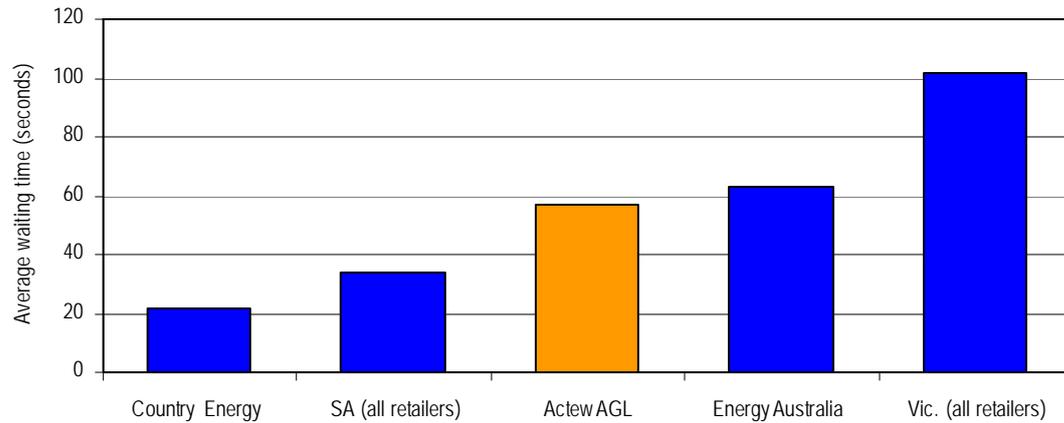
Figures 40 to 42 compare ACT electricity retailers' performance with the results achieved by retailers in other jurisdictions. ENERGEX outperformed all other retailers in the percentage of calls responded to within 30 seconds. Country Energy had the shortest wait time. ActewAGL Retail and Energy Australia compared well with the Victorian retailers but not the South Australian retailers. ENERGEX had the lowest incidence of abandoned calls.

Figure 40 Call centre performance, response within 30 seconds, electricity supply, selected utilities, 2005–06



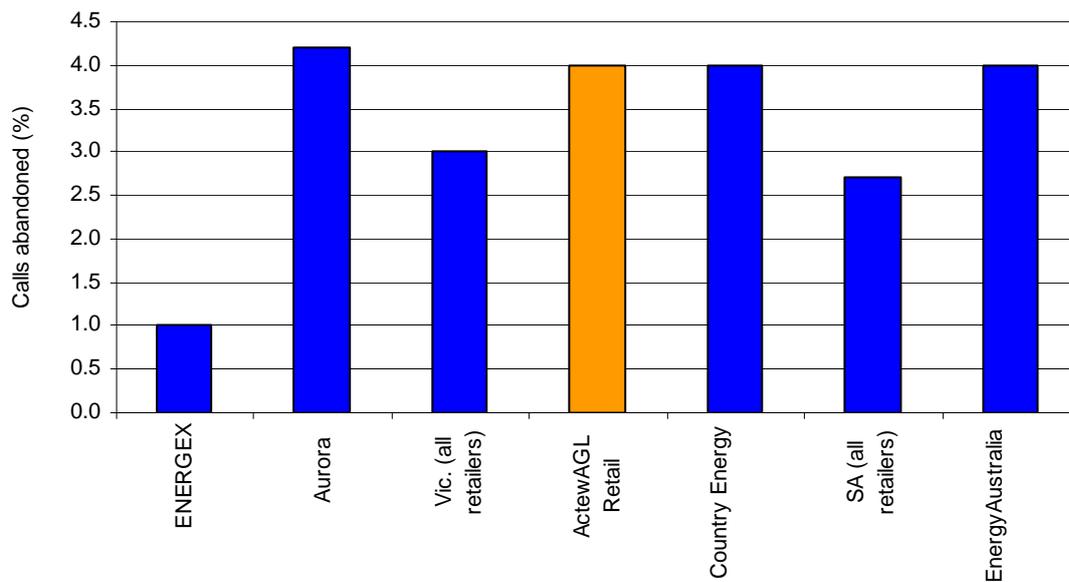
Sources: OTTER (2006), ESC (2006), ESCOSA (2006b), IPART (2006a), ActewAGL Retail report to ICRC.

Figure 41 Call centre performance, average waiting time, electricity supply, selected utilities, 2005–06



Sources: ESC (2006), ESCOSA (2006b), ActewAGL Retail report to ICRC.

Figure 42 Call centre performance, calls abandoned, electricity supply, selected utilities, 2005–06



Sources: OTTER (2006), ESC (2006), ESCOSA (2006b), licensed utility reports to ICRC.

4.3.3 Gas distribution

ActewAGL Distribution (gas) provided the Commission with estimated call centre performance data for 2005–06. The call centre received approximately 1,000 calls in 2005–06, of which 100% were answered within 30 seconds. The average response time was 5 seconds.

4.3.4 Gas supply

Like electricity suppliers' call centres, gas suppliers' call centres tend to serve a number of jurisdictions. Moreover, the call centres of Country Energy and EnergyAustralia serve both electricity and gas customers.

Table 32 shows that call centre performance for waiting time varied significantly between the ACT's three active gas suppliers in 2005–06.

Table 32 Call centre performance, response times and calls abandoned, gas supply, ACT suppliers, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Calls responded to in 30 seconds (%)				
ActewAGL Retail	87	82	91	77
EnergyAustralia	n.a.	n.a.	57	66
Country Energy	n.a.	72	76	77
Average waiting time (seconds)				
ActewAGL Retail	19	19	17	45
EnergyAustralia	n.a.	n.a.	38	57
Country Energy	n.a.	38	38	22
Calls abandoned (%)				
ActewAGL Retail	2	1	1	3
EnergyAustralia	n.a.	n.a.	5	2
Country Energy	n.a.	4	3	4

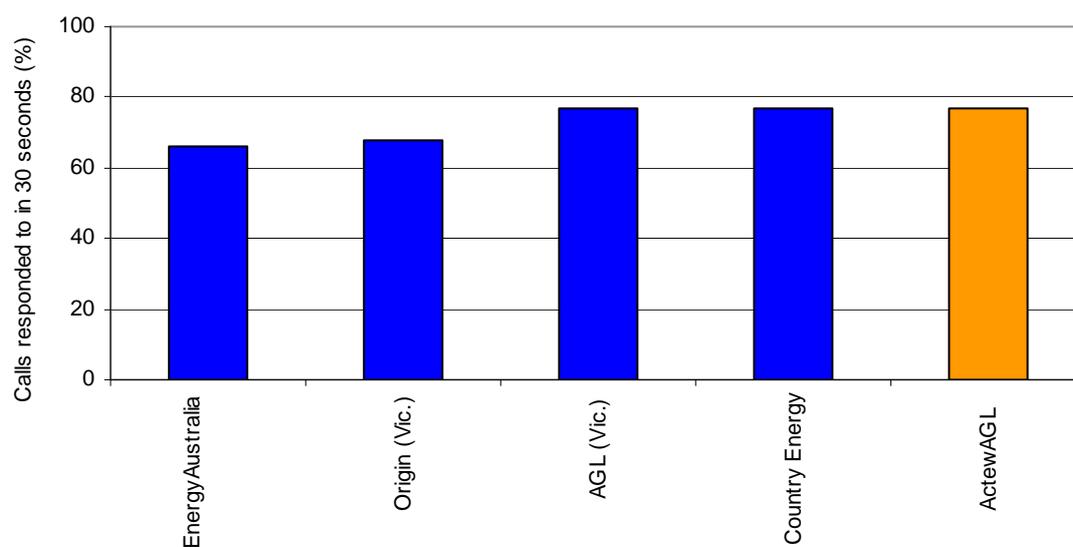
Source: Licensed utility returns to ICRC.

The proportion of calls responded to within 30 seconds was 66% for EnergyAustralia and 77% for both ActewAGL Retail and Country Energy. The average waiting times ranged from 22 seconds (Country Energy) to 57 seconds (EnergyAustralia). As with the electricity call centres, a relatively small proportion of calls were abandoned, ranging from 2% of EnergyAustralia’s calls to 4% of Country Energy’s.

Trend data are limited, because two of the three suppliers began supplying gas in the ACT very recently (Country Energy in 2003–04 and EnergyAustralia in 2004–05). However, as Table 32 shows, Country Energy’s call centre performance has improved for all indicators except calls abandoned, while ActewAGL’s performance has declined for all the indicators.

There is little call centre information available for gas suppliers in other jurisdictions. Some call responsiveness information is available for Victoria, and is presented in Figure 43. This shows that the relative performance of call centres was not significantly different between the ACT and Victoria in 2005–06.

Figure 43 Call centre performance, response within 30 seconds, gas supply, selected utilities, 2005–06



Source: ESC (2006), licensed utility reports to ICRC.

4.3.5 Water and sewerage

In 2005–06, ACTEW Corporation received approximately 28,666 water and sewerage calls on its non-emergency numbers including 4,577 enquiries on its drought advisory office line.²¹ This equals 209 calls per 1,000 customers; in 2004–05, there were 390 calls per 1,000 customers.

ACTEW Corporation also received 29,098 calls on its emergency number. This equals 211 calls per 1,000 customers in 2005–06, a similar ratio to that for the previous year (244 calls per 1,000 customers).

Table 33 summarises ACTEW Corporation’s call centre performance from 2002–03 to 2005–06. It shows an overall improvement in the performance of the non-emergency call centre since 2002–03, but a decline for some indicators between 2004–05 and 2005–06.

The performance of the emergency call centre was similar to the performance for 2004–05 in the proportion of calls answered within 30 seconds, the proportion of abandoned calls and the average wait time.

²¹ ActewAGL Retail receives retail enquiries on behalf of ACTEW Corporation through its electricity retail call centre.

Table 33 Call centre performance, call numbers, response times and calls abandoned, water and sewerage services, ACTEW Corporation, 2002–03 to 2005–06

Non-emergency	2002–03	2003–04	2004–05	2005–06
Number of calls received	35,564	41,958	51,930	28,666
Proportion answered within 30 seconds (%)	80	81	85	85
Proportion of calls abandoned by caller (%)	4	2	2	3
Average waiting time (seconds) ^a	79	64	30	45
Number of overload events ^b	0	0	0	0
Emergency call centre				
Number of calls received	34,127	32,861	32,436	29,098
Proportion answered within 30 seconds (%)	70	n.a.	77	77
Proportion of calls abandoned by caller (%)	9	9	4	4
Average waiting time (seconds) ^a	35	34	30	29
Number of overload events ^b	n.a.	n.a.	15	2

a Time spent waiting before being answered by a person.

b Events in which the number of incoming calls exceeds the capacity of the call centre and normal service standards cannot apply.

Source: ACTEW Corporation reports to ICRC.

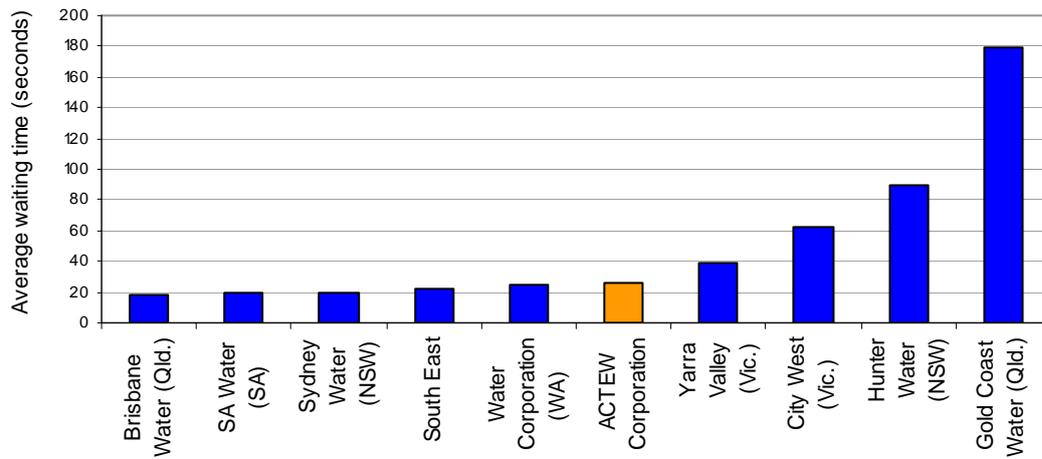
The proportion of calls answered within 30 seconds for both emergency and non-emergency call centres was the same in 2005–06 as it was in the preceding year (85% of non-emergency calls and 77% of emergency calls). The average waiting time and number of overload events decreased for emergency calls, but increased for non-emergency calls. Approximately 3% of non-emergency calls were abandoned in 2005–06, which was 50% more than in 2004–05 and 2003–04. At 4%, the abandonment rate for emergency calls was the same as in 2004–05.

The average waiting time for non-emergency calls increased to 45 seconds from 30 seconds in 2004–05 (64 seconds in 2003–04). Conversely, the average waiting time for emergency calls dropped to 29 seconds from 30 seconds in 2004–05. The emergency call centre experienced two overload events in 2005–06, down from 15 events in 2004–05.

As Figure 44 shows, the average call waiting time (all calls) for ACTEW Corporation (26.4 seconds) was comparable with the results achieved by many other metropolitan water suppliers²², most of which averaged response times between 20 seconds and 40 seconds. Four had considerably longer waiting times.

²² WSAA (2006); emergency and non-emergency calls are not separately identified.

Figure 44 Call centre performance, average response time, water supply, selected utilities, 2005–06



Note: Waiting time for ACTEW Corporation is the weighted average of the emergency and non-emergency call waiting times. Separate data are not available for emergency and non-emergency call centres for other suppliers.

Source: WSAA (2006), ACTEW Corporation report to ICRC.

5 Non-price safety net arrangements

This section measures various hardship indicators reported by utilities and, where applicable, makes comparisons between the ACT and other jurisdictions.

Access to utility services is determined by the availability of the infrastructure and the ability of customers to pay bills (a function of the price of the service and of demand). Accessibility is also influenced by utilities' safety net arrangements (for example, availability of instalment plans and flexibility in payment arrangements) and credit management strategies (for example, security deposits).

In 2002, utility regulators agreed to a set of nationally consistent reporting requirements for electricity distribution and retail businesses, with the ultimate aim of providing a nationally comparable reporting framework.²³

For electricity retailers, customers' ability to access services is measured by a suite of hardship indicators, such as disconnection for non-payment of accounts, reconnection of customers within seven days of disconnection, the use of instalment payment plans, direct debit defaults, and the use of security deposits.

In the interests of consistency, the Commission has sought this information for all ACT suppliers of utility services (electricity, gas and water and sewerage).

5.1 Disconnection for non-payment of accounts

Before a supplier may disconnect a customer for non-payment of an account, the supplier must follow a number of steps, such as issuing reminder notices, allowing a certain number of days between notices, and making personal contact with the customer. Disconnection for failure to pay an account is very much a last resort for suppliers attempting to recover a debt and, therefore, is a fair indicator of affordability.²⁴

However, this indicator does not necessarily differentiate between households that can afford to pay and those that cannot. For this reason, a second indicator is used to identify more accurately customers in genuine hardship: reconnection of a customer with the same name at the same premises within seven days.

The Commission has provided jurisdictional comparisons where available. However, definitional differences and differences in safety net arrangements between jurisdictions make comparisons difficult.

²³ Utility Regulators Forum (2002).

²⁴ Consumer Protection Code, clauses 17.4 and 23, sets out the ACT rules.

5.1.1 Residential electricity customers

Table 34 shows that over the period in which the Commission has been collecting data, the rate of disconnection of residential electricity customers for non-payment of accounts has ranged between 3.2 and 4.1. In 2005–06 an average of 4.0 per 1,000 residential electricity customers were disconnected for non-payment of accounts, up slightly on the preceding year's level of 3.6 per 1,000 customers.

Table 34 Disconnection of customers for non-payment of an account, residential customers, electricity supply, 2001–02 to 2005–06

Item	2001–02 ^a	2002–03 ^a	2003–04 ^a	2004–05 ^b	2005–06 ^b
Customers disconnected for non-payment of an account (per 1,000 customers)	4.1	3.9	3.2	3.6	4.0
Proportion in which the premises was reconnected in the same name within seven days ^c (%)	30.8	79.2	59.4	63.8	63.8

a Data for 2001–02 to 2003–04 are based on information for ActewAGL Retail only.

b The results for 2004–05 and 2005–06 relate to all ACT electricity suppliers.

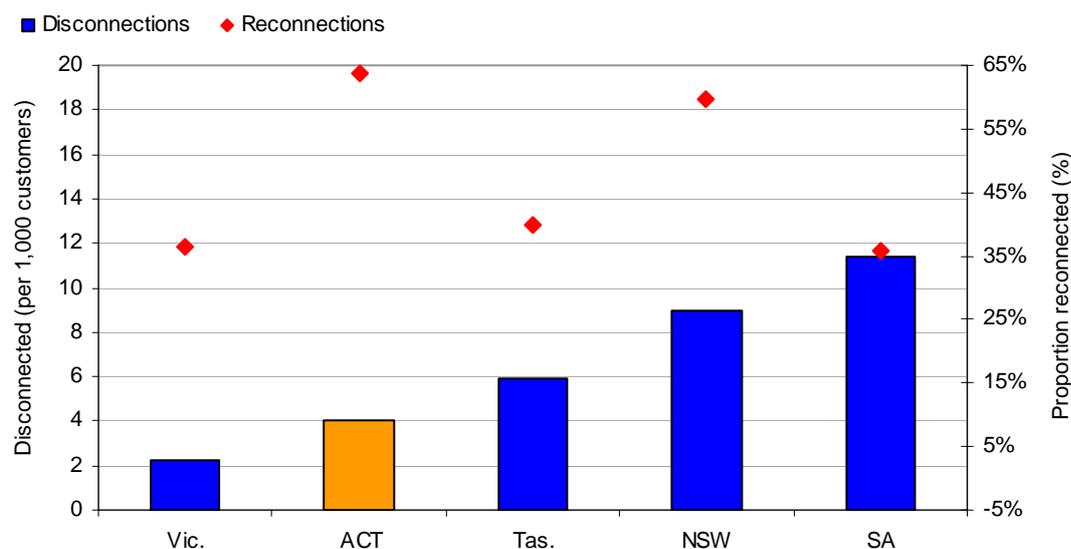
c Data are for residential and non-residential customers.

At 63.8%, the proportion of customers reconnected under the same name at the same premises within seven days remained the same as in 2004–05.

Figure 45 compares ACT retailers' residential disconnections with residential disconnections in other jurisdictions. ACT retailers' performance compared favourably with that of the others. At 2.2%, only Victoria had a lower disconnection rate. In Tasmania, the rate of disconnection of residential customers for non-payment of accounts averaged 5.9 per 1,000 customers; in South Australia, it averaged 11.4 per 1,000 customers.

The rate of reconnection of residential customers was also higher in the ACT (64%), compared with 36% in Victoria and South Australia, 40% in Tasmania and 62% in New South Wales.

Figure 45 Disconnection of customers for non-payment of an account, disconnection rate per 1000 residential customers, electricity supply, selected states and territories, 2005–06



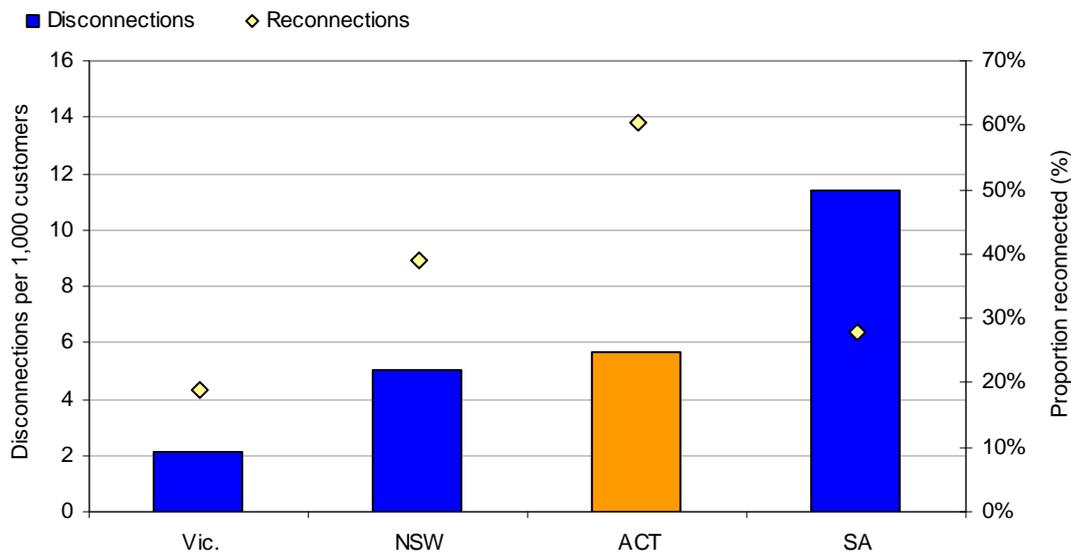
Sources: ESC (2006), ESCOSA (2006b), IPART (2006a), OTTER (2006), licensed utility reports to ICRC.

5.1.2 Non-residential electricity customers

In the ACT, the rate of disconnection for non-payment of an account for non-residential customers was 5.6 per 1,000 customers in 2005–06. In 2004–05, 2.7 per 1,000 non-residential customers were disconnected for not paying an account; in 2003–04, there were no disconnections.²⁵

Figure 46 compares ACT retailers' performance in relation to non-residential disconnections with the performance of a sample of retailers in other jurisdictions. In Victoria about 2 per 1,000 non-residential customers were disconnected, in New South Wales the ratio was 5 per 1,000 and in South Australia the ratio was 11.5 per 1,000.

Figure 46 Disconnection of customers for non-payment of an account, disconnection rate per 1000 non-residential customers, electricity supply, selected states and territories, 2005–06



Sources: ESC (2006), ESCOSA (2006b), IPART (2006a), licensed utility reports to ICRC.

As was the case for residential customers, the rate of reconnection of non-residential customers was higher in the ACT than in the other states in the sample. The rate of reconnections in other states ranged from 19% in Victoria to 39% in New South Wales.

5.1.3 Residential and non-residential gas customers

The reported incidence of disconnections of gas supply customers for non-payment of an account in the ACT was 32.0 per 1,000 customers in 2005–06, down from 37 in 2004–05. This figure includes both residential and non-residential customers, as suppliers were unable to provide a breakdown between those categories. It does not include disconnections by EnergyAustralia,

²⁵ In previous performance reports, disconnection and reconnection statistics related only to ActewAGL Retail. Data for 2001–02 to 2003–04 are therefore based on information for ActewAGL Retail only; the results for 2004–05 and 2005–06 relate to all ACT electricity suppliers.

which was unable to provide the information. Table 35 compares gas supply disconnection results from 2001–02 to 2005–06.

Table 35 Disconnection of customers for non-payment of an account, numbers disconnected and proportion subsequently reconnected, gas supply, 2001–02 to 2005–06

Item	2001–02 ^a	2002–03 ^a	2003–04 ^a	2004–05	2005–06
Number of customers disconnected for non-payment of an account (per 1,000 customers)	21.3	16.7	24.4	37.0	32.0
Proportion in which the premises was reconnected in the same name within seven days (%)	43.4	76.8	74.2	80.4	40.1

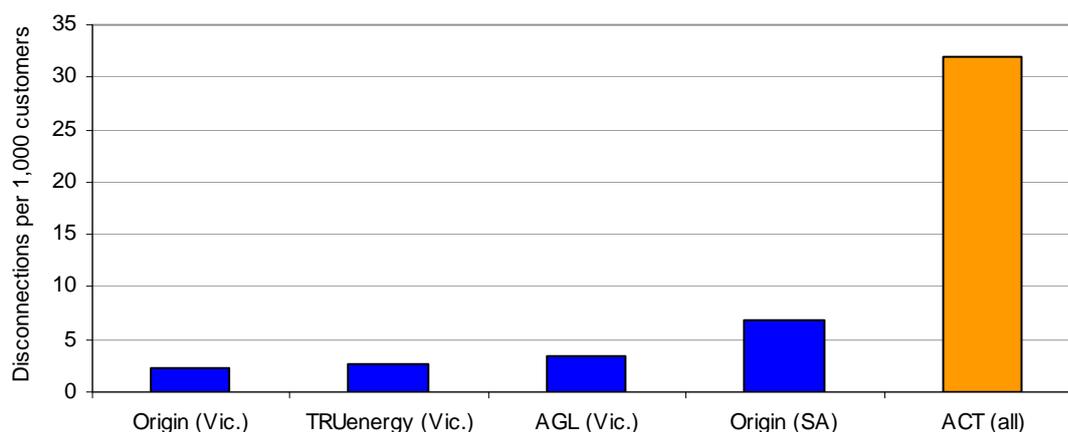
a For these years, data are for ActewAGL Retail only. The data for 2001–02 and 2002–03 also include data for Queanbeyan customers.
Source: Licensed utility reports to ICRC.

Of the customers disconnected for non-payment in 2005–06, 40% were subsequently reconnected at the same address and in the same name within seven days of the disconnection, significantly less than for the previous three years.

Compared with the disconnection rate for electricity customers (4.0 per 1,000 customers), the rate of gas supply disconnections is significantly higher (32.0 per 1,000 customers). According to ActewAGL Retail, the reason for the relatively high gas disconnection rates is that customers often choose to be disconnected after winter and then pay their outstanding account at the start of the following winter.

There is limited information available from gas suppliers in other jurisdictions. However, the available data suggest that the rate of disconnection by ACT gas suppliers is significantly higher than the rates in Victoria and South Australia (Figure 47). This may reflect the different demand pattern for gas in those states, where gas is more widely used for domestic purposes other than heating, which is its main use in the ACT. It is not possible to compare reconnection rates, because that information is not available in those jurisdictions for 2005–06.

Figure 47 Disconnection of customers for non-payment of an account, disconnection rate per 1000 customers, gas supply, selected utilities, 2005–06



Sources: ESC (2006), ESCOSA (2006b), licensed utility returns to ICRC.

5.1.4 Water and sewerage customers

Under the Consumer Protection Code, a utility is not permitted to disconnect water supply or withdraw sewerage services for failure to pay an account. However, it may restrict the water flow to a level that allows for essential uses only.

As in previous years, ACTEW Corporation did not restrict the water flow to any customer for failure to pay an account in 2005–06.

5.2 Direct debit defaults

Defaults on automatic direct debit account payments may indicate emerging payment difficulties. While a certain level of defaults can be expected to arise by accident—for example, through administrative errors by utilities or oversights by customers—a rising trend could indicate increasing numbers of customers having difficulty paying their utilities bills.

Of electricity and gas suppliers, only ActewAGL Retail was able to provide information about direct debit defaults in 2005–06. The rate of defaults for ActewAGL Retail’s electricity customers was 3.2% for all customers (3.3% for residential customers and 1.8% for non-residential customers). In the preceding reporting years, ActewAGL Retail could not differentiate defaults between residential and non-residential customers. As Table 36 shows, the percentage of ActewAGL Retail’s electricity and gas customers defaulting on direct debit payments has declined significantly in recent years.

Table 36 Direct debit, payment default, ActewAGL Retail and ACTEW Corporation, 2002–03 to 2005–06 (%)

Utility service	Licensee	2002–03	2003–04	2004–05	2005–06
Electricity	ActewAGL Retail	10.0	14.0	6.1	3.2
Natural gas	ActewAGL Retail	n.a.	10.1	9.5	0.2
Water and sewerage	ACTEW Corporation	n.a.	5.0	2.0	3.5

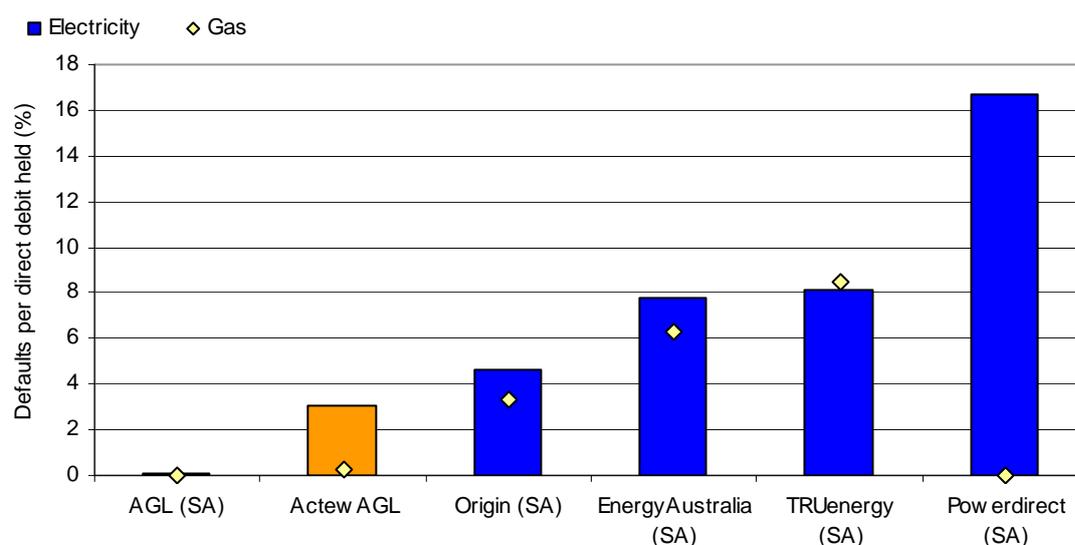
Source: ActewAGL Retail and ACTEW Corporation reports to ICRC.

The proportion of gas customers (residential and non-residential) defaulting on their direct debit payments has also fallen significantly, from 9.5% in 2004–05 to just 0.2% in 2005–06.

While the proportion of ACTEW Corporation’s water and sewerage customers defaulting on direct debit payments increased from 2.0% to 3.5% in 2005–06, this remains below the level of 5% in 2003–04.

Figure 48 compares the proportion of direct debit defaults by ActewAGL Retail’s electricity and gas customers with the proportions for energy suppliers in South Australia, the only other jurisdiction for which this information is available.

Figure 48 Direct debit, payment default, electricity and gas supply, selected utilities, 2005–06



Sources: ESCOSA (2006b), ActewAGL Retail report to ICRC.

This shows that relatively few of ActewAGL Retail’s electricity customers default on direct debit plans. Only AGL (SA), with 0.1%, had a lower default rate. For gas, ActewAGL’s customers also had the second lowest default rate.

5.3 Instalment plans

In a number of ways, utilities can assist customers experiencing financial hardship. Two options are instalment plans and deferred payments.

Although the number of customers on instalment plans is used as a measure of customer hardship, customers who are not in difficulty may choose to pay by instalment for reasons of budgeting or convenience.

5.3.1 Electricity supply

As indicated in Table 37, 6.1% of ActewAGL Retail’s residential customers were on instalment plans in 2005–06, an increase from 1.1% in 2003–04 and 3.8% in 2004–05. EnergyAustralia recorded a two-thirds reduction in the number of residential customers on instalment plans in 2005–06.

Table 37 Proportion of customers using instalment plans, electricity supply, ACT suppliers, 2002–03 to 2005–06 (%)

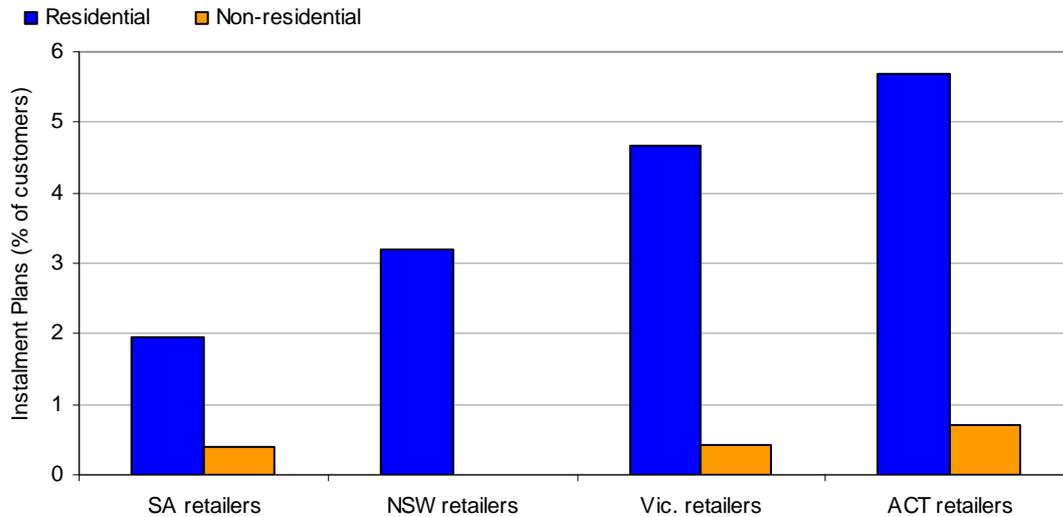
Electricity supplier	2002–03	2003–04	2004–05	2005–06
ActewAGL Retail	1.5	1.1	3.8	6.1
EnergyAustralia ^a	n.a.	n.a.	3.0	1.0

a EnergyAustralia did not supply electricity to small residential customers in 2002–03 and 2003–04.

Sources: ActewAGL Retail and EnergyAustralia reports to ICRC.

Figure 49 shows that the proportion of residential customers on instalment plans varies in other states, from just under 2% in South Australia to 4.7% in Victoria.

Figure 49 Proportion of customers using instalment plans, residential and non-residential customers, electricity supply, selected utilities, 2005–06



Sources: ESC (2006), ESCOSA (2006b), IPART (2006a), licensed utility returns to ICRC.

In 2005–06, 0.7% of ActewAGL Retail’s non-residential customers were on instalment plans. This was lower than for previous years (1.5% in 2004–05 and 0.8% in 2003–04) but higher than retailers in other jurisdictions. No other ACT supplier had non-residential customers on instalment plans.

5.3.2 Gas supply

In 2005–06, for every 1,000 residential gas customers, 9.1 customers paid their accounts through an instalment plan. There was a 20% increase from 7.6 per 1,000 in 2004–05. These numbers do not include customers on account smoothing plans, such as ActewAGL Retail’s ‘Even Pay’ scheme. There were no non-residential customers on instalment plans in 2005–06.

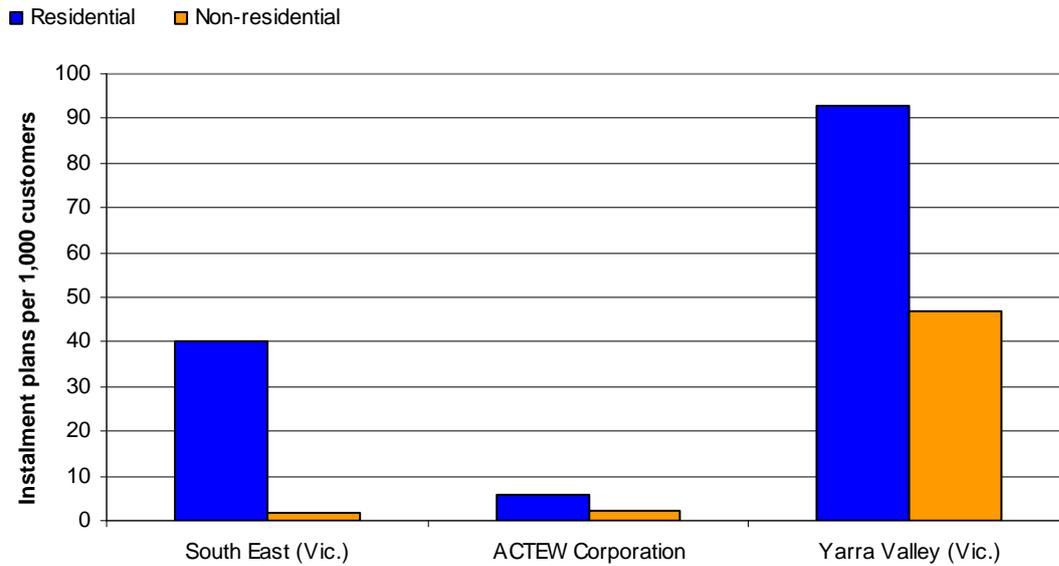
The ACT had a lower rate of residential customers on instalment plans than South Australia and Victoria. In South Australia, there were 10.5 instalment plans per 1,000 residential customers and 0.6 per 1,000 non-residential customers. In Victoria, there were 46.6 instalment plans per 1,000 residential customers and 4.3 per 1,000 non-residential customers.

5.3.3 Water and sewerage

At 30 June 2006, 749 water and sewerage customers were on instalment plans (732 residential and 17 non-residential customers). This equated to 5.6 instalment plans per 1,000 residential customers (7.1 in 2004–05) and 2.4 per 1,000 non-residential customers (4.2 in 2004–05). These figures exclude customers on ACTEW Corporation’s direct debit budget plan (2,423 residential and 8 non-residential customers). As noted above, these types of plans may be used for budgeting purposes rather than because of financial hardship.

Figure 50 shows that the proportions of residential and non-residential customers on instalment plans in the ACT are considerably smaller than for residential customers with South East Water and Victoria’s Yarra Valley Water and for non-residential customers with Yarra Valley Water.

Figure 50 Proportion of customers using instalment plans, residential and non-residential customers, water supply, selected utilities, 2005–06



Sources: ESC (2007b), ACTEW Corporation report to ICRC.

5.4 Security deposits

5.4.1 Electricity supply

EnergyAustralia was the only ACT electricity supplier to hold any security deposits in 2005–06. At 30 June 2006, it held 2.9 residential security deposits per 1,000 customers. The Commission notes that security deposits are still commonplace in other jurisdictions.

5.4.2 Gas supply

No ACT gas retailer held security deposits for either residential or non-residential gas customers in 2005–06.

5.4.3 Water and sewerage

ACTEW Corporation did not hold any security deposits in 2005–06 for water and sewerage services.

6 Environment and other issues

This section covers the increasingly important environmental performance of utilities. However, responsibility for energy, greenhouse and water policy and regulation rests with other ACT Government agencies. This section considers only those environmental issues that are a direct responsibility of the Commission, such as network losses, greenhouse gas emissions and consumption efficiency.

The section also refers to a number of safety issues related to natural gas.

6.1 Water

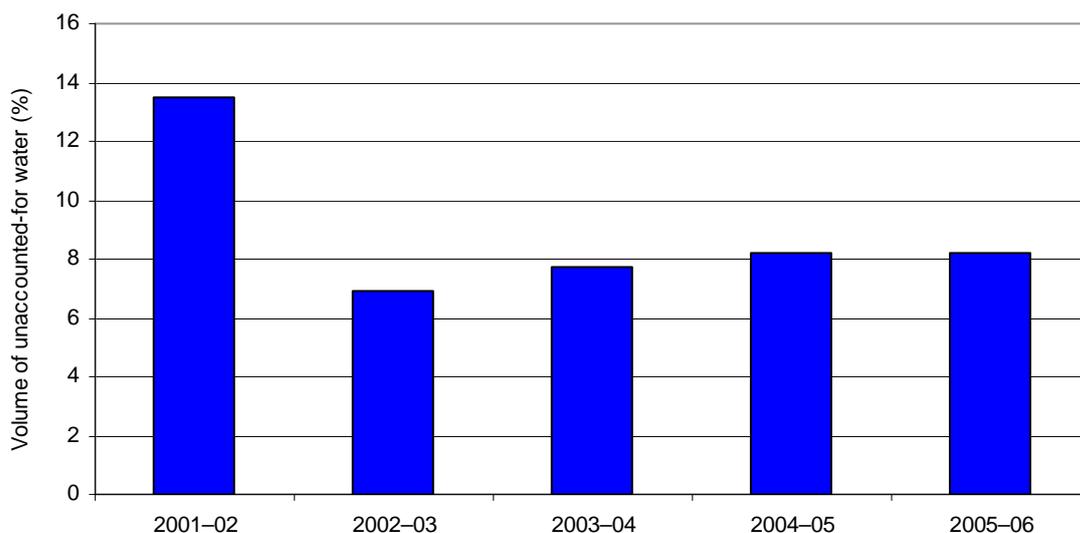
6.1.1 Water losses

‘Unaccounted-for’ (or ‘non-revenue’) water is water that has been wasted or lost through leakages, bursts, or evaporation from open-air treatment and storage facilities, as well as unbilled water consumption, unauthorised consumption and water lost through metering inaccuracies or errors. Thus, the volume of unaccounted-for water is the difference between the volume of water extracted and the amount of water for which the utility bills its customers.

Unaccounted-for water is sometimes used as a measure of the condition and efficiency of a utility’s water network. It is also significant from an environmental perspective, as the water lost was water extracted from river systems for consumptive purposes but not used for those purposes.

Figure 51 indicates that the annual quantity of unaccounted-for water in the ACT halved between 2001–02 and 2002–03, from just under 14% to 7% of the total volume of water extracted. In 2005–06, the percentage of unaccounted-for water was steady at 8.2%.

Figure 51 Unaccounted-for water, volume, ACTEW Corporation, 2001–02 to 2005–06



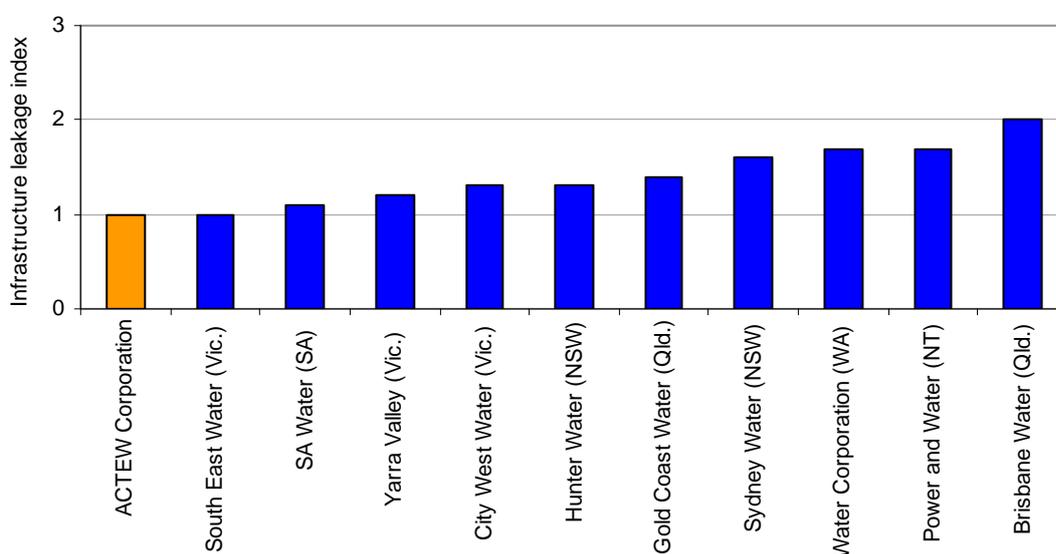
Source: ACTEW Corporation reports to ICRC.

Figure 52 compares ACTEW Corporation’s performance on network losses to the performance of interstate water utilities, using the Water Services Association of Australia (WSAA) infrastructure leakage index—that is, the ratio of current annual real losses to unavoidable real losses.

The infrastructure leakage index measures how effectively real losses are being managed at current operating pressure, while accounting for other influential factors such as the length of mains and customer meter location. An index of 1.0 indicates that only unavoidable losses are occurring and technically optimal leakage management is in place. South East Water in Victoria was the only water utility in the sample with an infrastructure leakage index of 1.0. Brisbane Water in Queensland had the highest infrastructure leakage index (2.0); indices for the other water utilities ranged from 1.1 to 1.7.

In 2005–06, ACTEW Corporation was unable to provide infrastructure leakage index data to the WSAA. Its index for 2004–05 was 1.0.

Figure 52 Infrastructure leakage indices, water networks, 2005–06



Note: ACTEW Corporation data are for 2004–05.

Source: WSAA (2006).

In 2005–06, ACTEW Corporation reported that it had continued its meter replacement and service upgrade programs, which are designed to reduce loss of water through leaks and to improve measurement by meters. The intention is to identify any flows that are other than minimal. Such flows would be investigated to pinpoint and reduce water losses.

6.1.2 Environmental flows

Environmental flows are the flows of water into rivers and streams that are necessary to maintain healthy aquatic ecosystems. They are designed to mimic naturally occurring water flows, including

seasonal fluctuations and other variables.²⁶ Under its licence conditions, ACTEW Corporation is required to release water from the Cotter and Googong catchments for environmental purposes. The volume of water released as an environmental flow is in accordance with the Environmental Flow Guidelines approved by the minister responsible for water resources. It is not determined by the water utility.

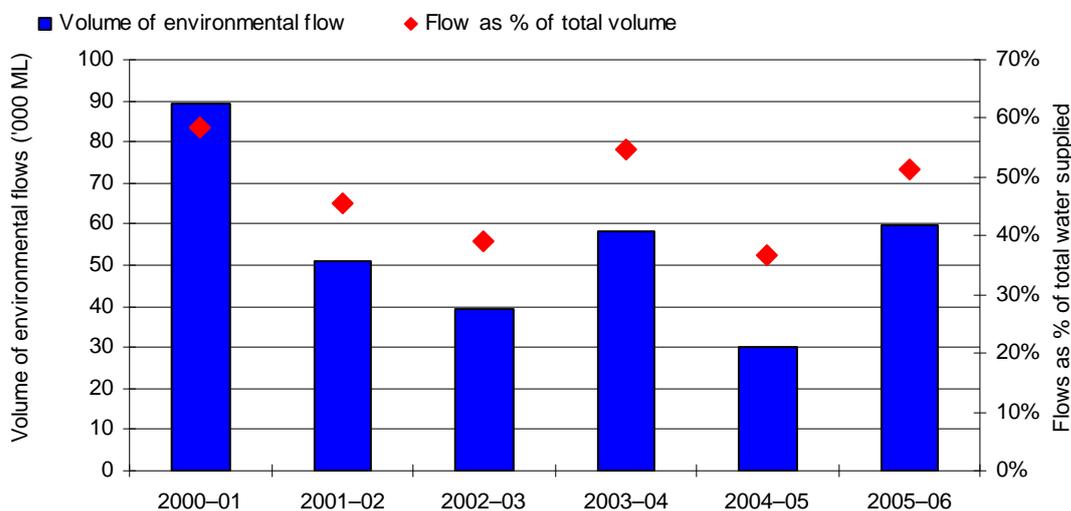
Dams, such as those built on the Cotter River and Queanbeyan River as part of the ACT water supply system, affect downstream flow by reducing the volume of flows and sometimes by changing the natural flow patterns. To reduce their impact, water is released or spilled from the dams into the rivers below at certain times of the year.

The environmental flows that are recommended for the water supply catchments are based on research and monitoring of environmental flows in the river systems and are intended to ensure that both water supply and conservation objectives are met. Because of the recent prolonged drought, the relevant authorities have reduced environmental flow requirements in recent years.

Figure 53 shows the total volume of environmental flows released by ACTEW Corporation, and those flows as a proportion of total water abstracted for consumptive or environmental purposes, between 2000–01 and 2005–06. Although they have varied from year to year, environmental flows released by ACTEW Corporation from water storages have consistently been more than one-third of the total water abstracted in the ACT. In 2005–06, the level was 51%.

ACTEW Corporation is one of only a few water utilities in Australia that is responsible for the release of water for environmental flows from the storage facilities that it manages.

Figure 53 Environmental flows, volumes and proportion of total volumes abstracted, water supply, ACTEW Corporation, 2000–01 to 2005–06



Source: WSAA (2006).

²⁶ Environment ACT (2006).

6.2 Energy

Very little electricity is generated and no natural gas is produced in the ACT. However, more than two-thirds of the greenhouse gas emissions attributable to the ACT derive from energy consumption.²⁷

This section covers the environmental impacts of greenhouse gas emissions associated with the use of gas and electricity, and energy efficiency. Distribution network losses are also examined.

6.2.1 Greenhouse gas emissions

Greenhouse gas emissions are a major environmental concern arising from energy consumption. Greenhouse gases include carbon dioxide, methane and nitrous oxide. These gases are released into the atmosphere by such activities as the use of fossil fuels, broadscale land clearing and other land-use changes, and are a key factor in climate change.

Electricity consumption

The Commission estimates the greenhouse gas emissions that can be attributed to electricity consumption in the ACT by subtracting the volume of ‘green power’ (electricity sourced from generators that produce no greenhouse gases) from the total electricity sold in the ACT, to calculate a net amount of greenhouse gas-producing electricity. This is then multiplied by an emissions intensity coefficient for New South Wales and ACT electricity consumption, supplied by the Australian Greenhouse Office (AGO).²⁸

This method of estimating greenhouse gas emissions makes a number of assumptions that, while appropriate in this context, might not be appropriate for other purposes. For example, it excludes emissions for energy lost through network losses. Readers seeking greenhouse gas emissions data as an input for other work should contact the Commission before using the data below.

Estimated greenhouse gas emissions increased as a result of an increase in the volume of electricity sold. As shown in Table 38, although there was a significant increase (34%) in the volume of green power sold in the ACT from 32.4 gigawatt hours in 2004–05 to 43.5 gigawatt hours in 2005–06, the estimated volume of greenhouse gases emitted as a result of electricity consumption also increased by approximately 3.3%²⁹ to 2,961,580 tonnes CO₂-e.

²⁷ ACT Government (2006), p. 15.

²⁸ Australian Greenhouse Office (2005).

²⁹ The same emissions intensity coefficient was used for 2003–04, 2004–05 and 2005–06 to enable more meaningful comparisons.

Table 38 Estimated greenhouse gas emissions arising from ACT electricity consumption, 2003–04 to 2005–06

Item	2003–04	2004–05	2005–06
Electricity sold in the ACT (MWh)	2,636,776	2,716,628	2,816,479
Green power sold in the ACT (MWh) ^a	28,692	32,444	43,463 ^b
Greenhouse gas producing electricity sold in the ACT (MWh)	2,608,084	2,684,184	2,773,015
AGO emissions intensity coefficient (t CO ₂ -e/MWh)	1.068	1.068	1.068
Estimated greenhouse gas emissions arising from ACT electricity consumption (t CO ₂ -e)	2,785,434	2,866,709	2,961,580

a Government-accredited Green power products.

b This corrects the figure published previously in the companion *Compliance Report for 2005–2006* (ICRC 2007b).

Source: Licensed utility reports to ICRC.

Gas consumption

To estimate greenhouse gas emissions caused by ACT gas consumption, the Commission multiplies the volume of gas sold in the ACT by an emissions intensity coefficient for New South Wales and ACT gas consumption, also supplied by the AGO.³⁰ For natural gas, the AGO provides two coefficients: one for large customers and one for small customers. As shown in Table 39, the estimated volume of greenhouse gases emitted as a result of natural gas consumption in the ACT in 2005–06 was 484,037 tonnes CO₂-e, a 5.5% increase on the 2004–05 level.

Table 39 Estimated greenhouse gas emissions arising from ACT natural gas consumption, 2003–04 to 2005–06

Item	2003–04	2004–05	2005–06
Natural gas sold in the ACT (TJ)	6,639	6,525	6,857
Natural gas sold to large customers (TJ)	295	1,893	1,490
AGO emissions intensity coefficient—large customers (t CO ₂ -e/TJ)	68.0	68.0	68.0
Natural gas sold to small customers (TJ)	6,344	4,632	5,368
AGO emissions intensity coefficient—small customers (t CO ₂ -e/TJ)	71.3	71.3	71.3
Estimated greenhouse gas emissions arising from ACT natural gas consumption (t CO ₂ -e)	472,387	458,986	484,037

Source: Licensed utility reports to ICRC.

6.2.2 Consumption efficiency

Energy consumption efficiency is both an important environmental and a cost-efficiency consideration. The more energy required for a task (for example, to heat a house), the more greenhouse gases are released through burning fossil fuels and the greater the environmental impact.

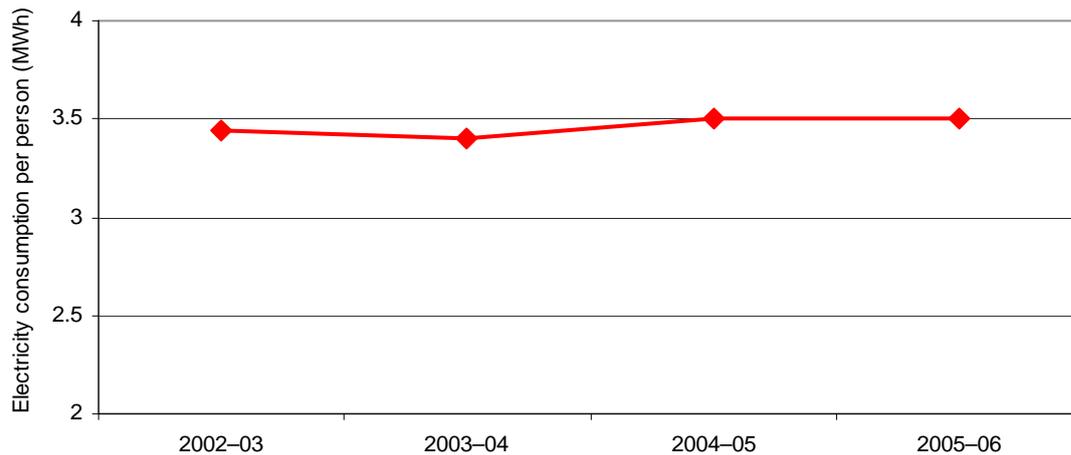
³⁰ Australian Greenhouse Office (2006).

Residential electricity consumption

To examine the efficiency of residential energy consumption over time, it is necessary to look at consumption per person, rather than consumption in total; otherwise, changes in consumption efficiency can be hidden by population growth.

As Figure 54 shows, ACT residential electricity consumption per person has ranged between 3.4 and 3.5 megawatt hours over the four-year period to 2005–06.

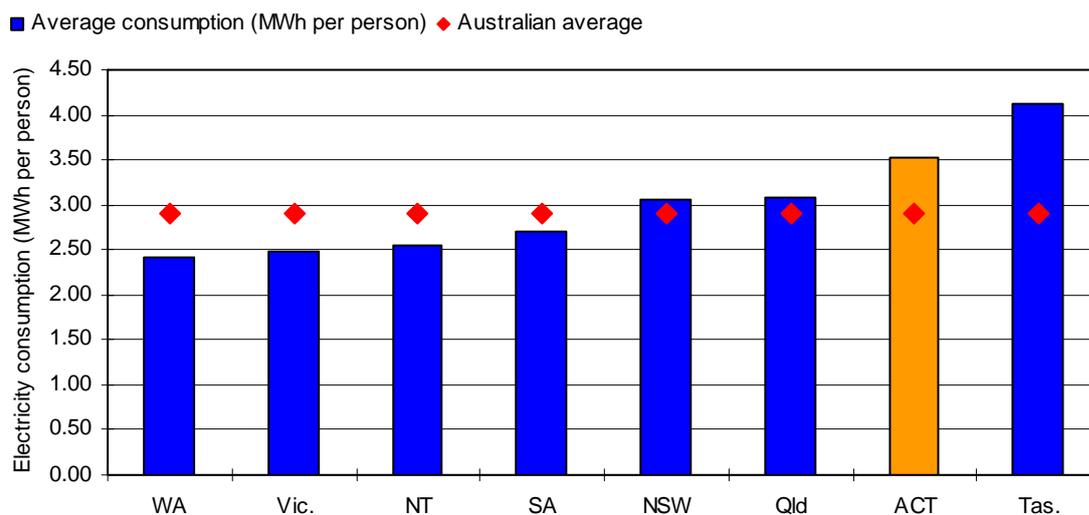
Figure 54 Electricity, residential consumption per person, ACT, 2002–03 to 2005–06



Sources: ABS (2006b), licensed utility reports to ICRC.

Figure 55 compares ACT residential electricity consumption per person with that in other states and territories in 2005–06. It shows that in 2005–06 the level of electricity consumption in the ACT at 3.5 megawatt hours per person is slightly above the national average of 2.9.

Figure 55 Electricity, residential consumption per person, all states and territories, 2005–06



Sources: ESAA (2006), licensed utility reports to ICRC.

Residential gas consumption

ACT residential gas consumption was 16 gigajoules per person in 2005–06, up by 25% from 12.8 gigajoules per person in 2004–05. Because gas usage data before 2003–04 included data for Queanbeyan, it is not possible to comment further on earlier year levels.

Limited information is available on residential gas consumption in other jurisdictions, so it is difficult to make comparisons.

Business energy consumption

‘Energy intensity’ is the quantity of energy required per unit of output or activity. The less the energy used per dollar produced (that is, the lower the intensity index), the more energy efficient the activity.

For business energy use³¹, where multiple technologies or products underlie those quantities being compared, it is more meaningful to examine the energy intensity of economic output than to examine the total energy use. This removes the impact of variations in economic growth and other structural factors, and focuses on the underlying energy efficiency of commercial and industrial activity.

The electricity use intensity of ACT businesses has increased (and efficiency has decreased) by about 1.1% per year since 2002–03, from 81.37 megawatt hours per million dollars of gross state product in 2002–03 to 84.96 megawatt hours in 2005–06.³² Electricity consumption by businesses increased at a faster rate than growth in gross state product.

Interstate comparisons are less meaningful for business electricity use than they are for residential use and, as a result, they are not made in this report. This is because some business activities (for example, aluminium refining) are more energy intensive than others (for example, government departments). Accordingly, the types of business activities in a state or territory tend to have a greater influence on aggregate business energy use efficiency within that jurisdiction than the underlying energy efficiency of the businesses in the jurisdiction.

Table 40 Electricity and gas energy use efficiency, 2002–03 to 2005–06

	2002–03	2003–04	2004–05 ^a	2005–06
Electricity efficiency index (MWh/\$m) ^b	81.37	82.44	84.47	84.96
Gas efficiency index (GJ/\$m) ^c	118.09	128.84	124.76	129.55

a The figures quoted by the ABS for gross state product using the production approach (GSP/P) for 2004–05 have been revised.

b Derived by taking total non-residential electricity consumption and dividing by GSP/P (current prices).

c Derived by taking total non-residential gas consumption and dividing by GSP/P (current prices).

Source: Licensed utility reports to ICRC.

³¹ ‘Business’ includes the activities of government as well as the activities of the private sector.

³² ABS (2006c). Note that there were significant revisions to the ABS supply and use tables and, as a result, the 2002–03 and 2003–04 data do not correspond with those presented in the Commission’s 2003–04 performance report.

Efficiency in the use of natural gas by businesses declined in 2005–06 after improving in 2004–05. The intensity index increased from 124.76 gigajoules per million dollars of gross state product in 2004–05 to 129.55 gigajoules per million dollars in 2005–06.

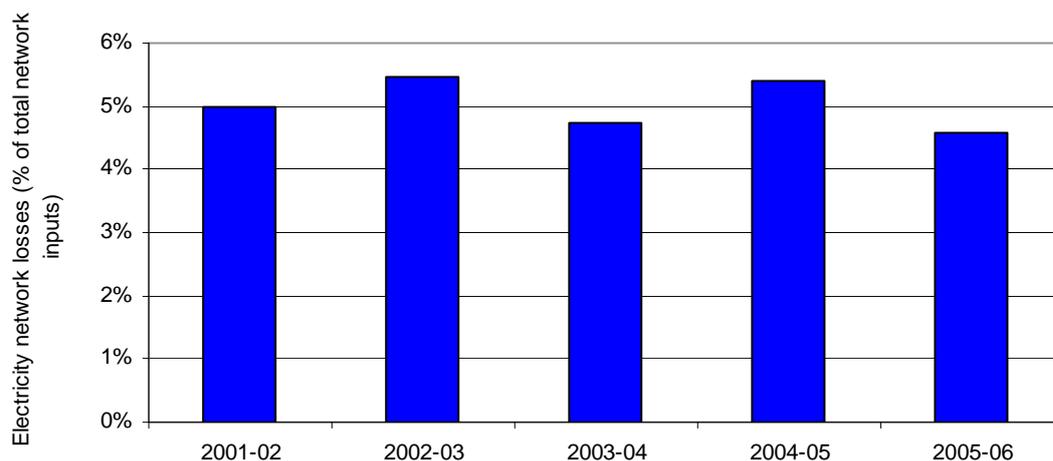
6.2.3 Network losses

Electricity network losses

Electricity networks lose energy mainly through heat generated by resistance in wires and transformers. From an environmental perspective, the greater the electricity network losses, the more electricity needs to be generated to meet demand, and the greater the potential impact on the environment.

Figure 56 summarises ActewAGL Distribution’s electricity network losses for the years 2000–01 to 2005–06, during which network losses fluctuated between 4.6% and 5.7%. In 2005–06, ActewAGL Distribution’s electricity network losses were 4.6% of total network inputs.

Figure 56 Network losses, electricity distribution, ActewAGL Distribution, 2000–2001 to 2005–06

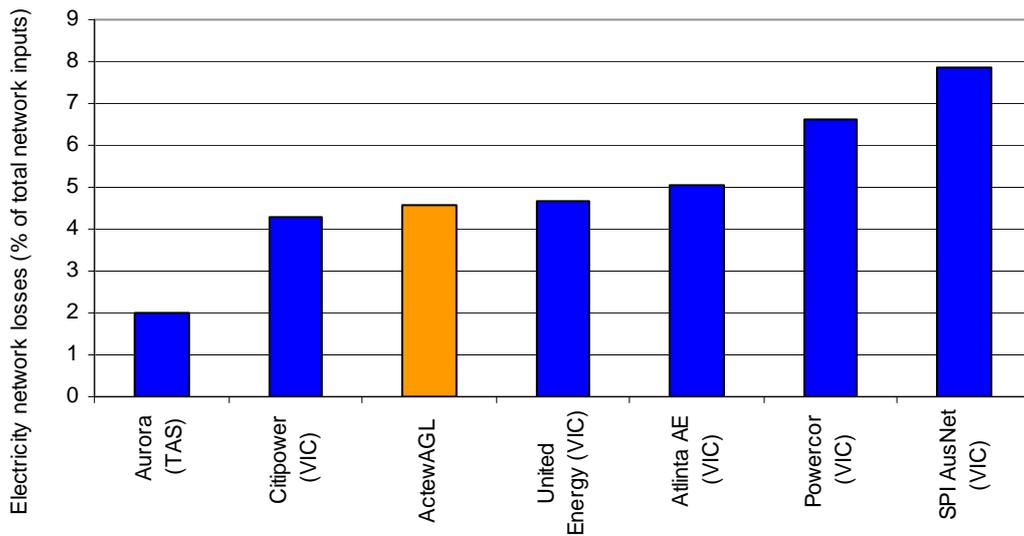


Source: ActewAGL Distribution reports to ICRC.

Figure 57 compares ActewAGL Distribution’s electricity network losses with losses from electricity networks in other jurisdictions. In 2005–06, Aurora Energy in Tasmania had the lowest percentage of network losses (an estimated 2% of total network inputs). Network losses for the other electricity distributors in the sample ranged from 4.1% to 7.9%, with ActewAGL Distribution falling roughly in the middle.

This is not surprising, because losses are typically greater on the long feeders characteristic of sparsely populated rural areas, such as the ones operated by Powercor and SPI AusNet in Victoria. The distributors with the lower losses tend to have the shorter feeders. The ACT has mainly short feeders with a small number of long feeders.

Figure 57 Network losses, electricity distribution, selected utilities, 2005–06



Note: Victorian data are for 2006 calendar year.

Sources: ESC (2007c), OTTER (2006), ActewAGL Distribution report to ICRC.

ActewAGL Distribution is required to report annually to the Commission on the strategies it has in place to reduce its network losses. ActewAGL Distribution stated that the management of network losses was incorporated into a range of functions and strategies, including:

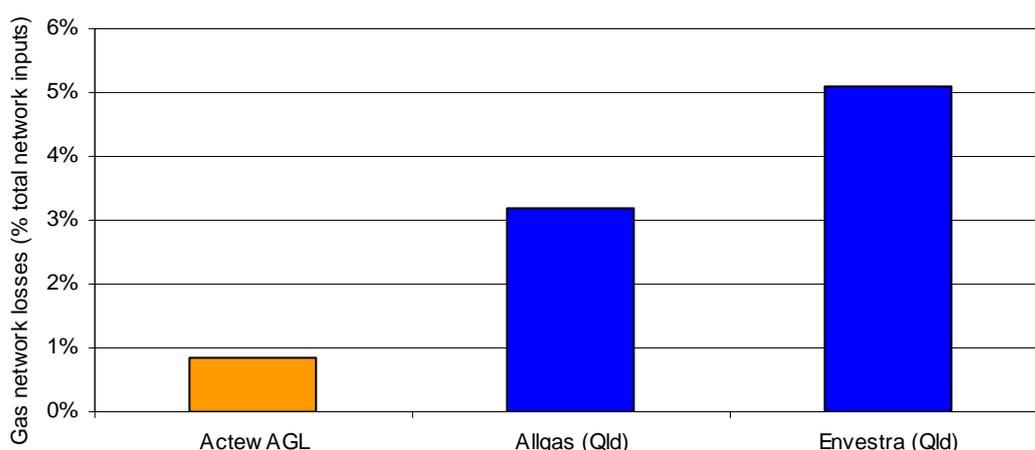
- network planning, design and project assessments, which must demonstrate consideration of network losses
- a forthcoming audit of zone substation transformers losses
- consideration of the cost of losses when purchasing transformers (electrical losses over the life of a transformer is a criterion in tender assessments)
- use of various network tariff initiatives to manage network demand and, as a result, network losses through providing appropriate price signals, including
 - demand tariffs that are designed to improve the system’s load profile and so result indirectly in a reduction of losses
 - the introduction from the 2006–07 reporting year of time-of-use residential network tariffs.

ActewAGL Distribution also noted that demand tariffs, which are designed to improve load profile, may also reduce losses and that further opportunities for load profile improvements may become available with the introduction of interval metering in the ACT. The Commission notes that the Ministerial Council on Energy is currently undertaking a cost–benefit analysis of a national roll-out of smart meters.

Gas network losses

In 2005–06, 0.9% of the gas entering the network was unaccounted for (the same as in 2004–05). As indicated in Figure 58, ActewAGL Distribution’s level of gas network losses is favourable when compared with losses for gas distributors in Queensland, which ranged from 3.4% (Allgas) to 5.1% (Envestra).

Figure 58 Network losses, gas distribution, 2005–06



Sources: QCA (2006), ActewAGL Distribution report to ICRC.

6.2.4 Operation and maintenance

Gas specification

‘Gas specification’ is the energy content and purity of the natural gas in the pipeline. Where the gas is outside the specification, there are potential health and safety problems, such as the risk of damage to customers’ equipment.

ActewAGL Distribution indicated that gas specification reached the maximum or minimum limits 72 times during 2005–06 (down by 23% from 2004–05, when gas specification reached the limits 94 times). There was no health and safety impact on customers or damage to their equipment.

Gas regulator and meter replacements

Table 41 shows that ActewAGL Distribution replaced 621 gas regulators in 2005–06, up by 3.2% on the 2004–05 level. Of the regulators replaced, 576 were for residential customers and 45 were for non-residential customers. ActewAGL Distribution replaced 264 meters in 2005–06, a 6% decrease from 2004–05. Of those replacements, 232 or 87.9% were for residential customers and 32 or 12.1% were for non-residential customers.

Table 41 Gas regulator and meter replacements, ActewAGL Distribution, 2002–03 to 2005–06

	2002–03	2003–04	2004–05	2005–06
Regulators replaced	445	432	602	621
Meters replaced	313	252	281	264

Distribution network pressure

Potential safety problems arise if the gas network operating pressure falls below the normal operating system minimum pressure: for example, domestic gas leaks can occur if the pressure is too low to maintain a pilot flame. ActewAGL Distribution indicated that distribution network pressure fell below the minimum standard for high-pressure infrastructure once in 2005–06, noting that there were no associated consumer impacts. No events were reported for the medium pressure system, as was also the case in 2004–05.

Codes of practice compliance

ActewAGL Distribution confirmed that its environmental management policies and practices were in line with the AG750 Environmental Code of Practice and the Australian Pipeline Industry Code of Practice for Pipeline Construction.

Appendix 1 Regulatory framework

A1.1 The ACT utilities regulatory regime

The regulatory framework for the ACT's utilities is established by the *Utilities Act 2000*. Section 21(1) of the Act specifies that a person must not provide a utility service except in accordance with a licence (although in special circumstances the minister may exempt a person from this requirement by means of a disallowable instrument).

Licences are granted subject to conditions intended to promote the objectives of the legislation, including service reliability and safety, consumer protection, effective competition, industry growth and ecological sustainability. Conditions are also imposed on utilities through industry and technical codes, and by any other related requirement imposed by the Commission or the 'technical regulator' (the ACT Planning and Land Authority).

The utilities licensing regime is underpinned by industry and technical codes, and guidelines that interpret licence conditions and/or specify what actions licensees must take to comply with licence conditions (for example, submitting the annual returns that inform the Commission's compliance and performance reports).

A1.1.1 The Commission's licensing role

The Commission holds the statutory authority to grant, vary, transfer, approve the surrender of and revoke licences, and to exempt a utility from compliance with a condition of its licence in relation to a stated activity or in stated circumstances. Decisions made under these powers are reviewable by the Administrative Appeals Tribunal. Each utility must pay an annual licence fee determined to be a reasonable contribution towards the costs incurred by the Commission, the Essential Services Consumer Council (ESCC) and the technical regulator in performing their statutory functions under the Utilities Act.

The Commission's licensing role principally involves:

- maintaining the licence register
- assessing applications for the grant, variation, transfer and surrender of licences
- monitoring licensees' compliance with the Utilities Act, licences and codes
- determining licence fees.

The Commission monitors and reports each year on the extent to which licensed utilities comply, or fail to comply, with their statutory obligations and the conditions of their licences, and on their performance of their licensed activities. The Commission also has extensive enforcement powers, especially for compliance with codes and pricing directions. Licensees may face significant penalties for contraventions of licence conditions.

A1.1.2 Essential Services Consumer Council

The ESCC is established under Parts 11 and 12 of the Utilities Act. The council facilitates the resolution of complaints, may determine unresolved complaints, and ensures, so far as practicable,

that utility services (electricity, gas, water and sewerage) continue to be provided to people suffering financial hardship. The ESCC also protects the rights of consumers under the Act, and advises the minister responsible for Part 5 of the Act and the Commission on any matter relevant to the council's functions.

A1.2 Industry and technical codes in force in 2005–06

A1.2.1 Industry codes

Industry codes administered by the Commission in 2005–06 were as follows.

Consumer Protection Code (June 2005)—This code:

- outlines the basic rights of customers and consumers to connection to and disconnection from a utility's network; the supply by a utility of electricity, gas, water and sewerage services; and access to product and service information
- sets out the circumstances in which a utility can interrupt, restrict or disconnect supply of a utility service to a customer or consumer
- outlines particular obligations that a utility must meet in dealing with customers or consumers
- sets out the provisions that a utility must give effect to in its customer contracts for the provision of utility services.

Electricity Customer Transfer Code (June 2003)—This code sets out practices and procedures for transferring customers between electricity suppliers. The data access and transfer rules operate in conjunction with the National Electricity Code and the requirements of the National Electricity Market Management Company transfer systems that operate under the code.

Electricity Network Boundary Code (December 2000)—This code defines boundaries between an electricity transmission network and an electricity distribution network; connected electricity distribution networks; and an electricity distributor's network and a customer's premises.

Electricity Network Capital Contributions Code (June 2001)—This code outlines the principles and procedures by which an electricity distributor or an electricity supplier may impose a capital contribution charge, payable by a customer, for the costs incurred by the distributor in developing or augmenting its electricity network

Electricity Network Use of System Code (December 2000)—This code imposes an obligation on an electricity distributor and an electricity supplier to enter into a commercial agreement setting out the terms upon which utility services relating to the distribution of electricity are provided by the distributor to the supplier.

Gas Network Boundary Code (December 2000)—This code defines the boundary between a gas transmission network and a gas distribution network; connected gas distribution networks; and a gas distributor's network and a customer's premises.

Gas Network Capital Contributions Code (June 2001)—This code outlines the principles and procedures by which a gas distributor or a gas supplier may impose a capital contribution charge, payable by a customer, for the costs incurred by the distributor in developing or augmenting its gas network.

Water and Sewerage Network Boundary Code (December 2000)—This code defines the boundaries between water utilities’ networks; a water utility’s network and a customer’s premises; sewerage utilities’ networks; and a sewerage utility’s network and a customer’s premises.

A1.2.2 Technical codes

Technical codes administered by the ACT Planning and Land Authority during 2005–06 were as follows.

Contestable Work Accreditation Code (August 2001)—This code requires each utility to prepare an accreditation scheme or adopt an approved accreditation scheme, and sets out those matters that must be included in an approved accreditation scheme. The purpose of the accreditation scheme is to accredit persons to undertake contestable work, such as electricity connection services.

Dam Safety Code (March 2003)—This code ensures that utilities have in place processes and procedures to properly manage water storage dams in order to prevent unsafe operation and/or failure that can in time cause loss to life and damage to property and the environment.

Electricity Distribution (Supply Standards) Code (December 2000)—This code prescribes minimum standards for the quality and reliability of electricity distributed through electricity networks.

Electricity Metering Code (August 2003)—This code sets out matters relating to electricity metering with which an electricity distributor must comply in providing electricity connection services to franchise customers and first tier customers, and with which an electricity supplier must comply in providing electricity supply services to franchise customers and first tier customers.

Electricity Service and Installation Rules Code (December 2000)—This code requires electricity distributors to develop service and installation rules that set out the requirements and associated obligations and procedures for the safe, reliable and efficient connection of electrical installations to an electricity network.

Emergency Planning Code (December 2000)—This code ensures that utilities have appropriate procedures, structures and arrangements for preventing, anticipating and responding to emergency events and potential emergency events.

Gas General Metering Code (December 2000)—This code sets out rules with which gas distributors must comply in providing connection services to customers and with which gas suppliers must comply in providing supply services to customers.

Gas Safety and Operating Plan Code (December 2000)—This code applies to operators of gas transmission and gas distribution networks to ensure the safe operation and maintenance of the networks and quality and pressure standards for gas conveyed through the networks.

Management of Electricity Network Assets Code (December 2000)—This code requires electricity distributors to design, construct, operate and maintain their electricity networks with reasonable care to avoid injury to any person or property.

Water and Sewerage Network (Design and Maintenance) Code (December 2000)—This code prescribes minimum standards for the design, construction, operation and maintenance of water networks and sewerage networks.

Water and Sewerage Service and Installation Code (December 2000)—This code requires water utilities and sewerage utilities to develop service and installation rules setting out the requirements and associated obligations and procedures for the safe, reliable and efficient connection of a customer's premises to a water network and a sewerage network.

Water Metering Code (December 2000)—This code sets out matters relating to water metering.

Water Supply and Sewerage Service Standards Code (December 2000)—This code prescribes minimum standards for the quality and reliability of water supply distributed through water networks and for the provision of sewerage services, including the removal of sewage from customer's premises through sewerage networks.

Appendix 2 Licence holders in 2005–06

Licensed utilities that provided electricity, gas, water and sewerage services in the ACT in 2005–06 are set out here.

Licensed utilities, 1 July 2005 to 30 June 2006

Service	Licensed utility
Electricity distribution and connection	ACTEW AGL Distribution (ACTEW Distribution Ltd and AGL Gas Company (ACT) Ltd)
Electricity supply	ActewAGL Retail (ACTEW Retail Ltd and AGL ACT Retail Investments Pty Ltd) AGL Electricity Ltd ¹ AGL Sales Pty Ltd ² Aurora Energy Pty Ltd Country Energy (franchise and non-franchise customers) Ergon Energy ENERGEX Retail EnergyAustralia Pty Ltd Energy One Pty Ltd ³ Integral Energy Australia Pty Ltd Origin Energy Electricity Ltd Powerdirect Pty Ltd Red Energy Pty Ltd TRUenergy Pty Ltd ⁴ TRUenergy Yallourn Pty Ltd ⁵
Gas transmission	East Australian Pipeline Ltd
Gas distribution and connection	ACTEW AGL Distribution (ACTEW Distribution Ltd and AGL Gas Company (ACT) Ltd)
Gas supply	ActewAGL Retail Country Energy EnergyAustralia ENERGEX Retail TRUenergy Pty Ltd
Water supply	ACTEW Corporation Ltd
Sewerage services	ACTEW Corporation Ltd

Notes:

1. Licence surrendered on 1 September 2006.
2. Licence varied to reflect change of name from AGL Victoria Pty Ltd on 20 February 2006.
3. Licence varied to reflect change of name from Ferrier Hodgson Electricity Pty Ltd on 1 July 2005.
4. Licence varied to reflect change of name from SPI Retail on 1 July 2005.
5. Licence varied to reflect change of name from Yallourn Energy Pty Ltd on 17 August 2005.

Appendix 3 Licensee performance report data

This appendix details the compiled performance data reported by licensees. The tables in this appendix show annual performance indicators by industry segment and licensee. Where licensees have provided supporting documentation, it has not usually been included. Notes to the tables contain licensees' comments and clarifications of their responses. They do not represent the Commission's views.

A3.1 Electricity distribution

ActewAGL Distribution was the only electricity distribution licensee in the ACT in 2005–06.

The indicators collected by the Commission include the national regulatory reporting requirements. These were agreed between regulators and industry representatives under the auspices of the Steering Committee on National Regulatory Reporting Requirements. Further information on the requirements, including definitions of terms, can be downloaded from the Utility Regulators Forum website.³³

A3.1.1 Business descriptors

Number of metered supply points, electricity distribution, ActewAGL Distribution, 2005–06

Feeder category	Total	By type of customer		By supply voltage		
		Residential	Non-residential	Sub-transmission	High-voltage	Low-voltage
CBD	Nil ^a	Nil	Nil	Nil	Nil	Nil
Urban and rural short ^b	154,510	140,849	13,661	0	23	154,487

a A review of feeder classifications concluded that there are no feeders in the ACT that should be classified as CBD.

b ActewAGL does not have the capability to report separately for urban and rural short feeders.

Energy delivered (GWh), electricity distribution, ActewAGL Distribution, 2005–06

Feeder category	Total	By type of customer		By supply voltage		
		Residential	Non-residential	Sub-transmission	High-voltage	Low-voltage
CBD	Nil ^a	Nil	Nil	Nil	Nil	Nil
Urban and rural short ^b	2,773	1,180	1,593	0	357	2,416

a A review of feeder classifications concluded that there are no feeders in the ACT that should be classified as CBD.

b ActewAGL does not have the capability to report separately for urban and rural short feeders.

³³ The link to the Utility Regulators Forum can be found at www.accc.gov.au.

Line length (km), electricity distribution, ActewAGL Distribution, 2005–06

Feeder category	Total	Underground	Overhead	By supply voltage		
				Sub-transmission	High-voltage	Low-voltage
CBD	Nil ^a	Nil	Nil	Nil	Nil	Nil
Urban and rural short ^b	4,691	2,251	2,440	205	2,280	2,206

a A review of feeder classifications concluded that there are no feeders in the ACT that should be classified as CBD.

b ActewAGL does not have the capability to report separately for urban and rural short feeders.

Number of transformers, electricity distribution, ActewAGL Distribution, 2005–06

Network	Number	Capacity (MVA)
Subtransmission	28	1,342
Distribution	4,495	1,682

Other business descriptors, electricity distribution, ActewAGL Distribution, 2005–06

Descriptor	Value
Distribution losses	4.58%
Network service area	2,358 km ²
Number of poles	51,783
Peak demand	617 MW

A3.1.2 Customer service

Customer service indicators cover timely provision of service, call centre performance, and complaints. For call centre performance, a call is considered answered when a caller speaks to a human operator or to an interactive service that provides the information requested, but not when a call is placed in an automated queue or continues to ring without a response. A complaint is defined as any expression of dissatisfaction with an action, a proposed action, or failure to act, or about a product or service offered or provided by the licensee, where a response by the service provider is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice.

Customer service, electricity distribution, ActewAGL Distribution, 2005–06

Indicator	Response
<i>Call centre performance</i>	
How many ACT customers made calls to the licensee's call centre in 2005–06?	59,552
How many calls were answered within 30 seconds?	35,917
What was the average waiting time before a call was answered by a person?	34 seconds
How many calls were abandoned before being answered by a person?	13,397
How many overload events occurred?	19
<i>Customer complaints</i>	
What was the total number of customer complaints received by the licensee in 2005–06?	898
Of the complaints received in 2005–06, how many related to:	
Reliability of supply?	76
Technical quality of supply?	9
Administrative process or customer service?	286
Property damage/restoration of property?	115
Connections?	8
Metering/meter reading?	4
Failure to provide, or insufficient, notice?	237
Other network operations?	63
Other?	100

A3.1.3 Supply reliability

Supply reliability, electricity distribution, ActewAGL Distribution, 2005–06

Dataset	Feeder category			
	CBD ^a	Urban	Rural short	Network total
<i>System average interruption duration index (SAIDI) (minutes)</i>				
Overall	n.a.	95.26	85.45	93.6
Distribution network—planned	n.a.	49.79	49.46	49.50
Distribution network—unplanned	n.a.	45.47	42.92	44.10
Normalised distribution network	n.a.	34.99	42.53	35.60
<i>System average interruption frequency index (SAIFI) (minutes)</i>				
Overall	n.a.	0.99	3.10	1.03
Distribution network—planned	n.a.	0.23	0.24	0.23
Distribution network—unplanned	n.a.	0.76	2.86	0.80
Normalised distribution network	n.a.	0.71	2.85	0.73
<i>Customer average interruption duration index (CAIDI) (minutes)</i>				
Overall	n.a.	96.2	27.56	90.87
Distribution network—planned	n.a.	216.48	206.08	215.2
Distribution network—unplanned	n.a.	59.80	15.00	55.12
Normalised distribution network	n.a.	49.28	14.90	48.77

a A review of feeder classifications concluded that there are no feeders in the ACT that should be classified as CBD.

A3.1.4 Technical quality of supply

Technical quality of supply, electricity distribution, ActewAGL Distribution, 2005–06

Indicator	Response
<i>Number of complaints</i>	
Total number of technical quality of service complaints	24
<i>Complaints by category</i>	
Low supply voltage	2 ^a
Voltage dips	1 ^b
Voltage swell	5 ^c
Voltage spike	2 ^d
Waveform distortion	1 ^e
TV or radio interference	1 ^f
Noise from appliances	0
Other	12 ^g
<i>Likely cause of problem</i>	
Network equipment faulty	2 ^h
Network interference by network service provider equipment	0
Network interference by another customer	0
Network limitation	4 ⁱ
Customer internal problem	3 ^j
No problem identified	14 ^k
Environmental	0
Other	1 ^l

a Tapped transformer to increase voltage and internal voltage drop due to mains and loading.

b Commonly called flickering of supply.

c Reports of high volts.

d Reports of transients/surges.

e Swinging voltage range burnt, TX neutral.

f Advised customer to talk to the ACA, if equipment faulty then ActewAGL will fix.

g Burnt neutral at TX, overheating compact LV board.

h Overload related issues and halogen lamp problems.

i LV circuit at maximum capacity.

j Internal overload.

k PIP (water ingress in lamps, customer could not operate equipment correctly, unfounded radio interference).

l LV cable fault occurred shortly after logging had been completed.

A3.1.5 Regulatory accounts

In 2005–06, the annual compliance and performance reporting process was also used to collect data on the regulatory accounts for ActewAGL Distribution's electricity business. This information is provided in the following tables.

Regulatory accounts, electricity distribution, ActewAGL Distribution, 2005–06

Item		Value	Notes
<i>Revenue (nominal \$000)^a</i>			
Network charges	Residential	43,089	Regulated
	Non-residential low-voltage	56,897	Regulated
	Non-residential high-voltage	9,615	Regulated
	Non-residential subtransmission	0	
	Total network charges	109,601	Regulated ^b
Public lighting		n.a. ^c	n.a.
Customer contributions		3,353	Regulated
Other distribution services		0	
<hr/>			
Profit from sale of assets	Gross sale proceeds	44	Regulated
	Book value of assets sold	0	
Other revenue (excludes community service obligations)		1,804	Regulated
<hr/>			
<i>Capital expenditure and additions to fixed assets (nominal \$000)</i>			
System assets	Subtransmission lines	982	Financial accounting value—includes zone substation assets (additions less write-offs)
	Distribution lines	17,048	Financial accounting value (additions less write-offs)
	Low-voltage supply	n.a. ^d	
	Substations	7,224	Financial accounting value for distribution substations (additions less write-offs)
	Distribution transformers	n.a. ^e	
	Meters	1,838	Financial accounting value (additions less write-offs). Note: meters are deemed 'excluded services' and do not form part of the regulated asset base.
	Communications		
	Land and easements		
	Buildings		
	Other system assets	1,500	Financial accounting value (additions less write-offs)
Total system assets	28,593	Financial accounting value (additions less write-offs)	
Public lighting		0	Financial accounting value (additions less write-offs)

Item	Value	Notes
Non-system assets	0	Financial accounting value (additions less write-offs) ^f
<i>Capital expenditure on system assets by purpose (nominal \$000)</i>		
Asset replacement	11,174	Financial accounting value (capex)
Demand related	11,697	Financial accounting value (capex)
Reliability and quality improvements	3,150	Financial accounting value for augmentation (capex) ^g
Environmental, safety and legal obligations		
Full retail contestability	n.a.	
Other	3,394	Financial accounting value (capex)
<i>Depreciation (nominal \$000)</i>		
Current year depreciation charge	21,583	Financial accounting value (not regulatory)
Depreciation methodology used	Straight line	
<i>Weighted average (expected and remaining) lives (years)</i>		
System assets	n.a. ^h	
Non-system assets	n.a.	
<i>Operating costs (nominal \$000)</i>		
Network operating costs	13,806	Regulated
Network maintenance costs		
Inspection	1,350	Regulated
Maintenance and repair	5,657	Regulated
Vegetation management	1,559	Regulated
Emergency response	2,588	Regulated
Other network maintenance	0	
Total network maintenance	11,153	Regulated
Other costs		
Meter reading	782	Regulated
Customer service	0	
Advertising and marketing	1,198	Regulated
Full retail contestability	0	
Other operating costs	4,388	Regulated
Corporate management fee	9,093	Regulated
Business services provided by ActewAGL Retail	1,765	Regulated
Total other costs	17,226	Regulated
Public lighting	0	
Total corporate overheads included in cost categories	15,465 ⁱ	Regulated
<i>Related party transactions (nominal \$000)</i>		
Total value of related party transactions	2,962 ^j	

a Includes estimated unread meter sales.

b Excludes TUOS charges.

c Public lighting charges are included in network charges.

d Included in 'Distribution lines' category.

e Included in 'Substations' category.

f Does not include electricity networks share of corporate assets.

g Augmentation works are for various reasons and are influenced by demand considerations.

h Lives by assets classes were determined and shown in the ActewAGL asset valuation which the Commission declined to recognise. The Commission opted to use an overall average life expectancy of 24 years in its last pricing determination.

i Total charges from corporate for business support services and associated overheads.

j Payments to ActewAGL Retail.

A3.2 Electricity supply

There were 15 licensed electricity suppliers in the ACT in 2005–06. Information is presented only for the 13 suppliers that traded in the ACT electricity market in 2005–06.

The indicators collected by the Commission include the national regulatory reporting requirements, which were agreed between regulators and industry representatives under the auspices of the Steering Committee on National Regulatory Reporting Requirements. Further information on the requirements, including definitions of terms, can be downloaded from the Utility Regulators Forum website.³⁴

In the tables below, small customers are defined as those using less than 100 megawatt hours per year, medium customers are those using 100–160 megawatt hours per year, and large customers are those using more than 160 megawatt hours per year. All residential customers are small customers.

For legibility, each section has two tables: the first covers suppliers alphabetically from ActewAGL Retail to EnergyAustralia, and the second covers suppliers alphabetically from Ergon Energy to TRUenergy Yallourn.

A3.2.1 Customer service

Customer service indicators cover call centre performance and complaints. For call centre performance, a call is considered answered when a caller speaks to a human operator or to an interactive service that provides the information requested, but not when a call is placed in an automated queue or continues to ring without a response.

A complaint is defined as any expression of dissatisfaction with an action, a proposed action or failure to act, or about a product or service offered or provided by the licensee, where a response is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice. Billing and affordability complaints include matters directly relating to the amount of a bill, as well as ensuing matters. These include:

- disconnection due to an unpaid disputed bill
- complaints relating to difficulty in paying accounts
- payment terms and methods
- overcharging
- prices
- debt recovery practices.

³⁴ The link to the Utility Regulators Forum is at www.accc.gov.au/content/index.phtml/itemId/3894.

Customer service, electricity supply, 2005–06, suppliers ActewAGL to EnergyAustralia

Issue	ActewAGL Retail	AGL Electricity	Power-direct	Country Energy	ENERGEX	EnergyAustralia
<i>Call centre performance</i>						
How many calls did ACT customers make to the licensee's call centre in 2005–06?	162,748 ^a	0	88,233	1,016,372 ^b	1,738 ^c	596,988 ^d
Number of calls answered within 30 seconds	139,049	n.a.	77,259	783,259	1,719	395,776
What was the average waiting time before a call was answered by a person? (seconds)	57	n.a.	19	22	n.a.	63 (residential) 44 (non-residential)
How many overload events occurred?	0	n.a.	0	0	n.a.	n.a.
Number of calls abandoned before being answered by a person	3,881	n.a.	1,222	35,589	19	23,168
<i>Complaints</i>						
What was the number of complaints received in 2005–06?	508	0 ^e	0 ^e	1	0	501 ^f
Of the complaints received in 2005–06, how many related to:						
Billing and affordability?	84	0	0	1	0	134
Marketing?	262	0	0	0	0	163
Other retail matters?	162	0	0	0	0	204

a ActewAGL Retail's call centre fields account and retail enquiries for electricity, water, sewerage and internet customers. Call centre statistics are not held at a service level. The statistical information reported has been derived using the percentage of call type or line of business code entered at the point of each call.

b Country Energy operates a national call centre. The reported figures represent overall performance.

c This is the overall performance for ENERGEX's New South Wales and ACT customer base. ENERGEX systems cannot distinguish between customer calls from customers in New South Wales and those in the ACT, as they call the same ENERGEX phone number.

d Statistics are for the ACT/New South Wales and national (ACT, New South Wales, Victoria, South Australia and Queensland) call centres.

e There are very few national customers in the ACT, and they are 'account managed'.

f Complaints relate to 'dual fuel' matters.

Customer service, electricity supply, 2005–06, suppliers Ergon Energy to TRUenergy Yallourn

Issue	Ergon Energy	Integral Energy	Origin Energy	TRUenergy	TRUenergy Yallourn
<i>Call centre performance</i>					
How many calls did ACT customers make to the licensee's call centre in 2005–06?	0 ^a	0	0 ^b	not provided ^c	10
Number of calls answered within 30 seconds	n.a.	n.a.	n.a.	n.a.	10
What was the average waiting time before a call was answered by a person? (seconds)	n.a.	n.a.	n.a.	n.a.	3
How many overload events occurred?	n.a.	n.a.	n.a.	n.a.	0
Number of calls abandoned before being answered by a person	n.a.	n.a.	n.a.	n.a.	0
<i>Complaints</i>					
What was the number of complaints received in 2005–06?	0	0	623	0	0
Of the complaints received in 2005–06, how many related to:					
Billing and affordability?	0	0	169	0	0
Marketing?	0	0	328	0	0
Other retail matters?	0	0	126	0	0

a Customers in the ACT do not use a call centre; they call their account managers directly.

b These are large customers managed by individual account managers. Customer calls relating to these accounts are made directly to the relevant account manager.

c ACT calls are aggregated with New South Wales calls. The aggregated data were not provided.

A3.2.2 Affordability and access

The affordability and access indicators include data on the use of instalment plans. The Commission notes that such a payment arrangement is not necessarily a debt-related payment plan for customers experiencing payment difficulties; rather, it may be an arrangement used for flexible budgeting.

Affordability and access, electricity supply, 2005–06, suppliers ActewAGL to EnergyAustralia

Issue	ActewAGL Retail	AGL Electricity	AGL Victoria	Country Energy	ENERGEX	Energy Australia
<i>Instalment plans</i>						
Number of customers on instalment plans at 30 June 2006	7,842 ^a	n.a.	n.a.	5	n.a.	67
How many were:						
Residential customers?	7,767	n.a.	n.a.	5	n.a.	67
Non-residential customers?	75	n.a.	n.a.	0	n.a.	0
<i>Use of direct debit</i>						
Number of customers that used direct debit facilities to pay customer accounts	34,711	n.a.	n.a.	24	n.a.	data not available
How many were:						
Residential customers?	34,711	n.a.	n.a.	23	n.a.	n.a.
Non-residential customers?	1,151	n.a.	n.a.	1	n.a.	n.a.
<i>Direct debit defaults</i>						
Number of customers that used direct debit defaulted on direct debit payments	1,161	n.a.	n.a.	0	n.a.	n.a.
How many were:						
Residential customers?	1,140	n.a.	n.a.	0	n.a.	n.a.
Non-residential customers?	21	n.a.	n.a.	0	n.a.	n.a.
<i>Disconnections/reconnections</i>						
Number of residential customers that were disconnected in 2005–06 for failure to pay an amount due	476	n.a.	n.a.	2	n.a.	3
Number of residential customers that were disconnected for failure to pay an amount due <i>and</i> were reconnected at the same premises in the same name within seven days of disconnection	304	n.a.	n.a.	1	n.a.	3
Number of non-residential customers that were disconnected in 2005–06 for failure to pay an amount due	63	n.a.	n.a.	0	n.a.	data not available
Number of non-residential customers that were disconnected for failure to pay an amount due <i>and</i> were reconnected at the same premises in the same name within seven days of disconnection	38	n.a.	n.a.	0	n.a.	n.a.
<i>Security deposits</i>						
Number of customers that had a security deposit lodged with the licensee at 30 June 2006	0	n.a.	n.a.	0	n.a.	20
How many security deposits has the licensee held for 12 months or more?	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Centrelink Centrepay</i>						
Number of customers that used Centrelink's Centrepay option in 2005–06	1,549	n.a.	n.a.	7	n.a.	206

a Includes 1,549 customers paying by Centrepay.

Affordability and access, electricity supply, 2005–06, suppliers Ergon Energy to TRUenergy Yallourn

Issue	Ergon Energy	Integral Energy	Origin Energy	TRUenergy	TRUenergy Yallourn
<i>Instalment plans</i>					
Number of customers on instalment plans at 30 June 2005	0	0	0	0	0
<i>Use of direct debit</i>					
Number of customers that used direct debit facilities to pay customer accounts ^a	0	0	0	1	0
<i>Disconnections/reconnections</i>					
Number of residential customers that were disconnected in 2004–05 for failure to pay an amount due	n.a.	n.a.	n.a.	n.a.	n.a.
Number of non-residential customers that were disconnected in 2004–05 for failure to pay an amount due	0	0	0	0	0
<i>Security deposits</i>					
Number of customers that had a security deposit lodged with the licensee at 30 June 2005 ^b	0	0	0	0	0
<i>Centrelink Centrepay</i>					
Number of customers that used Centrelink's Centrepay option in 2004–2005	0	0	0	0	0

a No further direct debit information is provided for these suppliers, as they did not have any customers using direct debit facilities in 2004–05.

b No further security deposit information is provided for these suppliers as they did not hold any security deposits.

A3.3 Gas transmission

The ACT has one licensed gas transmission utility, East Australian Pipeline Limited. Due to the small size of the licensee's operations and the fact that it has only one customer (ActewAGL Distribution), performance reporting requirements are limited.

A3.4 Gas distribution

ActewAGL Distribution was the only gas distribution licensee in the ACT in 2005–06.

A number of the indicators collected by the Commission are based on the national regulatory reporting requirements for electricity distribution that were agreed by the Utility Regulators Forum in 2002.

A3.4.1 Business descriptors

Business descriptors, gas distribution, ActewAGL Distribution, 2005–06

Indicator	Response
<i>Connection points</i>	
How many DPIs (distribution point identifiers) did the licensee have at 30 June 2006?	92,763
<i>Customers</i>	
How many customers were connected to the licensee's network at 30 June 2006?	91,330
How many new customers were connected to the licensee's network in 2005–06?	2,985
<i>Volume of gas (TJ)</i>	
Aggregate quantity of gas entering the distribution network	7,731
Aggregate quantity of gas billed	7,665
<i>Length of network (km)</i>	
Total pipeline length by pressure classes at 30 June 2006	3,604
Length of which is medium pressure	3,361
Length of which is high pressure	243

A3.4.2 Customer service

Customer service indicators cover call centre performance and complaints. For call centre performance, a call is considered answered when a caller speaks to a human operator or to an interactive service that provides the information requested, but not when a call is placed in an automated queue or continues to ring without a response.

A complaint is defined as any expression of dissatisfaction with an action, a proposed action, or failure to act, or about a product or service offered or provided by the licensee, where a response is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice.

Customer service, gas distribution, ActewAGL Distribution, 2005–06

Indicator	Response
<i>Call centre performance</i>	
How many calls did ACT customers make to the licensee's call centre in 2005–06?	1,000
How many calls were answered within 30 seconds?	100%
What was the average waiting time before a call was answered by a person? (seconds)	5
How many overload events occurred?	0
How many calls were abandoned before being answered by a person?	0
<i>Complaints</i>	
What was the total number of complaints received in 2005–06?	125
Of the complaints received in 2005–06, how many related to:	
Property damage/restoration of property?	15
Administrative process or customer service?	0
Quality and reliability of supply?	0
Connections?	19
Metering/meter reading?	76
Unplanned interruptions?	0
Failure to provide, or insufficient, notice?	0
Other network operations?	0
Contractor performance?	0
Other?	15

A3.4.3 Supply reliability

Supply reliability, gas distribution, ActewAGL Distribution, 2005–06

Indicator	Planned interruptions	Unplanned interruptions (excluding transmission outages)	All interruptions
Number of interruptions affecting five or more customers	0	2	2
Customer hours off supply for interruptions affecting five or more customers	0	21	21
In 2005–06, what is the total number of incidents of:			
Burst or leaking pipes that affected public health, or were causing or likely to cause substantial damage or harm to people or property?	n.a.	195	195
Any other burst or leaking pipes?	n.a.	n.a.	n.a.
What percentage of responses to notifications were not responded to:			
Within six hours, in the case of burst or leaking pipes that affected public health or were causing or likely to cause substantial damage or harm to people or property?	n.a.	100%	100%
Within 48 hours, in the case any other burst or leaking pipes?	n.a.	n.a.	n.a.

Incidents and maintenance, gas distribution, ActewAGL Distribution, 2005–06

Indicator	Response
<i>Incidents</i>	
Number of gas leaks (from mains, service and meters) reported by the public to the licensee	1,060
Of these, number from medium-pressure infrastructure	1,060
Number from high-pressure infrastructure	0
Number of mechanical damage incidents to mains and services	195
Of these, number from medium-pressure infrastructure	195
Number from high-pressure infrastructure	0
Number of times gas specification reached the maximum or minimum limits	72
<i>Operations and maintenance</i>	
Number of significant gas leaks detected by survey	431
Of these, number from medium-pressure infrastructure	431
Number from high-pressure infrastructure	0
Number of gas regulators replaced	621
Of these, number for residential customers	576
Number for industrial/commercial customers	45
Number of meter replacements	264
Of these, number for residential customers	232
Number for industrial/commercial customers	32
Number of times distribution network pressure fell below normal operating system minimum pressure by pressure classes	1
Of these, number from medium-pressure infrastructure:	0
Number from high-pressure infrastructure:	1
<i>Unaccounted-for gas (TJ)</i>	
In 2005–06, what is the volume of unaccounted gas as a percentage of gas entering the distribution network?	66 ^a

a Includes Queanbeyan portion of the network.

A3.5 Gas supply

For the 2005–06 financial year, there were five licensed gas suppliers in the ACT. Information is provided for ActewAGL Retail, Country Energy, EnergyAustralia and TRUenergy, as only those suppliers were active in the ACT gas market in 2005–06.

In these tables, small customers are defined as those using less than 1 terajoule per year and large customers are those using more than 1 terajoule per year. All residential customers are small customers.

A number of the indicators collected by the Commission are based on the national regulatory reporting requirements for electricity supply that were agreed by the Utility Regulators Forum in 2002.

A3.5.1 Customer service

Customer service indicators cover call centre performance and complaints. For call centre performance, a call is considered answered when a caller speaks to a human operator or to an interactive service that provides the information requested, but not when a call is placed in an automated queue or continues to ring without a response.

A complaint is defined as any expression of dissatisfaction with an action, a proposed action, or failure to act, or about a product or service offered or provided by the licensee, where a response is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice. Billing and affordability complaints include matters directly relating to the amount of a bill, as well as ensuing matters. These include:

- disconnection due to an unpaid disputed bill
- complaints relating to difficulty in paying accounts
- payment terms and methods
- overcharging
- prices
- debt recovery practices.

Customer service, gas supply, 2005–06

Issue	ActewAGL Retail	Country Energy	EnergyAustralia	TRUenergy
<i>Call centre performance</i>				
How many calls did ACT customers make to the licensee's call centre in 2005–06?	234,549 ^a	1,016,372 ^a	596,988 ^a	311
How many calls were answered within 30 seconds?	181,490	783,259	395,776	216
What was the average waiting time before a call was answered by a person? (seconds)	45	22	57	63
How many overload events occurred?	229 ^b	0	0	0
How many calls were abandoned before being answered by a person?	6,208	36,589	23,168	18
<i>Complaints</i>				
What was the number of complaints received in 2005–06?	129	0	0	0
By small customers	129	n.a.	n.a.	n.a.
By large customers	0	n.a.	n.a.	n.a.
Of the complaints received in 2005–06, how many related to:				
Billing and affordability	92	n.a.	n.a.	n.a.
And were from small customers?	92	n.a.	n.a.	n.a.
And were from large customers?	0	n.a.	n.a.	n.a.
Marketing	4	n.a.	n.a.	n.a.
And were from small customers?	4	n.a.	n.a.	n.a.
And were from large customers?	0	n.a.	n.a.	n.a.
Other retail matters	33	n.a.	n.a.	n.a.
And were from small customers?	33	n.a.	n.a.	n.a.
And were from large customers?	0	n.a.	n.a.	n.a.

a Includes New South Wales customers.

b Estimate.

A3.5.2 Affordability and access

The affordability and access indicators include data on the use of instalment plans. The Commission notes that such a payment arrangement is not necessarily a debt-related payment plan for customers experiencing payment difficulties; rather, it may be an arrangement used for flexible budgeting.

Affordability and access, gas supply, 2005–06

Issue	ActewAGL Retail	Country Energy	Energy Australia	TRUenergy
<i>Instalment plans</i>				
Number of customers on instalment plans at 30 June 2006	12,790 ^a	0	75	0
How many were residential customers?	12,790 ^b	n.a.	75	n.a.
How many were non-residential customers?	0 ^b	n.a.	0	n.a.
<i>Use of direct debit</i>				
How many customers used direct debit facilities to pay customer accounts?	20,300	0	1,876	0
How many were residential customers?	n.a. ^c	n.a.	n.a.	n.a.
How many were non-residential customers?	n.a. ^c	n.a.	n.a.	n.a.
<i>Direct debit defaults</i>				
How many customers who used direct debit defaulted on direct debit payments?	46 ^d	0	n.a.	0
How many were residential customers?	n.a. ^e	n.a.	n.a.	n.a.
How many were non-residential customers?	n.a. ^e	n.a.	n.a.	n.a.
<i>Disconnections/reconnections</i>				
How many residential customers were disconnected in 2005–06 for failure to pay an amount due?	3,429 ^f	n.a.	data not available	n.a.
How many residential customers were disconnected for failure to pay an amount due <i>and</i> were reconnected at the same premises in the same name within seven days of disconnection?	1,374 ^f	n.a.	n.a.	n.a.
<i>Security deposits</i>				
Number of security deposits lodged with the licensee at 30 June 2006	0	0	0	0
By residential customers	n.a.	n.a.	n.a.	n.a.
By non-residential customers	n.a.	n.a.	n.a.	n.a.
What was the total value of the security deposits lodged?	n.a.	n.a.	n.a.	n.a.
By residential customers?	n.a.	n.a.	n.a.	n.a.
By non-residential customers?	n.a.	n.a.	n.a.	n.a.
How many security deposits has the licensee held for 12 months or more?	n.a.	n.a.	n.a.	n.a.
For residential customers?	n.a.	n.a.	n.a.	n.a.
For non-residential customers?	n.a.	n.a.	n.a.	n.a.
<i>Centrelink Centrepay</i>				
How many customers used Centrelink's Centrepay option in 2005–06?	2,500	n.a.	data not available ^g	n.a.

a Includes 6,152 customers on 'Even-Pay' plan, where the customer is charged monthly or fortnightly 'even' instalments.

b Breakdown is not possible.

c Breakdown is not possible.

d Estimate.

e Breakdown is not possible.

f Data are for residential and non-residential customers.

g Data not available, as EnergyAustralia does not segment its Centrepay customers between gas and electricity.

A3.6 Water and sewerage services

In the 2005–06 reporting period, ACTEW Corporation was the only water and sewerage licensee in the ACT.

For ease of use, this section is divided into three subsections: a joint water and sewerage subsection covering activities, such as call centres, that ACTEW Corporation provides jointly for both services, and one subsection each for ACTEW Corporation's water activities and sewerage activities.

A number of the indicators collected by the Commission are based on the national regulatory reporting requirements for electricity distribution and supply that were agreed by the Utility Regulators Forum in 2002.

A3.6.1 Joint water and sewerage customer service and access

Customer service indicators cover call centre performance and complaints. As water and sewerage services share a call centre, call centre performance is covered in this section. However, complaints are recorded individually for water and sewerage, and are therefore covered under sections A3.6.2 and A3.6.3, respectively.

For call centre performance, a call is considered answered when a caller speaks to a human operator or to an interactive service that provides the information requested, but not when a call is placed in an automated queue or continues to ring without a response.

The affordability and access indicators include data on the use of instalment plans. The Commission notes that such a payment arrangement is not necessarily a debt-related payment plan for customers experiencing payment difficulties; rather, it may be an arrangement used for flexible budgeting.

Customer service, water network and service, ACTEW Corporation, 2005–06

Indicator	Response
<i>Telephone enquiries: non-emergency call centre</i>	
How many calls were made to the licensee's non-emergency call centre in 2005–06?	28,666 ^a
How many calls were answered within 30 seconds?	24,386
How many calls dropped out or were abandoned before being answered by a person?	764
What was the average waiting time before the call was answered by a person? (seconds)	26 ^b
How many overload events occurred?	274 ^c
<i>Telephone enquiries: emergency number</i>	
How many calls were made to the licensee's emergency call centre in 2005–06?	29,098
How many calls were answered within 30 seconds?	22,530
How many calls dropped out or were abandoned before being answered by a person?	1,153
What was the average waiting time before the call was answered by a person? (seconds)	29
How many overload events occurred?	2

a ActewAGL Retail's call centre fields account and retail enquiries for electricity, water, sewerage and internet customers. Call centre statistics are not held at a service level. The statistical information reported has been derived using the percentage of call type or line of business code entered at the point of each call.

b Represents the average for three call centres: 57 seconds for the retail call centre, 16 seconds for the Fyshwick call centre, and 6 seconds for the Drought Advisory Office.

c Figure related to cases in which out-of-hours calls to the Drought Advisory Office were switched through to another call centre for answering. Such cases do not constitute 'overload event' as defined in Section 4.3.1. The main text of this report, therefore, has been amended to '0'.

Affordability and access, water network and services, ACTEW Corporation, 2005–06

Indicator	Response
<i>Instalment plans</i>	
How many residential customers were on instalment plans (for debt-related payments) at 30 June 2006?	3,155 ^a
How many non-residential customers were on instalment plans (for debt-related payments) at 30 June 2006?	25
Of these, how many were on extensions to accounts?	450 ^b
<i>Direct debit defaults</i>	
How many customers used direct debit facilities to pay customer accounts in 2005–06?	29,272
How many residential customers?	28,254
How many were non-residential customers?	1,018
How many customers who used direct debit defaulted on direct debit payments?	1,032
How many residential customers who used direct debit defaulted on direct debit payments?	1,012
How many non-residential customers who used direct debit defaulted on direct debit payments?	20
<i>Security deposits</i>	
How many security deposits were lodged with the licensee at 30 June 2006 by residential customers?	0
What was the total value of the security deposits lodged by residential customers? (\$)	n.a.
How many security deposits were lodged with the licensee at 30 June 2006 by non-residential customers?	0
What was the total value of the security deposits lodged by non-residential customers? (\$)	n.a.
How many security deposits has the licensee held for 12 months or more?	0
<i>Centrelink</i>	
How many residential customers used Centrelink's Centrepay option in 2005–06?	3,052

a Of these customers, 2,423 were on ACTEW Corporation's Direct Debit Budget plans.

b Comprises 445 residential customers and 5 non-residential customers.

A3.6.2 Water network and service

Business descriptors, water network and service, ACTEW Corporation, 2005–06

Indicator	Response
<i>Properties</i>	
How many properties were connected to the licensee's network at 30 June 2006?	138,684
How many of these were residential properties?	132,011
How many of these were non-residential properties?	6,673
<i>Customers</i>	
How many customers did the licensee have at 30 June 2006?	136,890
How many of these were residential customers?	129,915
How many of these were non-residential customers?	6,975
<i>Water consumption</i>	
What was the volume of water supplied in 2005–06? (kL) ^a	52,470,000
What was the volume of water supplied to the following customer categories in 2005–06 (kL):	
Residential—standard	34,436,000
Commercial (includes government)	18,034,000
Individual bulk supplies	4,353,000
Other identifiable categories:	
Non-potable and Pierces Creek and Uriarra	658,362
System losses	6,566,512

a Information is from WSAA (2006). The annual return sent to the Commission was inaccurate due to a change in ACTEW Corporation's infrastructure leakage index (ILI).

Customer service

Customer service indicators cover call centre performance and complaints. As water and sewerage services share a call centre, call centre performance is covered in Section A2.6.1.

A complaint is defined as any expression of dissatisfaction with an action, a proposed action, or failure to act, or about a product or service offered or provided by the licensee, where a response is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice.

Customer service, water network and service, ACTEW Corporation, 2005–06

Indicator	Response
<i>Complaints</i>	
What was the total number of complaints received by the licensee in 2005–06?	1,075
Of these complaints, how many related to:	
Water quality?	851
Water supply reliability?	27
Property damage/restoration of property?	79
Accounts/billing?	25
Metering/meter reading?	41
Failure to provide, or insufficient, notice?	12
Other retail complaints?	15
Other network complaints?	25

Affordability and access

ACTEW Corporation does not currently restrict water services for non-payment of accounts.

Supply reliability

Supply reliability indicators are divided into two categories. The first category of indicators, shown in the first table below, examines the reliability of the water supply from the perspective of the customer. In that table:

- ‘Average water supply interruption frequency’ is the proportion of all properties supplied with water that had a water supply interruption during the year.
- ‘Average water supply interruption duration’ is the average length of each interruption. This is calculated by dividing the total duration of all interruptions during the year by the number of interruptions.
- ‘Customer water supply interruption frequency’ breaks down the ‘average water supply interruption frequency’ to show the proportion of all properties supplied with water that had various numbers of interruptions. This is calculated by dividing the total number of properties whose water supply was interrupted x times during the year by the total number of properties supplied with water, where $x = 1$ through to ‘5 or more’. This allows the Commission to examine whether supply interruptions are shared around customers or concentrated among a smaller number of customers.

The second category of indicators examines reliability from a technical perspective, for example by measuring the number of leaks. Those indicators are shown in the second table.

Supply reliability, water network and services, ACTEW Corporation, 2005–06

Indicator	Planned interruptions	Unplanned interruptions
How many interruptions to water supply services were there in 2005–06?	462 ^a	798
Average water supply interruption frequency	0.041	0.139
Average water supply interruption duration (minutes)	70.8	98.7
Total interruption time faced by an average customer in 2005–06 (minutes per customer)	0.236	0.57
Customer water supply interruption frequency:		
1 interruption	0.03500	0.11000
2 interruptions	0.00370	0.02000
3 interruptions	0.00002	0.00400
4 interruptions	0.00008	0.00130
5 or more interruptions	0.00000	0.00000

a Of these, 2,350 premises had their supply interrupted for 318 water meter replacements.

Incidents and maintenance, water network and services, ACTEW Corporation, 2005–06

Indicator	Response
<i>Burst or leaking pipes</i>	
How many instances were there in 2005–06 of burst or leaking pipes that affected public health, or were causing or likely to cause substantial damage or harm to people or property?	7
In how many of these instances did the licensee respond within three hours?	7
How many instances were there in 2005–06 of burst or leaking pipes that did not affect public health, or cause or were likely to cause substantial damage to people or property?	1,203
In how many instances did the licensee respond within 24 hours?	996

A3.6.3 Sewerage network and service

Business descriptors, sewerage network and service, ACTEW Corporation, 2005–06

Indicator	Response
<i>Properties</i>	
How many properties were connected to the licensee's network at 30 June 2006?	138,432
How many of these were residential properties?	132,011
How many of these were non-residential properties?	6,421
<i>Customers</i>	
How many customers did the licensee have at 30 June 2006?	133,217
How many of these were residential customers?	127,358
How many of these were non-residential customers?	5,859

Customer service

Customer service indicators cover call centre performance and complaints. However, as water and sewerage services share a call centre, call centre performance is covered in Section A3.6.1.

A complaint is defined as any expression of dissatisfaction with an action, a proposed action, or failure to act, or about a product or service offered or provided by the licensee, where a response is

explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice.

Customer service, sewerage network and service, ACTEW Corporation, 2005–06

Indicator	Response
<i>Complaints</i>	
What was the total number of complaints received by the licensee in 2005–06?	74
Of these complaints, how many related to:	
Sewerage odour complaints?	7
Sewerage services reliability and quality?	37
Property damage/restoration of property?	20
Failure to provide, or insufficient, notice?	2
Other network complaints?	8

Service reliability

Service reliability indicators are divided into two categories. The first category of indicators, shown in the first table below, examines the reliability of the sewerage service from the perspective of the customer. In this table:

- ‘Average sewerage service interruption frequency’ is the proportion of all properties served by the sewerage network that had a service interruption during the year.
- ‘Average sewerage service interruption duration’ is the average length of each interruption. This is calculated by dividing the total duration of all interruptions during the year by the number of interruptions.

The second category of indicators examines reliability from a technical perspective, for example by measuring the number of sewer breaks. Those indicators are shown in the second table.

Service reliability, unplanned interruptions, sewerage network and services, ACTEW Corporation, 2005–06

Indicator	Response
How many interruptions to sewerage services were there in 2005–06?	1,847
Average sewerage service interruption frequency	0.0133
Average sewerage service interruption duration (minutes)	137.4
Total interruption time faced by an average customer in 2005–06 (minutes/customer)	1.83

Incidents and maintenance, sewerage network and services, ACTEW Corporation, 2005–06

Indicator	Response
<i>Sewer main breaks and chokes</i>	
Total number of sewer main breaks and chokes	3,203
Number caused by tree roots	2,909
Total number of property connection sewer breaks and chokes	1,860
Number caused by tree roots	1,599

Glossary and abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
AER	Australian Energy Regulator
AGO	Australian Greenhouse Office
CAIDI	customer average interruption duration index
capex	capital expenditure
CBD	central business district
CO ₂ -e	carbon dioxide equivalent
Commission	Independent Competition and Regulatory Commission
ESAA	Energy Supply Association of Australia
ESC	Essential Services Commission of Victoria
ESCC	Essential Services Consumer Council
ESCOSA	Essential Services Commission of South Australia
FRC	full retail contestability
GJ	gigajoule
GWh	gigawatt hour
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal
kL	kilolitre
km	kilometre
kWh	kilowatt hour
ML	megalitre
MWh	megawatt hour
NEM	National Electricity Market

OTTER	Office of the Tasmanian Energy Regulator
QCA	Queensland Competition Authority
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
TJ	terajoule
TUOS	total use of system
Utilities Act	<i>Utilities Act 2000</i>
WSAA	Water Services Association of Australia

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