



# ICRC

Independent Competition and Regulatory Commission

## **Licensed Electricity, Gas and Water and Sewerage Utilities**

### Performance Report for 2004–05

**Report 1 of 2007**

**February 2007**

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 Act for determining competitive neutrality complaints and providing advice about other government-regulated activities. Under the *Utilities Act 2000* the Commission also has responsibility for licensing utility services and ensuring compliance with licence conditions.

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For further information on this investigation or any other matters of concern to the Commission please contact Susan Faulbaum, Manager, on 6205 2773.

# Foreword

An important part of the Commission's role in administering the utility licence framework established under the *Utilities Act 2000* is monitoring utilities' performance. This report is the fourth annual performance report for Australian Capital Territory (ACT) utilities licensed under the Utilities Act, and complements the utilities compliance report for 2004–05 published by the Commission in February 2006. This report focuses on the performance of the utilities, in particular their financial performance and performance in relation to customer service, safety net arrangements and the environment.

Both the structure and the content of the performance reports have evolved over the four years of the reports' production, and they will no doubt continue to develop as long as the Commission retains its monitoring responsibilities. There are now fewer gaps in data and the information reported is generally of a higher quality. In addition, the body of data is growing, both in the ACT and in other jurisdictions, thereby enabling better jurisdictional comparisons and trend analysis.

While the reporting of performance information is part of a utility's obligations under the conditions of its licence, it is more importantly part of the process of providing information to the marketplace and, in particular, to consumers. Such reporting both provides assurance that service quality and other service obligations are being met, and is an important means of reducing the information asymmetry that exists between utilities and regulators and consumers. Through these reports, regulators and consumers can see whether utilities are meeting their service obligations and how utilities in the ACT perform in relation to the market in general.

The Commission expects that, as they become better informed about the services they use, consumers will become more active and vocal participants in reviewing the pricing of services and in setting meaningful performance standards.

**Paul Baxter**  
**Senior Commissioner**  
**February 2007**

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# Executive summary

This report reviews the performance of licensed utilities in the ACT during 2004–05, and compares it to performance in the ACT in the preceding three reporting years and, where appropriate information is available, to the performance of utilities in other jurisdictions. Utility services examined in this report include the distribution of electricity and gas, the supply (retail) of electricity and gas, and the supply of water and sewerage services.

The following areas of performance are reviewed:

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

## Key findings

### Consistent or improved performance

For a number of indicators, licensees' performance in 2004–05 was consistent with, or improved on, performance in 2003–04. The most significant improvements were in the areas of customer service and the environment.

#### *Customer service*

The incidence of complaints made to ActewAGL Distribution (gas) fell by 21% to less than 1 per 1,000 customers.

Both the average duration and the incidence of planned interruptions to electricity supply decreased.

The average duration of unplanned interruptions to water supply continued to fall.

ActewAGL Distribution (gas) reported no planned or unplanned interruptions resulting in lost supply to five or more customers in 2004–05.

Call centre performance for ACT electricity suppliers has generally improved across all indicators over the past three reporting periods. Likewise, there has been an overall improvement in performance for ACTEW Corporation's non-emergency call centre and emergency call centre.

### ***Environment***

The greenhouse gas emissions arising from the use of electricity and natural gas decreased.

ACTEW Corporation's water infrastructure leakage index was 1.0 in 2004–05; although slightly higher than in 2003–04, it remains one of the lowest among comparable Australian utilities.

The efficiency of the use of natural gas by businesses improved.

### **Drops in performance**

For some indicators in the areas of customer service and the environment, utilities' performance was less favourable in 2004–05 than in the previous year.

### ***Customer service***

The incidence of complaints made to ActewAGL Distribution (electricity) increased by 38%. Likewise, there were increases in the incidence of water complaints (18%) and sewerage complaints (31%). There were 40% increases in the incidence of complaints made to electricity suppliers and to gas suppliers.

The average duration of unplanned interruptions to electricity supply increased in terms of overall outage time and individual customers' time off supply.

ACTEW Corporation had a greater incidence of sewerage breaks and chokes than water and sewerage service providers had in other jurisdictions (more than 90% of incidents in the ACT were attributed to tree roots).

### ***Environment***

The number of gas leaks reported by the public increased significantly.

## Trends in the ACT

The Commission observed the following trends in the provision of utility services in the ACT:

- Electricity supply customer numbers increased by 1.6% between 2003–04 and 2004–05, and the volume of electricity sold increased by 3%. Average electricity consumption was 18.9 megawatt hours per customer in 2004–05.
- Gas supply customer numbers increased by 2.5% between 2003–04 and 2004–05, while the volume of gas sold declined by 1.7%. Average gas consumption was 75 gigajoules per customer in 2004–05.
- Water connections increased by 1.4% between 2003–04 and 2004–05. The amount of water supplied and consumed has been declining over the past few years. In 2004–05, average water consumption for residential premises was 240 kilolitres per premises and 355 kilolitres for all premises (about three-quarters the consumption in 2001–02).
- The number of premises connected to the sewerage network increased by 2.3% between 2003–04 and 2004–05. At 30 June 2005, the number of connections was 135,561. An average of 201 kilolitres of wastewater was collected per property in 2004–05.

## Financial performance

### Electricity supply

Between 2003–04 and 2004–05, total retail revenue received from the supply of electricity rose by just over 1% to reach \$265 million. Slightly less than half of this revenue was earned from the sale of electricity to non-residential customers.

Average bills decreased for residential customers during this period, as a result of reduced electricity consumption and discount deals offered to customers entering into negotiated contracts.

The average calculated price per megawatt hour fell slightly for residential customers, and by 3% for non-residential customers.

## Electricity distribution

ActewAGL Distribution's average network charges fell between 2003–04 and 2004–05. In 2004–05, the average network charge was 3.941 cents per kilowatt hour. The average residential charge fell by 15%, while the average non-residential charge increased by 8%.

In addition:

- The total revenue ActewAGL Distribution earned from the distribution of electricity increased by 5% to \$111.1 million.
- ActewAGL Distribution's operating costs increased by 4% to \$41 million while depreciation remained constant at \$22.1 million.
- ActewAGL Distribution spent \$26.4 million on capital expenditure.

## Gas supply

Gas prices per terajoule increased by 5% between 2003–04 and 2004–05. This change was not fully reflected in customers' average bills, as the average residential bill declined by 2% and the average non-residential bill increased by 2%.

## Water

The structure of water prices changed between 2003–04 and 2004–05. The supply charge approved in the 1999 price direction, \$125, was reduced to \$75 in the 2004 price direction. This was counterbalanced by an increase in the volumetric charge, also approved in the 2004 price direction.

Also:

- The total volume of water sold in the ACT decreased slightly despite an increase in the number of connections.
- Revenue increased in 2004–05, to \$52.5 million, based on the Commission's new price direction and restructured water tariffs.
- Capital expenditure was less than the capital expenditure forecast in the price determination. However, this is a one-year comparison, and ACTEW Corporation may elect to spread its actual expenditure out over the regulatory period in a different pattern to that included in the price path modelling.

## Sewerage

Between 2003–04 and 2004–05, ACTEW Corporation’s revenue from sewerage services revenue increased by \$3.9 million or 6%. Prices and customer numbers did not change significantly. The number of properties connected fell slightly, while the number of billable fixtures increased. Capital expenditure decreased to \$10.22 million, which was much less than forecast in the price determination, but ACTEW Corporation has the option to undertake its projected capital expenditure in a different pattern to that included in the price determination.

## Customer service

### Complaints

Table 1 provides a comparison of complaints made to licensed utilities in 2003–04 and 2004–05, and summarises the nature of the most common complaints made in 2004–05.

Table 1 Complaints, all ACT utilities, 2003–04 to 2004–05

Licensee	Complaints/ 1,000 customers		Most common complaints in 2004–05	
	2003–04	2004–05	Nature	Proportion of total %
ActewAGL Distribution (electricity)	4.2	5.8	Notices	31
ActewAGL Distribution (gas)	1.3	0.9	Metering and meter reading	61
ACT electricity suppliers	0.9	1.2	Marketing	36
ACT gas suppliers	1.7 <sup>a</sup>	2.3	Billing and affordability	50
ACTEW Corporation (water)	4.0	4.5	Water quality	51
ACTEW Corporation (sewerage)	0.4	0.5	Property damage and site restoration	19

a ActewAGL Retail only.

Between 2003–04 and 2004–05 the incidence of complaints increased in all utility sectors except gas distribution, where the incidence of complaints decreased. As a proportion of the customer base, the ratio of complaints has tended to be relatively low for gas distribution compared to the other utility sectors. In 2004–05, gas distribution complaints represented less than one complaint for every 1,000 customers.

The greatest increases in complaints occurred in the electricity and gas supply sectors, where the incidence of complaints increased by 40%. In the case of electricity supply, billing and affordability complaints dropped as a proportion of total complaints but marketing complaints increased. For gas supply, the increase in complaints seems to be accounted for by an increase in billing and affordability complaints. Despite the increases, the ratios of electricity supply complaints and, to a lesser degree, gas supply complaints are still low compared to those in other jurisdictions.

ActewAGL Distribution (electricity) experienced an increase of 38% in the incidence of complaints. The largest source of complaint, and one of the main reasons for the increase in the incidence of complaints, was network operations, particularly in relation to failing to give notice or giving insufficient notice. Both the number and the proportion of customer service complaints dropped significantly between 2003–04 and 2004–05, while complaints about the quality of supply remained at about the same levels. Of these, the complaints related primarily to voltage swells and spikes and low-voltage supply, each accounting for 21% of the total technical supply complaints.

There were increases in the incidence of complaints about water (18%) and sewerage (31%) between 2003–04 and 2004–05. Over half of the water complaints related to water quality, and about 20% of the sewerage complaints related to property damage and site restoration.

## **Network service quality**

### ***Electricity***

ActewAGL Distribution reported that in 2004–05 all new connections were made on or before the date agreed with the customer.

Between 2003–04 and 2004–05, planned outages increased for the network as a whole, in terms of frequency and duration. However, for unplanned interruptions the average number of interruptions and the outage duration per customer decreased. The performance of urban feeders generally improved for unplanned interruptions but generally declined for planned interruptions. The opposite was the case with rural short feeders, whose performance generally improved for planned interruptions but not for unplanned interruptions.

### ***Gas***

ActewAGL Distribution reported no planned or unplanned interruptions resulting in loss of supply to five or more customers in 2004–05.

In 2004–05, there were 201 mechanical or third-party damage incidents to ActewAGL Distribution’s medium-pressure system mains and services. No incidents were reported for the high-pressure system.

The incidence of gas leaks reported by the public increased by 40%, to 1,140, between 2003–04 and 2004–05. There were no reported leaks from the high-pressure system. A further 885 leaks were detected by survey. The total number of leaks detected by survey and reported by the public for 2004–05 equated to 559 leaks per 1,000 kilometres of pipe, which is a low ratio compared to the results achieved by other gas distributors.

### ***Water***

Although the average duration of planned water interruptions declined between 2003–04 and 2004–05, both the total number and average number of outages increased. In the case of unplanned interruptions, the total and average numbers of outages and the average duration of outages declined over this period but the total outage time per customer increased.

Despite a decline in performance in some areas, ACTEW Corporation’s performance for planned and unplanned interruptions to water supply compared favourably with the performance of water suppliers in other major cities in 2004–05.

## *Sewerage*

The number of unplanned interruptions to sewerage services increased by 16% between 2003–04 and 2004–05. In 2004–05, there were 3,863 sewer main breaks or chokes (28 breaks or chokes per 1,000 properties) and a further 2,033 breaks or chokes to property connection branches or drains.

This ratio is high compared with results in other jurisdictions. However, when the effect of tree roots (which are particularly problematic in the ACT and estimated to be responsible for over 90% of breaks and chokes) is excluded, ACTEW Corporation's performance compares favourably with that of other sewerage service providers.

The incidence of ACTEW Corporation's sewage overflows has steadily increased over the past five years and is high when compared with results achieved by other utilities. ACTEW Corporation attributes the high incidence of overflows to the effects of tree roots.

## **Call centre performance**

As Table 2 shows, call centre performance for ACT licensees varied significantly, both between utility sectors and within individual sectors. Given this, and the differences in the types of services that utilities provide and the types of calls made to the various call centres, it is difficult to draw any conclusions about relative performance.

However, it is possible to make some limited observations about the year-on-year performance of individual utilities. Call centre performance for electricity and gas suppliers has generally improved across all indicators. Likewise, ACTEW Corporation's emergency call and non-emergency call centres have shown an overall improvement. Except for average waiting times, call centre performance for ActewAGL Distribution's electricity network declined marginally.

**Table 2 Call centre performance, all ACT utilities, 2003–04 to 2004–05**

Licensee	2003–04			2004–05		
	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)	76	33	13	66	29	17
ActewAGL Retail (electricity)	84	64	2	83	60	2
Country Energy (gas and electricity)	72	38	4	76	28	3
EnergyAustralia (electricity)	54	67	10	57	85	n.a.
ENERGEX (electricity)	95	n.a.	50	98	n.a.	2
EnergyAustralia (gas)				57	38	5
ActewAGL Retail (gas)	82	19	1	91	17	1
ACTEW Corporation						
Non-emergency call centre	81	64	2	84	30	2
Emergency call centre	n.a.	34	9	77	30	4

## Non-price safety net arrangements

### Disconnection for non-payment of accounts

The rate of disconnection of residential electricity customers for non-payment of accounts has generally declined over the period in which the Commission has been collecting data. In 2004–05, there were 3.6 disconnections per 1,000 residential customers. At 64%, the proportion of customers reconnected within seven days is greater than it was two years ago (31%), but not as high as it was in 2003–04 (79%).

The rate of disconnections for non-residential electricity supply customers was 2.7 per 1,000 customers in 2004–05, and the rate of reconnections was 66%.

Given the limited trend data the Commission is unable to make any year-on-year comparisons for these indicators. However, the disconnection and reconnection rates for the ACT's non-residential electricity customers compare favourably with those of other jurisdictions.

At 37 disconnections per 1,000 customers in 2004–05, the rate of disconnection for gas supply customers was significantly higher than for electricity customers. However, the reconnection rate was also high, at 80%.

ACTEW Corporation did not restrict supply of water to any customer for non-payment of an account in 2004–05.

### **Direct debit defaults**

Data for this indicator are available only for two years for gas and water and sewerage supply, and three years for electricity supply, so it is not yet possible to draw conclusions about trends. However, the Commission notes that the proportion of customers that have defaulted on direct debit payments has fallen for all utility sectors.

### **Instalment plans**

The number of electricity supply customers (residential and non-residential) and gas supply customers on instalment plans increased between 2003–04 and 2004–05. However, the increase is not in itself a concern to the Commission, as it may in fact indicate greater use by utilities of safety net arrangements.

In 2004–05, an average of 7.6 per 1,000 gas customers were on instalment plans, slightly more than in 2003–04.

For ACTEW Corporation's water and sewerage services, 7.1 per 1,000 residential customers were on instalment plans, and there were 4.2 instalment plans per 1,000 non-residential customers, in 2004–05. These figures are comparable with the 2002–03 figures.<sup>1</sup>

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<sup>1</sup> ACTEW Corporation has advised that the figures provided for 2003–04 and reported in the Commission's performance report for 2003–04 were incorrect.

## Security deposits

The only utility to hold security deposits in 2004–05 was ActewAGL Retail (gas). At 30 June 2005, ActewAGL Retail held 13 security deposits for its residential gas customers.

## Environment

### Water

The volume of unaccounted-for water, the indicator used to measure the amount of water lost from the network, halved between 2001–02 and 2002–03, from 14% to 7% of the total volume of water extracted. Since 2002–03, the proportion of unaccounted-for water has gradually increased, reaching just over 8% of the water extracted in 2004–05.

In 2004–05, ACTEW Corporation's infrastructure leakage index was 1.0, one of the lowest results achieved by the water utilities considered in this report.

Environmental flows represented 37% of the 82,475 megalitres of water supplied to the ACT and Queanbeyan by ACTEW Corporation in 2004–05.

### Greenhouse gas emissions

The estimated volume of greenhouse gas emitted as a result of the ACT's electricity consumption for 2004–05 was 2,643,921 tonnes CO<sub>2</sub>-e (carbon dioxide equivalent). This represents a 4% decrease relative to the estimate for 2003–04, the result of an increase in the volume of 'green power' sold in the ACT and a reduction in the emissions intensity coefficient (the factor used to calculate emissions).

The estimated volume of greenhouse gas emitted as a result of the ACT's natural gas consumption in 2004–05 was 458,986 tonnes CO<sub>2</sub>-e, representing a 3% reduction.

## Consumption efficiency

Annual residential electricity consumption in the ACT averaged 3.5 megawatt hours per person in 2004–05, representing an increase of 2.5% compared to 2003–04. The rate of residential electricity consumption in the ACT remains the second highest of all Australian states and territories. ACT residential gas consumption was 12.8 gigajoules per person in 2004–05, down by 3% from 2003–04.

The electricity use intensity of ACT businesses has increased (and efficiency has decreased) by about 2% per year since 2002–03, to reach 88.7 megawatt hours per million dollars of gross state product in 2004–05.

The efficiency of the use of natural gas by businesses has improved over the past two years, with the intensity index declining from 135 gigajoules per million dollars of gross state product in 2003–04 to 131 gigajoules per million dollars of gross state product in 2004–05.

## Network losses

Since 1999–2000, ActewAGL Distribution's electricity network losses have been fluctuating in the range from 4.6% to 5.4% of total network inputs. Network losses were 5.4% of network inputs in 2004–05.

Unaccounted-for gas represented 0.9% of gas entering the network in 2004–05, an increase of almost 50% compared to 0.6% in 2003–04. Despite this increase, ActewAGL Distribution's level of gas network losses is favourable when compared with results in other jurisdictions.

## Gas operation and maintenance

Gas specifications exceeded the maximum or minimum 62 times in 2004–05; there was no impact on customers.

In 2004–05, ActewAGL Distribution replaced an increased number of both gas regulators (602, or 40% more) and gas meters (281, or 11% more), compared to 2003–04.

ActewAGL Distribution indicated that distribution network pressure remained at, or above, the normal operating minimum pressure at all times during 2004–05.

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



# 1 Introduction

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 of practice, as well as the utilities' performance of their functions under those instruments.

The information on which this performance report is based was provided to the Commission primarily through utilities' annual performance and compliance reports. It has been supplemented with information from industry reports by the Water Services Association of Australia and the Energy Supply Association of Australia.<sup>2</sup> Unless otherwise stated, the statistics derive from the data provided by licensees to the Commission.

## 1.1 Changes to reporting requirements

The Commission's reporting requirements for 2004–05 were not significantly different from the requirements for previous years. This year, the Commission worked with licensees to improve the reporting templates; special attention was paid to clearing up ambiguities and removing unnecessary reporting requirements.

## 1.2 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 the regulated network operators.
- Chapter 4 details the licensees' customer service performance.

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<sup>2</sup> Water Services Association of Australia (WSAA), *WSAAfacts 2005*, and Energy Supply Association of Australia, *Electricity Gas Australia 2006*.

- Chapter 5 discusses access and affordability indicators.
- Chapter 6 considers the impact of utility services on the environment.

The appendices provide background information on the ACT licensing regime, as well as the performance data reported by licensees.

### **1.3 Commercial-in-confidence information**

In order for the Commission to undertake its responsibilities in relation to 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.

### **1.4 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.<sup>3</sup> Because such indicators do not change significantly from year to year, similar comparisons are not made in this report.

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.

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<sup>3</sup> Independent Competition and Regulatory Commission (ICRC) 2005a, *Licensed Electricity, Gas and Water and Sewerage Utilities Performance Report for 2003–04*, Report 8 of 2005, September 2005.

However, the comparisons in this report:

- seek to compare, not rank, utilities' performance
- provide directional, not highly precise, findings
- identify potentially achievable performance.

The Commission therefore believes that the disclosure of available comparative information adds useful commentary.

## **1.5 Accuracy of data**

The Commission seeks to ensure that the data reported are accurate and, to that end, takes steps to confirm data and clarify inconsistencies, where possible.<sup>4</sup> That notwithstanding, the data presented in this report are largely as submitted by licensees and may include errors.

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<sup>4</sup> For example, data from licensees on electricity consumption are compared with data from the National Electricity Market Management Company on electricity purchases.



## 2 About the utilities industry

This section of the report provides a brief overview of the utility services regulated by the Commission, and compares key aspects of the utilities industry in the ACT with those of the markets 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.<sup>5</sup>

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.

Both of these substations are owned and operated by TransGrid.

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 Competition and Consumer Commission (ACCC) regulates the transmission network.

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<sup>5</sup> There are two small, reclaimed gas-fired generators at the Mugga Way landfill tips and a mini-hydro generation plant at Mt Stromlo.

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

ActewAGL Distribution operates 11 zone substations where voltage is further reduced from 132 kilovolts or 66 kilovolts to the 11 kilovolt distribution voltage level at which distribution ‘feeders’ operate (with the exception of two distribution lines which operate at 22 kilovolts). The 11 kilovolt high-voltage system radiates from each zone substation to feed electricity into the suburbs and commercial centres. Each zone substation serves a population cluster of about 25,000 to 40,000 people.

The reticulation includes underground and aerial conductors and more than 4,000 smaller distribution substations that are required to further reduce the voltage to 415/240 volts. At this voltage level the electrical energy is distributed from distribution substations through overhead or underground low-voltage lines.

In Canberra’s older suburbs, the low-voltage distribution system is generally implemented by aerial conductors with poles located along the spines of housing blocks. Since the 1960s, electricity cables have been progressively installed underground. In new development areas electricity is distributed through underground 11 kilovolt and 415/240 volt lines.

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.<sup>6</sup> ActewAGL Distribution’s licence authorises it to provide electricity distribution services and electricity connection services.

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<sup>6</sup> ACTEW Distribution Ltd and AGL Gas Company trade jointly as ‘ActewAGL Distribution’. 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.

In 2004–05, ActewAGL’s distribution network comprised 2,459 kilometres of overhead cable; 2,217 kilometres of underground cable; and 52,462 power poles. The high-voltage feeders supplied 4,463 distribution transformers and 28 subtransmission transformers. The network services an area of 2,358 square kilometres and, in 2004–05, supplied electricity to 151,308 customers.<sup>7</sup> ActewAGL Distribution’s network comprises mainly urban feeders and a small number of rural short feeders.

As in previous years, in 2004–05 ActewAGL Distribution’s residential customers accounted for the majority of customers (91%). There were 23 high-voltage non-residential (commercial) customers in 2004–05; the rest were low-voltage residential and non-residential customers.

## 2.1.2 Electricity supply

### *Suppliers*

There were 13 utilities licensed to supply electricity in the ACT in 2004–05; all but two were active during this period. The following utilities were licensed to supply electricity:

- ActewAGL Retail (franchise and non-franchise customers)<sup>8</sup>
- Country Energy (franchise and non-franchise customers)<sup>9</sup>
- AGL Electricity
- AGL Victoria
- ENERGEX Retail
- EnergyAustralia
- Ergon Energy
- Energy One Electricity
- Integral Energy
- Origin Energy Electricity

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<sup>7</sup> This number is based on the number of metered supply points on the network, or national metering identifiers (NMIs). It includes both connected and disconnected (non-active) supply points.

<sup>8</sup> ACTEW Retail Ltd and AGL ACT Retail Investments Pty Ltd trade jointly as ‘ActewAGL Retail’.

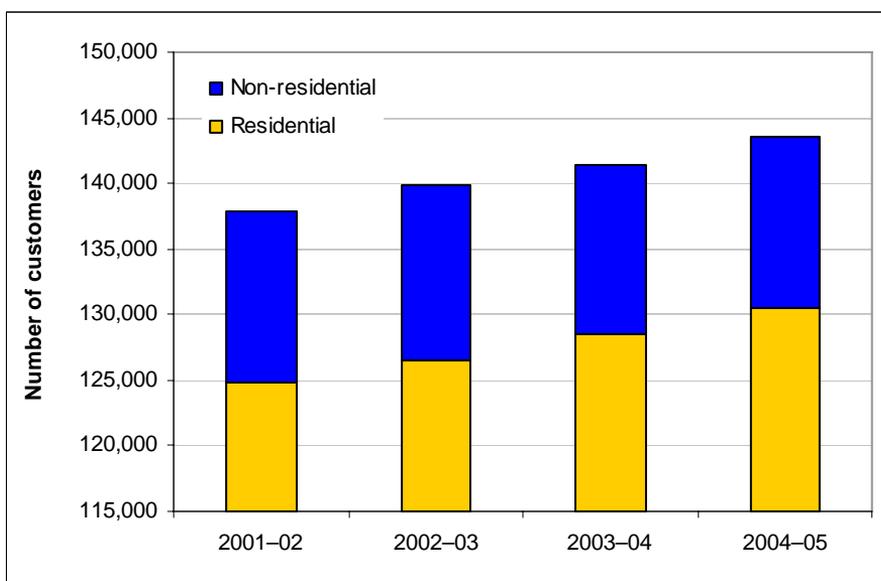
<sup>9</sup> The right to supply to franchise customers applies only to those customers serviced by that part of Country Energy’s distribution network that is located within the ACT (approximately 12 customers).

- Powerdirect
- TRUenergy
- TRUenergy Yallourn.

### *Customers and consumption*

ACT electricity customer numbers increased by 1.6% between 2003–04 and 2004–05, totalling 143,594 at 30 June 2005. Customer numbers increased in both the residential sector (by 1.6%) and the non-residential sector (by 1.4%). This compares with a slight decline in non-residential customer numbers over the previous reporting period. Figure 1 shows customer growth trends over the past four reporting periods.

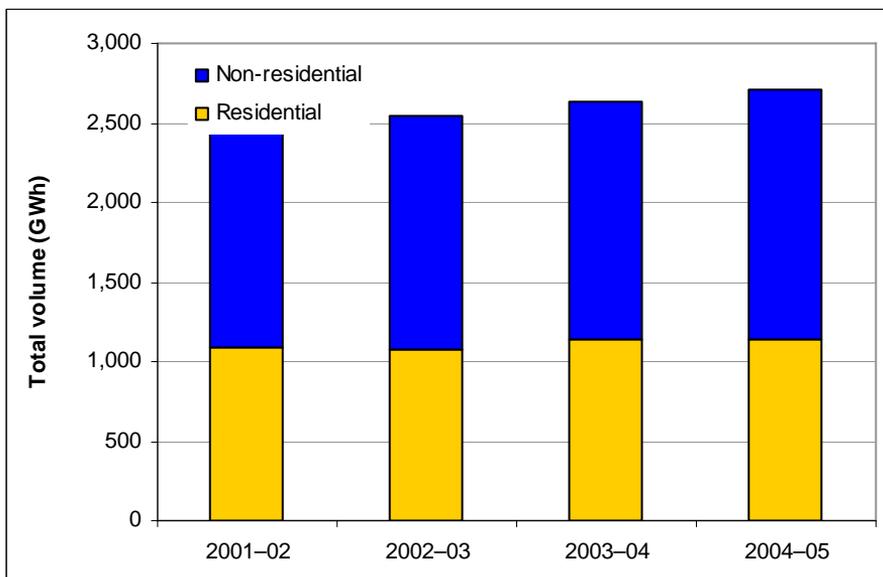
Figure 1 Electricity supply customers, ACT, 2001–02 to 2004–05



At the same time, electricity suppliers reported sales of 2,717 gigawatt hours in 2004–05, an increase of 3% over sales for the preceding year.<sup>10</sup> Figure 2 shows the total volume of electricity sold to residential and non-residential customers between 2001–02 to 2004–05, as reported by electricity suppliers.

<sup>10</sup> The volume of electricity sold in 2003–04 was 2,637 gigawatt hours, not 2,700 gigawatt hours as reported in the Commission’s performance report for 2003–04.

Figure 2 Volume of electricity sold, ACT, 2001–02 to 2004–05



In 2004–05, the average electricity consumption in the ACT was 18.9 megawatt hours per customer, up from 18.6 megawatt hours the previous year.<sup>11</sup>

As Figure 3 shows, average residential consumption has tended to be fairly stable at around 8.5 to 8.8 megawatt hours per year over the past four reporting periods. Conversely, average non-residential consumption has steadily increased, from 109.6 megawatt hours per customer in 2001–02 to 121.3 megawatt hours per customer in 2004–05. The Commission is advised that this is due to increased consumption by large commercial customers.

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<sup>11</sup> The Commission’s 2003–04 performance report indicated an average consumption of 19.1 megawatt hours per year; the correct figure is 18.6 megawatt hours per year.

Figure 3 Average electricity consumption, ACT, 2001–02 to 2004–05

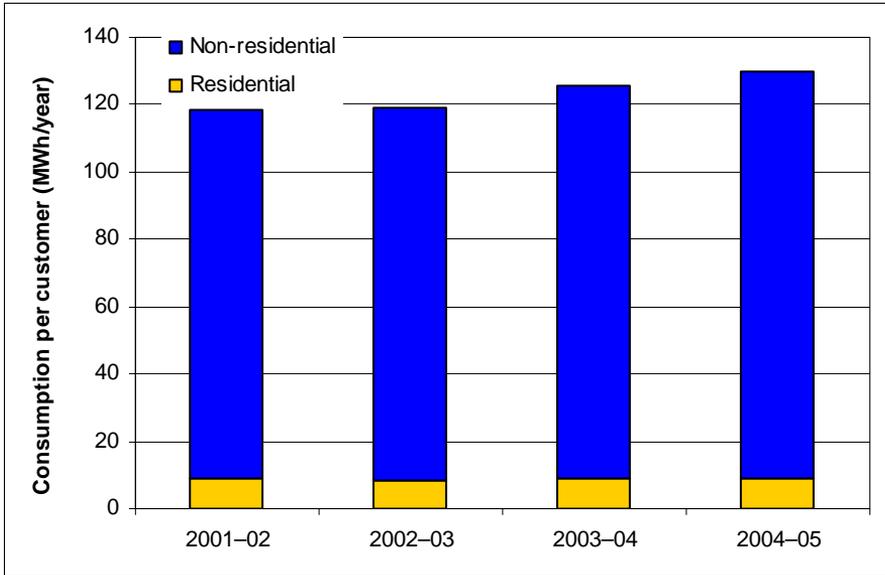
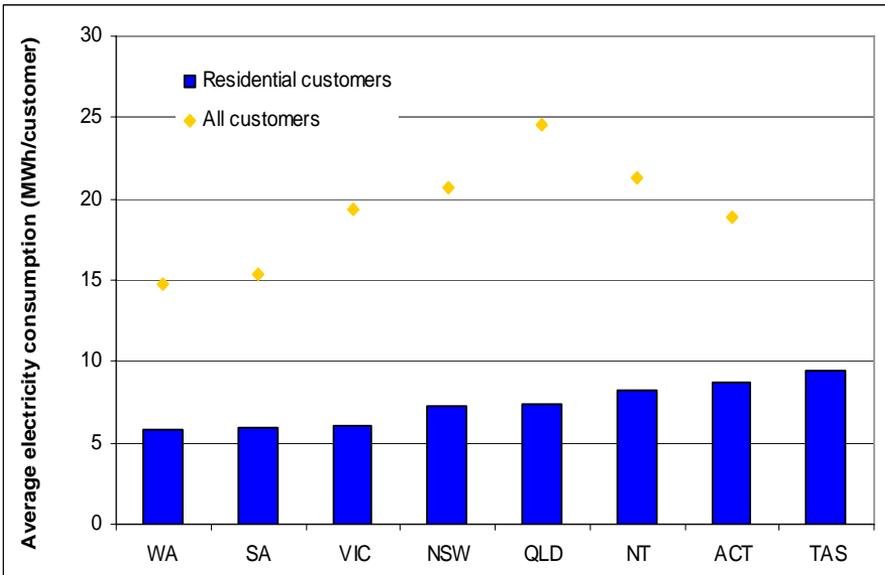


Figure 4 compares ACT electricity consumption with consumption in other jurisdictions in 2004–05.

Figure 4 Average electricity consumption, Australia, 2004–05



Source: ESAA 2006.

At 8.7 megawatt hours per residential customer, the level of residential consumption in the ACT was higher than the Australian average (6.8 megawatt hours) and was one of the highest in Australia. Only Tasmania's residential consumption was greater. The ACT's high level of electricity consumption is generally linked to its heating demands in winter and the comparatively recent availability of natural gas as an alternative fuel source (as would also be the case in Tasmania).

Conversely, the level of electricity consumption for all customers was relatively low in the ACT and was below the average for Australia as a whole (20.6 megawatt hours). This is no doubt a function of the ACT's having a relatively small industrial and manufacturing sector.

The ACT electricity retail market is composed predominantly of residential customers. In 2004–05, as in previous years, residential customers accounted for 91% of the total electricity market. However, in terms of electricity consumption, non-residential customers accounted for a greater and increasing share of the market. Non-residential electricity consumption has increased from 56% in 2001–02 to just over 58% in 2004–05.

Table 3 provides details of customer numbers and electricity consumption, broken down into residential and non-residential categories.

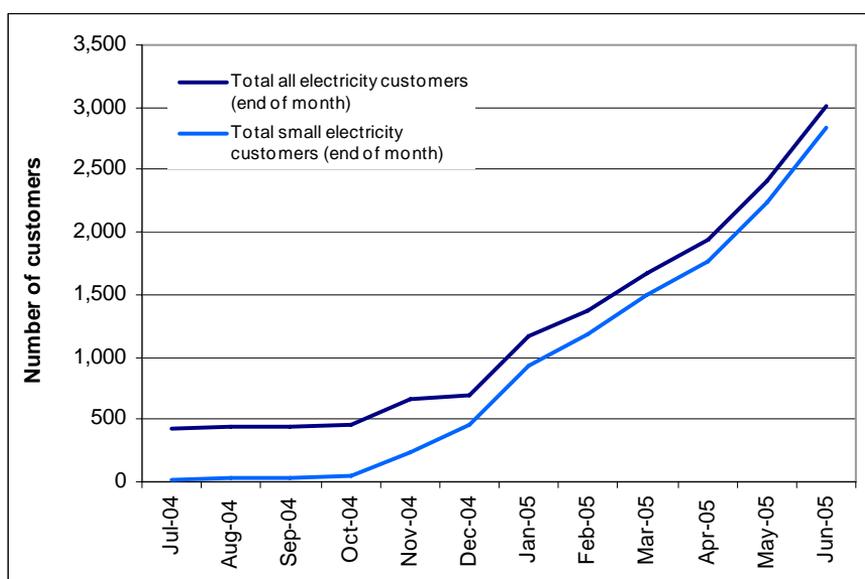
**Table 3** Customer numbers and sales, electricity supply, ACT suppliers, 2001–02 to 2004–05

	2001–02	2002–03	2003–04	2004–05
<i>Customer numbers</i>				
Residential	124,836	126,585	128,513	130,548
Non-residential	13,025	13,301	12,861	13,046
<b>Total</b>	<b>137,861</b>	<b>139,886</b>	<b>141,374</b>	<b>143,594</b>
<i>Customer sales (MWh)</i>				
Residential	1,089	1,079	1,134	1,134
Non-residential	1,427	1,467	1,503	1,583
<b>Total</b>	<b>2,516</b>	<b>2,546</b>	<b>2,637</b>	<b>2,717</b>

### ***Full retail contestability***

In 2005, the Commission analysed customer churn in its review of retail prices for non-contestable electricity customers.<sup>12</sup> Between July 2003, when full retail contestability (FRC) commenced, and June 2005, approximately 2,500 customers transferred to a new electricity supplier. As Figure 5 shows, most of the transfers occurred from late 2004. In addition, another 15,500 residential customers (about 11% of all ACT customers) switched from the standard customer contract to a negotiated contract with ActewAGL Retail.

Figure 5 Customer churn, electricity supply, ACT, 2004–05

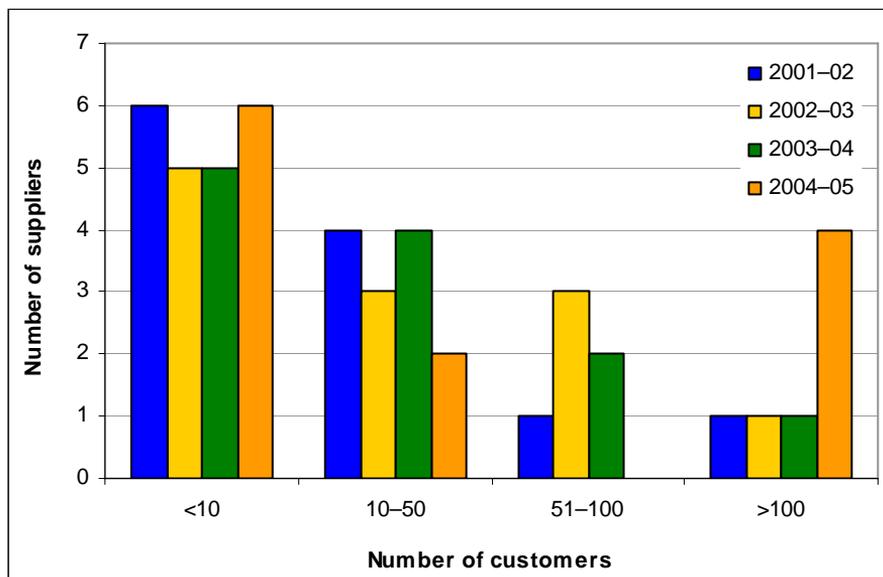


Note: Data do not include ActewAGL Retail customers who have switched from a standard to a negotiated customer contract.

The increased customer churn is also reflected in the distribution of customers between electricity suppliers, as shown in Figure 6. Whereas in 2003–04 only one electricity retailer supplied more than 100 customers, four did so in 2004–05. During this period there was a corresponding reduction in the number of electricity suppliers that supplied 10 to 100 customers, down from six to two. About half of the ACT’s electricity suppliers supply fewer than 10 customers each.

<sup>12</sup> ICRC 2005b, *Issues paper—Retail Prices for Non-contestable Electricity Customers*, Report 12 of 2005, November 2005.

Figure 6 Electricity supply customers and suppliers, ACT, 2001–02 to 2004–05



## 2.2 Gas

Natural gas has historically tended to be regarded as a product of choice, rather than an essential service like electricity. In fact, reticulated gas has been available in the ACT only since the 1980s.

However, with the deregulation of the energy market there has been an increasing diversification of energy businesses as well as energy services. Electricity businesses have entered the gas market, and vice versa, and many businesses now provide ‘bundled’ products comprising electricity and gas services (as well as such other services as telecommunications and internet services). Natural gas accounts for about 9% of energy consumption in New South Wales and the ACT, about half as much as electricity.<sup>13</sup>

The ACT gas market is limited to gas transmission, distribution and supply. The gas sold in the ACT is sourced primarily from the Cooper Basin in

<sup>13</sup> Australian Bureau of Agricultural and Resource Economics, *Australian Energy Statistics, Australian Energy Consumption, by Fuel—Energy Units*, June 2006, Table C2.

South Australia and is transmitted through the Moomba to Sydney pipeline by East Australian Pipeline Limited (EAPL).<sup>14</sup>

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

More recently a second source of gas supply was made available to the ACT, from the Gippsland Basin in Victoria via the Eastern Gas Pipeline. An offtake has been constructed at Hoskinstown near the ACT border. From there, the gas is transported to a pressure radiation station, at Fyshwick, which is connected to ActewAGL Distribution's network.

This report considers the performance of the distribution and supply licensees. Compliance and performance matters relating to the EAPL, which holds an ACT gas transmission licence and is responsible for transmitting natural gas to the ACT through the Moomba to Sydney pipeline, are considered in the Commission's 2004–05 compliance report.<sup>15</sup>

### **2.2.1 Gas distribution**

During 2004–05, 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 approximately 3,600 kilometres of medium-pressure and high-pressure mains. In 2004–05, ActewAGL distributed 7,084 terajoules of gas to 88,659 customers.

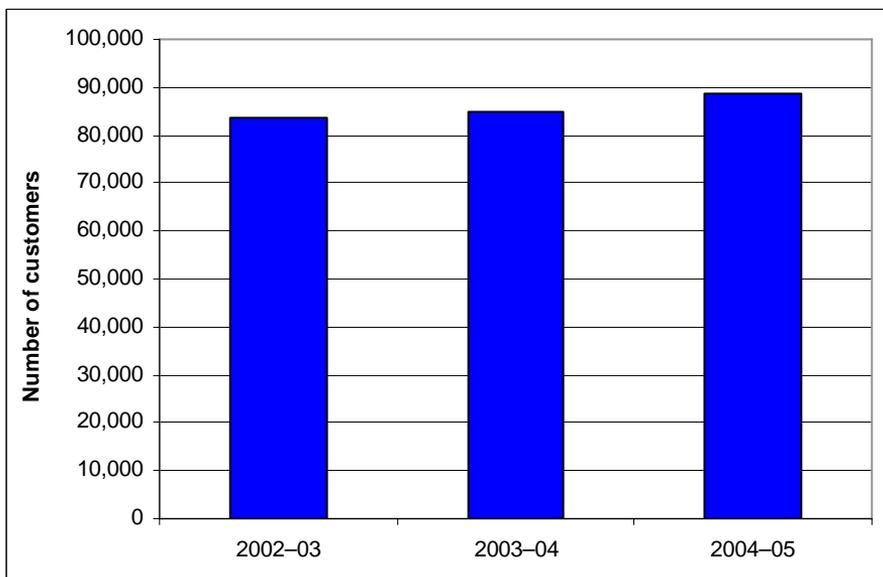
ActewAGL Distribution's customer base is relatively small, but steadily growing. As Figure 7 shows, customer numbers increased by 5% between 2003–04 and 2004–05.

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<sup>14</sup> The Moomba to Sydney gas pipeline is owned by Australian Pipeline Trust. The transmission pipeline operated by EAPL in the ACT is a relatively short (6 kilometre) section of this pipeline.

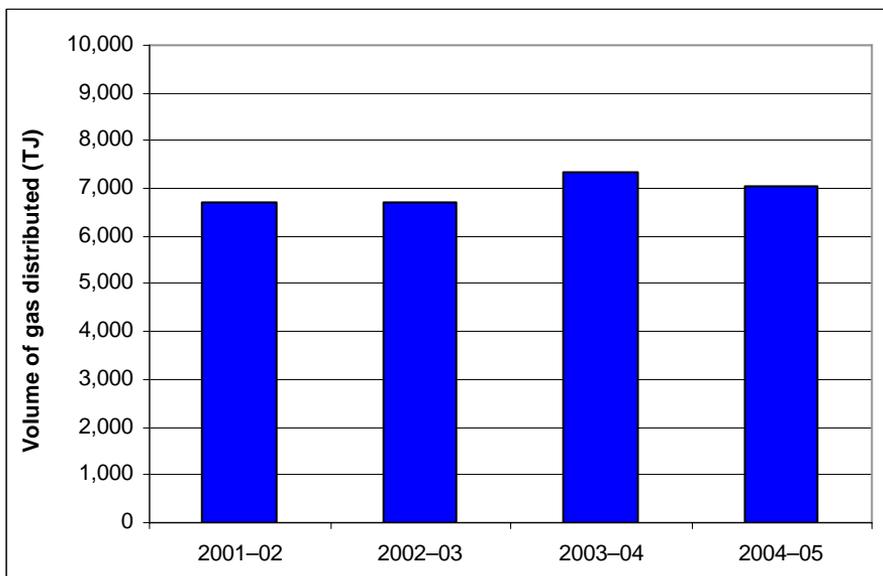
<sup>15</sup> ICRC 2006, *Licensed Electricity, Gas and Water and Sewerage Utilities Compliance Report for 2004–05*, Report 4 of 2006, February 2006.

Figure 7 Customer numbers, gas distribution, ACT, 2002–03 to 2004–05



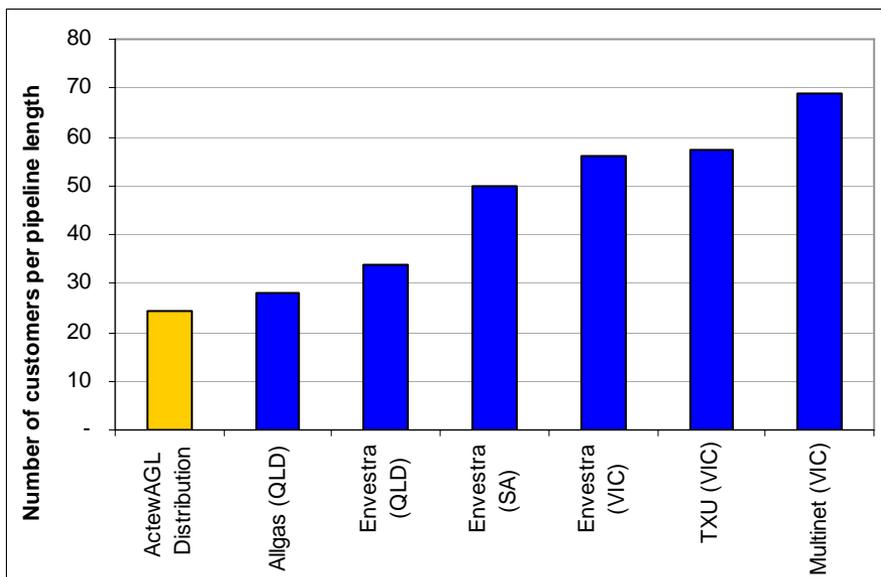
The volume of gas distributed in the ACT has gradually increased over the past four reporting periods, although it was about 4% less in 2004–05 than in the previous year, as shown in Figure 8. This reflects a warm winter and a consequent decline in demand for gas heating in 2005.

Figure 8 Volume of gas distributed, gas distribution, ACT, 2001–02 to 2004–05



In 2004–05, there were 24.5 customers per kilometre of pipeline on ActewAGL Distribution’s gas network. This is relatively low customer density, similar only to the those of Envestra and Allgas in Queensland. The average customer density across the sample of Australian jurisdictions was 48 customers per kilometre of pipeline. Figure 9 compares the customer densities of ActewAGL Distribution and other distributors.

Figure 9 Customer densities, gas distribution, sample of distributors, 2004–05



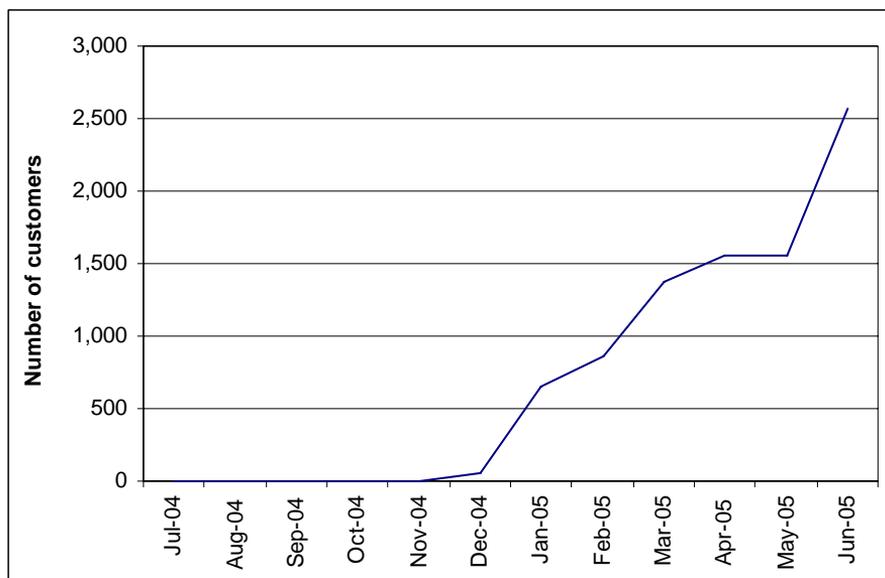
## 2.2.2 Gas supply

During 2004–05, four entities were licensed to supply gas in the ACT: ActewAGL Retail, Country Energy, ENERGEX Retail and EnergyAustralia. ENERGEX Retail did not have any gas supply customers during 2004–05 and, accordingly, was not required to provide a performance report to the Commission.

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 were purchasing ‘bundled’ energy services.

At the end of June 2005, approximately 2,500 customers had switched to another supplier. An estimated additional 12,000 of ActewAGL Retail's customers had switched from a standard customer contract to a negotiated customer contract.

Figure 10 Customer churn, gas supply, ACT, 2004–05



Note: Data do not include ActewAGL Retail customers who have switched from a standard to a negotiated customer contract.

There were approximately 86,750 gas customers in the ACT in 2004–05, representing an increase of about 2.5% over the total for 2003–04 (84,500). Comparable data are not available for previous years, because the earlier data include information about Queanbeyan gas consumption. At 98% of the customer base, residential customers accounted for the vast majority of the ACT's gas customers.

The volume of gas sold in the ACT was 6,525 terajoules in 2004–05, down slightly from the total for 2003–04 (6,639 terajoules). Both residential and non-residential sales declined over this period, although the overall decline can be attributed primarily to the rate of residential sales, which was 2.5% less in 2004–05 than in 2003–04.

Average gas consumption declined accordingly, from 79 gigajoules per customer in 2003–04 to 75 gigajoules per customer in 2004–05.

Table 4 compares gas consumption and sales data for residential and non-residential customers in 2003–04 and 2004–05.

**Table 4** Customer numbers, sales and consumption, gas supply, ACT suppliers, 2003–04 to 2004–05

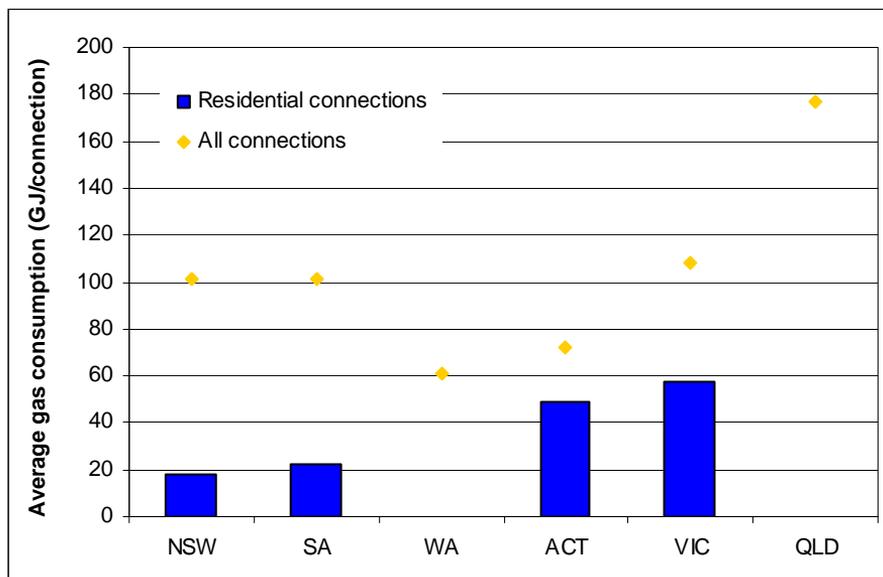
	2003–04	2004–05
<i>Customer numbers</i>		
Residential	82,665	84,864
Non-residential	1,847	1,888
<b>Total</b>	<b>84,512</b>	<b>86,752</b>
<i>Customer sales (TJ)</i>		
Residential	4,290	4,187
Non-residential	2,349	2,338
<b>Total</b>	<b>6,639</b>	<b>6,525</b>
<i>Consumption (GJ/customer)</i>		
Residential	52	49
Non-residential	1,271	1,238
<b>Total</b>	<b>79</b>	<b>75</b>

Figure 11 provides information on gas consumption in the ACT and other jurisdictions.

This shows that, as with electricity consumption, the rate of residential gas consumption in the ACT is relatively high. However, at 72 gigajoules per connection, overall consumption (residential and non-residential) in the ACT is significantly less than the Australian average (101.1 gigajoules per connection). Western Australia was apparently the only jurisdiction that had lower gas consumption in 2004–05, although the number in the sample reflects only connections to the AlintaGas distribution network.

Due to the very high average gas consumption in the Northern Territory (more than 3,000 gigajoules per connection) and Tasmania (more than 5,000 gigajoules per connection), data for these jurisdictions have been excluded from the graph.

Figure 11 Average gas consumption, Australia, 2004–05



Note: A breakdown of gas supplied by customer classification was not available in Queensland and Western Australia. ACT data for residential consumption are based on customer numbers, not connections.

Source: ESAA 2006.

## 2.3 Water and sewerage

ACTEW Corporation was the only entity licensed to supply water and sewerage services in the ACT in 2004–05. 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, sewerage collection and treatment, and 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 480 square kilometres and Googong has about 870 square kilometres. The three dams comprising the Cotter catchment system together provide about 87 gegalitres of storage; the Googong Dam provides approximately 124 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 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 the 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. In addition, ACTEW Corporation allocates a large proportion of its water supply to environmental flows.

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 2004–05, ACTEW Corporation supplied 82,475 megalitres of water, of which 48,268 megalitres was supplied to ACT customers, 4,007 megalitres was supplied to Queanbeyan, and 30,200 megalitres was released as environmental flows.

A total of 135,804 ACT properties, or 134,027 customers, were supplied with water in 2004–05. There was a small increase (1.4%) in the overall number of properties (residential and non-residential) supplied, between 2003–04 and 2004–05. Residential properties accounted for approximately 95% of properties, but for only 60% of the water supplied to ACT properties. Average water consumption per premises in 2004–05 was about 240 kilolitres for residential premises and 355 kilolitres for all premises.

Table 5 provides information about ACT water supply and consumption for the past four reporting periods. This shows that there has been a general downward trend in the amount of water supplied and consumed in recent years, coinciding with the application of water restrictions since late 2002.

Between 2001–02 and 2004–05 there was a 30% decline in the volume of water supplied. Over this time, ACT premises have reduced their use of water by an average of 24%, with residential premises consuming about 26% less water overall. Consumption for non-residential premises has increased over the past three years, although it remains slightly lower than it was in 2001–02.

**Table 5** Premises supplied and consumption, water supply, ACTEW Corporation, 2001–02 to 2004–05

	2001–02	2002–03	2003–04	2004–05
<i>Premises supplied (000)</i>				
Residential	123	124	127	129
Non-residential	8	9	6 <sup>b</sup>	7
<b>Total<sup>a</sup></b>	<b>132<sup>c</sup></b>	<b>133<sup>c</sup></b>	<b>134<sup>b</sup></b>	<b>136</b>
<i>Consumption (ML)</i>				
Residential	40,031	39,646	31,492	30,989
Non-residential	20,812	21,084	17,017	17,279
<b>Total</b>	<b>117,288</b>	<b>105,439</b>	<b>110,960</b>	<b>82,475</b>
<i>Average consumption/premises (KL)</i>				
Residential	324	319	248	239
Non-residential	2,601	2,343	2,671 <sup>b</sup>	2,468
<b>All premises</b>	<b>470</b>	<b>465</b>	<b>363<sup>b</sup></b>	<b>355</b>

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

b The data on number of 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 Figures are based on customer numbers, not property numbers.

Source: WSAA 2005.

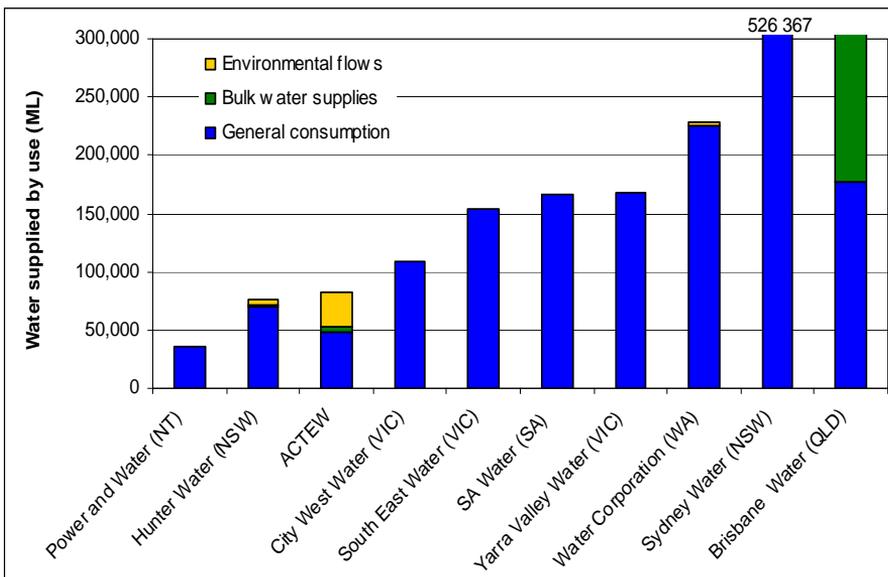
ACTEW Corporation's water supply infrastructure generally expanded between 2003–04 and 2004–05. Supply mains increased around 1% in length, the number of pumping stations increased from 21 to 23, and a new water filtration plant was completed at Mt Stromlo. In addition, augmentation of the Googong water treatment plant was completed.

Australia's water authorities vary widely in terms of size and functions. Most metropolitan water suppliers provide reticulated services only. Few provide bulk water supplies and/or environmental flows. These 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 water for environmental flows.

Water utilities vary in size, from supplying as few as 43,000 properties (Power and Water, Northern Territory) to supplying as many as 1,685,000 properties (Sydney Water Authority). 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 supply by use, sample of suppliers, 2004–05



ACTEW Corporation is also one of the few water utilities that provides bulk water and environmental flows. Of the suppliers included in this sample, only Hunter Water and ACTEW Corporation provide bulk water supplies and environmental flows in addition to reticulated services. SA Water and the Water Corporation in Western Australia provide environmental flows in addition to water for general consumption.

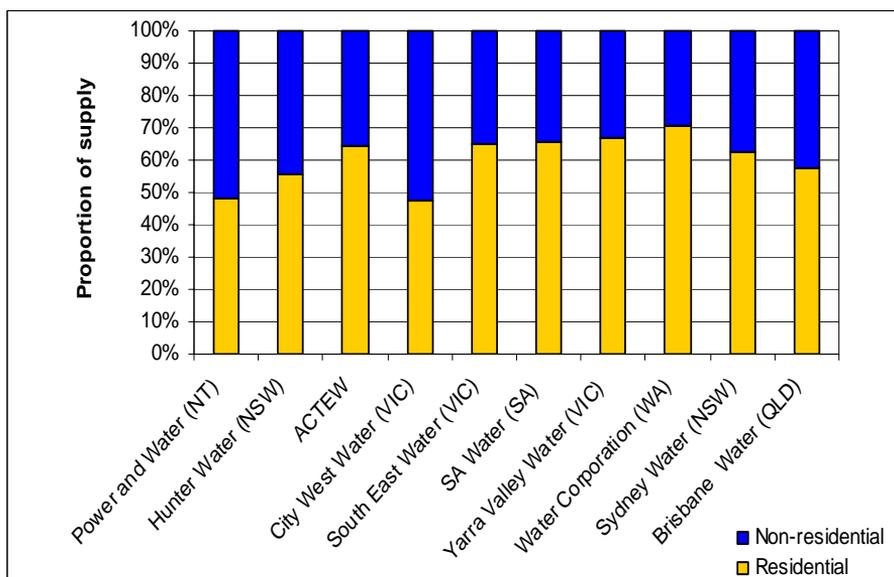
As noted earlier, a large proportion of the water that ACTEW Corporation supplies is used for environmental flows (approximately 37% in 2004–05). Hunter Water released about 7% to the environment in 2004–05, and the

Water Corporation and SA Water released less than 2% each. About 80% of the water supplied by Brisbane Water was used for bulk purposes.

No other metropolitan water supplier provides bulk water. In Sydney and Melbourne environmental flows and bulk water supplies are the responsibility of separate authorities.

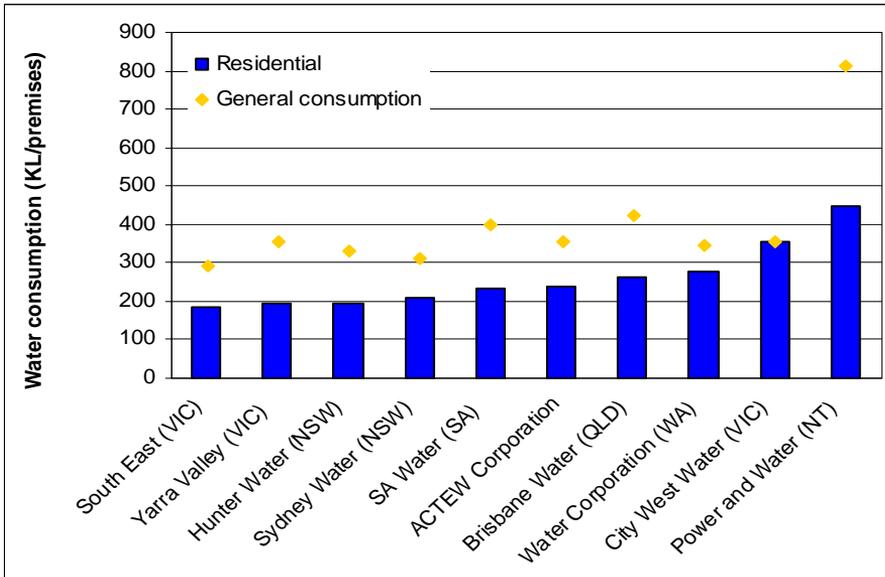
Figure 13 compares the water supply by customer group across a sample of Australian water suppliers for 2004–05. The water supplied by most of the suppliers in the sample, including ACTEW Corporation, is used predominantly for residential purposes. In the case of Power and Water (Northern Territory) and City West Water (Victoria), just under half of the general water supply is for residential use.

Figure 13 Water supply by customer category, sample of suppliers, 2004–05



The average volume of water supplied per residential property was fairly consistent between water suppliers, as shown in Figure 14. The exception was Power and Water in the Northern Territory, which supplied almost twice as much per residential property as the average.

Figure 14 Water consumption per premises, sample of suppliers, 2004–05



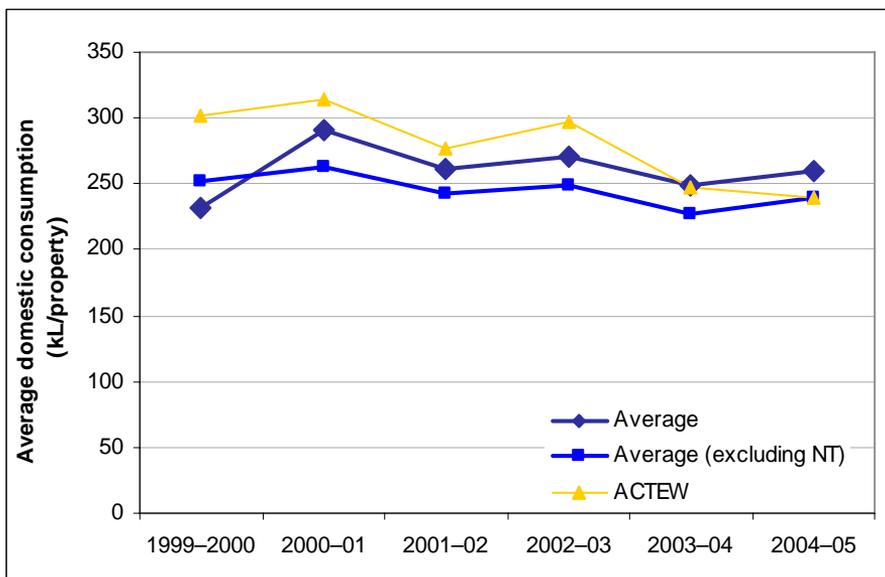
In 2004–05, the average volume of water supplied per residential property was 260 kilolitres if Power and Water is included, and 240 kilolitres if Power and Water is excluded. Average consumption per residential property for ACTEW Corporation was 240 kilolitres per property in 2004–05.

Average water consumption for all properties was about 400 kilolitres per property for all the water suppliers included in the sample: the average excluding Power and Water was 350 kilolitres per property. Water consumption averaged 355 kilolitres per property in the ACT in 2004–05.

Figure 15 compares the average residential consumption in the ACT over the six years to 2004–05 with the averages across the sampled suppliers (including or excluding Power and Water).

This figure shows that up until 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.

Figure 15 Average water consumption, sample of suppliers, 1999–2000 to 2004–05



### 2.3.2 Sewerage

The overall number of premises connected to the sewerage network increased by just over 2% to reach 135,561 in 2004–05 (from 132,482 in 2003–04). Customer numbers increased by 2%, reaching 131,088, over the same period.

In 2004–05, ACTEW Corporation operated 2,948 kilometres of sewerage mains and channels and collected 27,293 megalitres of sewage. Table 6 shows that the volume of sewage collected per property has dropped by 29% since 2000–01, to reach 201 kilolitres per property in 2004–05.

Table 6 Sewage collected, ACTEW Corporation, 2000–01 to 2004–05

	2000–01	2001–02	2002–03	2003–04	2004–05
Total sewage collected (ML)	34,212	30,647	28,313	27,959	27,293
Sewage collected/property (kL)	282	233	214	211 <sup>a</sup>	201

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 2005.



## 3 Financial performance

As part of the annual compliance and performance reporting process licensees are asked to provide financial data. This section examines some aspects of the financial performance of electricity and gas suppliers, ActewAGL Distribution (electricity) and ACTEW Corporation. ActewAGL Distribution (gas) did not provide any regulatory accounts data. This year electricity supply data are presented to give a more complete picture of the electricity retail market.

### 3.1 Electricity supply

The retail market for electricity in the ACT is partially regulated, with franchise customers able to access a regulated retail tariff. A franchise customer is any customer who consumes less than 100 megawatt hours per year and who remains on the standard customer contract offered by ActewAGL Retail. Franchise customers become non-franchise customers when they elect to enter into a negotiated supply contract with ActewAGL Retail or another electricity supplier. The retail tariff for non-franchise customers is unregulated.

#### 3.1.1 Full retail contestability

As noted in Chapter 2, since 1998 the ACT's electricity market has been opened progressively to competition.

ActewAGL Retail, the incumbent retailer, is still the largest retailer of electricity in the residential sector. The non-residential market is more diverse, with a number of companies competing for market share. ActewAGL Retail, Country Energy, ENERGEX, EnergyAustralia and Origin Energy each generated revenue of more than \$1 million from the sale of electricity to non-residential customers in 2004–05.

Since 2002–03, 13 companies have participated in the electricity retail market. The majority received less than \$5 million in revenue. The number of companies with revenues in excess of \$10 million has increased each year. In 2004–05, three companies earned in excess of \$10 million in revenue from the sale of electricity in the ACT.

### 3.1.2 Prices, supply and customer numbers

In 2004–05, the average price of electricity charged by the different retailers ranged from 8.04 cents to 9.99 cents per kilowatt hour. The average price for the entire market was 9.75 cents per kilowatt hour. For residential customers the average price was 10.26 cents per kilowatt hour. For non-residential customers the average price was 9.03 cents kilowatt hour. Total revenue received from the supply of electricity rose by just over 1% to reach \$265 million.

The average residential bill for electricity declined from \$904.78 to \$891.08 between 2003–04 and 2004–05, reflecting a decline in average retail consumption between the two years. This compares favourably to the average residential bills in Victoria (\$923<sup>16</sup>) and South Australia (\$1,180<sup>17</sup>) in 2004–05. Data from the other states were not available.

Table 7 examines the electricity market in greater detail, presenting consumption, customer numbers and revenue data.

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<sup>16</sup> This figure is the lowest reported average energy price figure published by Victoria's Essential Services Commission (ESC 2005b, *Energy Retail Businesses Comparative Performance Report for the 2004–05 Financial Year*, December 2005).

<sup>17</sup> Essential Services Commission of South Australia (ESCOSA), *SA Energy Distributors 04/05, 2004/05 Annual Performance Report: Performance of South Australian Energy Distributors*, November 2005.

**Table 7** ACT market, electricity supply, 2003–04 to 2004–05

	2003–04	2004–05	Difference %
<i>Revenue</i>			
Residential	\$116,375,628	\$116,328,223	-0.04
Non-residential	\$145,740,471	\$148,552,351	1.93
<b>Total</b>	<b>\$262,116,099</b>	<b>\$264,880,574</b>	<b>1.05</b>
<i>Customers</i>			
Residential	128,519	130,548	1.58
Non-residential	12,855	13,045	1.48
<b>Total</b>	<b>141,374</b>	<b>143,594</b>	<b>1.57</b>
<i>Consumption (MWh)</i>			
Residential	1,133,910	1,133,872	0.00
Non-residential	1,502,497	1,582,758	5.34
<b>Total</b>	<b>2,636,407</b>	<b>2,716,630</b>	<b>3.04</b>
<i>Average consumption/customer (MWh)</i>			
Residential	8.82	8.69	-1.56
Non-residential	116.88	121.33	3.81
<b>All customers</b>	<b>18.65</b>	<b>\$18.92</b>	<b>1.45</b>
<i>Average bill</i>			
Residential	\$904.78	\$891.08	-1.51
Non-residential	\$10,909.38	\$11,544.40	5.82
<b>All customers</b>	<b>\$1,809.76</b>	<b>\$1,846.95</b>	<b>2.05</b>
<i>Average price/MWh</i>			
Residential	\$102.63	\$102.59	-0.04
Non-residential	\$97.00	\$93.86	-3.24
<b>All customers</b>	<b>\$99.42</b>	<b>\$97.50</b>	<b>-1.93</b>

Note: All dollar values are in nominal terms.

As noted in the previous chapter, the total consumption of electricity increased in the ACT, driven by a rise in non-residential consumption. The increase in consumption influenced total revenue, which increased by 1%. Residential revenue fell very slightly, while non-residential revenue increased by 2%.

The net result of an increase in the number of residential customers and the fall in residential consumption was a very slight decline in the total residential revenue. The average residential bill fell by 2%, which corresponds to the fall in the average residential consumption of 2%.

The average price of electricity per megawatt hour fell between 2003–04 and 2004–05. For residential consumers the average price fell very slightly. The non-residential average price per megawatt hour dropped by 3%.

## **3.2 Gas supply**

The ACT gas market, which opened to competition in 2002, is not price regulated.

Table 8 presents the key price, production and customer number figures from 2004–05, comparing them with the figures for the 2003–04 financial year. Average bills and average consumption data are also presented.

**Table 8** ACT market, gas supply, 2003–04 to 2004–05

	2003–04	2004–05	Difference %
<i>Revenue</i>			
Residential	\$61,537,203	\$63,480,868	3.16%
Non-residential	\$21,930,000	\$22,786,782	3.91%
<b>Total</b>	<b>\$83,467,203</b>	<b>\$86,267,650</b>	<b>3.36%</b>
<i>Customers</i>			
Residential	82,665	86,864	5.08%
Non-residential	1,847	1,888	2.22%
<b>Total</b>	<b>84,512</b>	<b>88,752</b>	<b>5.02%</b>
<i>Consumption (TJ)</i>			
Residential	4290.16	4,187.24	-2.40%
Non-residential	2349.00	2,338.05	-0.47%
<b>Total</b>	<b>6639.16</b>	<b>6,525.29</b>	<b>-1.72%</b>
<i>Average consumption/customer (GJ)</i>			
Residential	51.90	48.20	-7.12%
Non-residential	1,271.79	1,238.37	-2.63%
<b>All customers</b>	<b>78.56</b>	<b>73.52</b>	<b>-6.41%</b>
<i>Average bill</i>			
Residential	\$744.42	\$730.81	-1.83%
Non-residential	\$11,873.31	\$12,069.27	1.65%
<b>All customers</b>	<b>\$987.64</b>	<b>\$972.01</b>	<b>-1.58%</b>
<i>Average price (TJ)</i>			
Residential	\$14,343.81	\$15,160.54	5.69%
Non-residential	\$9,335.89	\$9,746.07	4.39%
<b>All customers</b>	<b>\$12,571.96</b>	<b>\$13,220.50</b>	<b>5.16%</b>

Note: All dollar values are in nominal terms.

Customer numbers in 2004–05 increased by 5%, but the impact on revenue was in part dampened by a 2% fall in demand. Overall, revenue increased by slightly over 3% in nominal terms.

The price per terajoule increased by 5%. This change was not fully reflected in average bills, with average consumption falling by 6%. The average residential bill declined by 2% and the average non-residential bill increased by 2%.

### 3.3 Electricity distribution

ActewAGL Distribution is the regulated distributor of electricity to all customers in the ACT. Table 9 summarises ActewAGL Distribution's financial performance in the 2002–03 to 2004–05 financial years.

Table 9 Key financial performance indicators, electricity distribution, ActewAGL Distribution, 2002–03 to 2004–05

	Nominal \$ million			Variation from price determination <sup>a</sup>		
	2002–03	2003–04	2004–05	2002–03	2003–04	2004–05
<i>Revenue</i>						
Regulated network charges	96.4	104.9	103.6	n.a.	n.a.	n.a.
Customer contributions	2.3	3.9	5.6	-62.4	-36.6	n.a.
Other regulated revenue	10.5	1.8	1.9	n.a.	n.a.	n.a.
<b>Total revenue</b>	<b>109.2</b>	<b>110.7</b>	<b>111.1</b>	<b>18.65</b>	<b>16.72</b>	<b>4.24</b>
<i>Operating costs</i>						
Network operating costs	27.6	12.5	11.9	n.a.	n.a.	n.a.
Network maintenance costs	8.6	9.1	9.5	n.a.	n.a.	n.a.
Other costs	n.a. <sup>b</sup>	17.7	19.6	n.a.	n.a.	n.a.
<b>Total operating costs</b>	<b>36.1</b>	<b>39.3</b>	<b>41.0</b>	<b>-7.91</b>	<b>-0.76</b>	<b>4.04</b>
Earnings before interest, tax, depreciation and amortisation <sup>c</sup>	73.1	71.4	70.1	43.61	37.57	21.99
Depreciation	24.4	22.1	22.1	19.02	7.28	1.38
<b>Earnings before interest and tax (EBIT)</b>	<b>48.7</b>	<b>49.3</b>	<b>48.0</b>	<b>52.63</b>	<b>45.05</b>	<b>6.00</b>
Average regulatory asset base <sup>d</sup>	479,513	516,507	536,587	-10.6	-4.0	4.06
Pre-tax nominal return on assets (ROA) <sup>e</sup>	10.20%	9.60%	9.78%	-1.6	-1.5	7.93

a This refers to the projected figures in the 2004 price review determination (ICRC 2004a, p. 88).

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

c The large variation from the prediction is due to the inclusion of metering costs. Total metering costs were not provided by ActewAGL Distribution and hence could not be removed from this figure.

d This refers to the regulatory asset base determined by the Commission as part of the 2004 price review determination (see ICRC 2004a). This does not include a calculation of the 2004–05 asset base.

e ROA = EBIT ÷ average asset base × 100%. Variation from price determination is the absolute variation, not relative variation.

Notes: The volume of electricity distributed was 2,537 GWh in 2002–03; 2,619 GWh in 2003–04; and 2,629 GWh in 2004–05.

All values are in nominal dollars.

In 2004–05, a new price direction was introduced. The method used to forecast the financial data changed with the introduction of the new price determination. This will have caused some discrepancies between the predictions for 2003–04 and 2004–05.

ActewAGL Distribution’s financial performance has been stronger than was anticipated in the 1999 and 2004 price directions. Revenue in the 2004–05 financial year increased by 5% to \$111.1 million. Earnings before interest and tax in the 2004–05 financial year were 6% greater than expected.

Revenue in 2003–04 and 2002–03 was also substantially greater than the amounts predicted in the 1999 price direction. This was because the demand for electricity was consistently larger than expected in these periods.<sup>18</sup> The Commission considered that this growth was driven by unexpected changes in consumer preferences rather than regulatory ‘gaming’ by ActewAGL Distribution.<sup>19</sup> Further analysis of revenue is provided in Table 10.

Total operating costs increased by 4% between 2003–04 and 2004–05. The \$1.7 million increase was primarily driven by an increase in ‘other costs’, which include such things as meter reading, advertising, non-network operations costs and corporate management fees. The primary increase in other costs arose from non-network operating costs. Total operating costs were below the expected levels in 2003–04 and 2002–03.

Revenue has been steadily increasing. The only exception is ‘other regulated revenue’, which fell by 83% between 2002–03 and 2003–04 then increased by 6% in 2004–05. This revenue includes such things as miscellaneous prescribed charges and external business which does not add value to the network but is customer initiated (for example, de-energising supply for building works, moving a service cable, or repairing customer damage to network assets).

The average residential price per kilowatt hour fell by 15% while the average non-residential price per kilowatt hour increased by 8%.

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<sup>18</sup> ICRC 2003, *Draft Decision—Investigation into Prices for Electricity Distribution Services in the ACT*, Report 15 of 2003, November 2003, pp. 11–12.

<sup>19</sup> ICRC 2003, p. 18.

**Table 10 Revenue, electricity distribution, ActewAGL Distribution, 2002–03 to 2004–05**

	2002–03	2003–04	2004–05
Total network charges (\$ million)	96.4	104.9	103.6
Total energy delivered (GWh)	2,537	2,619	2,629
Average network charge (cents/kWh)	3.801	4.005	3.941
Residential customer charges (\$ million)	n.a.	43.1	37.2
Energy delivered (GWh)	1,113	1,101	1,119
Average residential network charge (cents/kWh)	n.a.	3.913	3.323
Non-residential customer charges (\$ million)	n.a.	61.8	66.4
Energy delivered (GWh)	1,424	1,518	1,510
Average non-residential network charge (cents/kWh)	n.a.	4.072	4.4
MAAR (from price determination) (cents/kWh)	3.768	3.853	3.676
Difference between the MAAR and the average network charge (cents/kWh) <sup>a</sup>	0.033	0.152	0.265

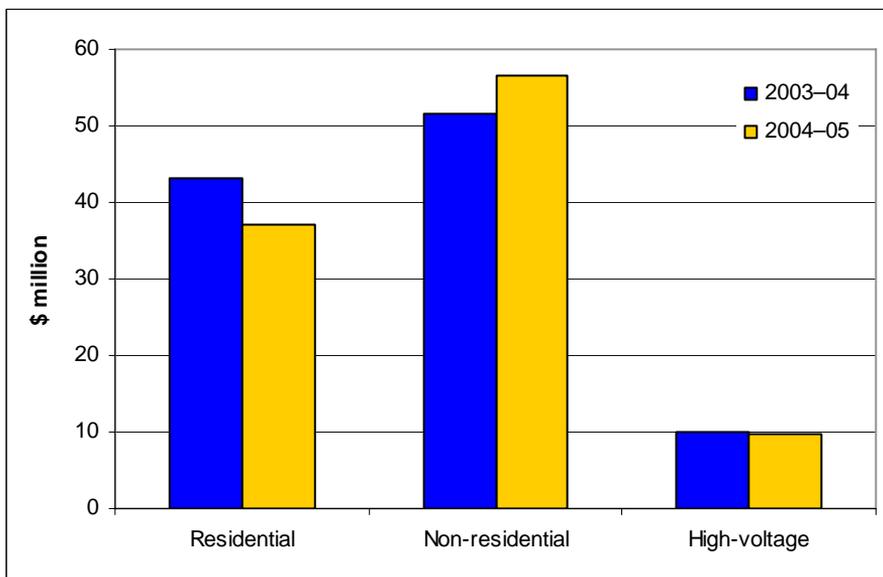
a The MAAR (maximum allowable average revenue) will generally be less than the average network charge because the MAAR is calculated using customer numbers from 1.5 years beforehand. This is an accepted part of the regulatory methodology.

Notes: The average charges set out above provide high-level bases for comparison only. They have not been calculated on the basis of, and do not represent, actual tariff structures.

All values are in nominal dollars.

Network charge and supply revenues for the past two years are illustrated in Figure 16.

Figure 16 Total network revenue, electricity distribution, ACT, 2003-04 to 2004-05



Note: The Commission does not have the 2002-03 figures.

Figure 17 shows changes in the levels of consumption for the past three years.

Figure 17 Energy distributed, electricity distribution, ACT, 2002-03 to 2004-05

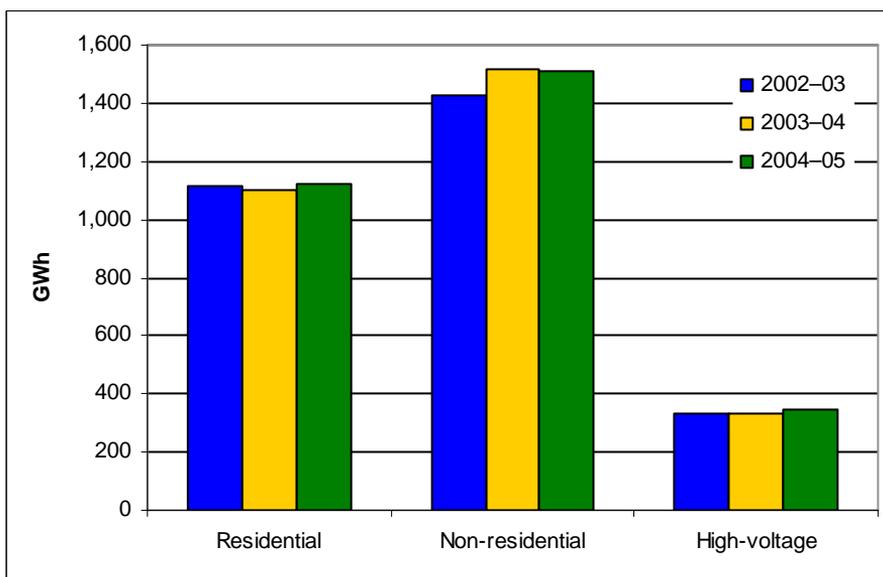


Table 11 compares capital expenditure from 2002–03 to 2004–05 with the capital expenditure forecasts included in the price determination. Capital expenditure is undertaken either directly by ActewAGL Distribution or via customer contributions, usually made to augment systems for the benefit of individual customers.

Table 11 Capital expenditure, electricity distribution, ActewAGL Distribution, 2002–03 to 2004–05

	\$ million			Variation from price determination <sup>a</sup>		
				%		
	2002–03	2003–04	2004–05	2002–03	2003–04	2004–05
Funded by ActewAGL Distribution	29.1	22.7	21.0	42.61	134.02	–6.91
Funded by customer contributions	2.3	3.9	5.6	–62.4	–36.6	–14.04
<b>Total</b>	<b>31.4</b>	<b>26.3</b>	<b>26.7</b>	<b>27.50</b>	<b>55.00</b>	<b>–8.38</b>

a See the Commission's 1999 and 2004 price determinations. A positive number indicates that the actual number is higher than the price determination.

Note: All values are in nominal dollars.

Unexpected external events—in particular, the 2003 bushfires and development projects unanticipated at the time of calculating the previous forecasts—also impact on expenditure. In the 2004–05 price determination, the Commission deemed that ActewAGL Distribution's capital expenditure up to 2002–03 was prudent and agreed to it being rolled into the regulated asset base for the next regulatory period.<sup>20</sup>

Capital expenditure has varied from the forecast amounts because of unexpected costs. In 2003–04, the level of capital expenditure funded by ActewAGL Distribution was more than double the forecast capital expenditure included in the price determination. ActewAGL Distribution has previously advised that much of the expenditure was driven by higher than expected growth in the ACT and the need to replace ageing or failing assets in order to maintain existing service standard levels.<sup>21</sup>

<sup>20</sup> ICRC 2003.

<sup>21</sup> ICRC 2004a, *Final Decision—Investigation into Prices for Electricity Distribution Services in the ACT*, Report 6 of 2004, March 2004, p. 42.

Capital expenditure increased from 2003–04 to 2004–05, but not by as much as expected. In 2004–05, nearly \$27 million was spent on capital expenditure, which was 8% less than predicted.

### 3.4 Water supply

Table 12 shows the components of ACTEW Corporation's water supply revenues and capital expenditure from 2002–03 to 2004–05. The forecasts contained in the 1999 and 2004 price determinations are included for comparison.

**Table 12** Key financial performance indicators, water services, ACTEW Corporation, 2002–03 to 2004–05

	Actual <sup>a</sup>			Variation from price determination <sup>b</sup>		
	2002–03	2003–04	2004–05	%		
	2002–03	2003–04	2004–05	2002–03	2003–04	2004–05
Number of properties	130,027	131,991	133,431	n.a.	n.a.	n.a.
Volume of water (kL)	54,895,668	43,526,595	43,466,958	n.a.	n.a.	n.a.
<i>Revenue (nominal \$)</i>						
Volumetric charge	40,003,474	33,611,314	42,079,730	n.a.	n.a.	n.a.
Supply charge	15,507,132	16,533,322	9,611,673	n.a.	n.a.	n.a.
Miscellaneous services	220,069	344,683	774,880	n.a.	n.a.	n.a.
<b>Total</b>	<b>57,424,333</b>	<b>50,489,319</b>	<b>52,466,283</b>	<b>5.75</b>	<b>-12.50</b>	<b>-21.78</b>
<i>Average charges</i>						
Volumetric charge (\$/kL)	0.745	0.772	0.968	n.a.	n.a.	n.a.
Supply charge (\$/property)	125	125	72 <sup>c</sup>	n.a.	n.a.	n.a.
<b>Total charge (\$/property)</b>	<b>441.63</b>	<b>382.52</b>	<b>393.21</b>	<b>9.36</b>	<b>-11.29</b>	<b>-17.46</b>
Capital expenditure (\$ million)	4.6	39	9.7	-80.3	316.00	-69.59

a Figures are taken from ACTEW Corporation's 2004–05, 2005–06 and 2006–07 water and wastewater tariff proposals to the Commission.

b See ICRC 2004a. A positive number indicates that the actual number is higher than the price determination.

c This is less than \$75 (the supply charge set in the determination) because pensioners get a discount.

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

All values are in nominal dollars.

The structure of water prices changed between 2003–04 and 2004–05. The supply charge approved in the 1999 price direction, \$125, was reduced to \$75 in the 2004 price direction. This was counterbalanced by an increase in the volumetric charge, also approved in the 2004 price direction. The volumetric charge was increased to create an incentive for consumers to use less water.<sup>22</sup>

Prior to the implementation of the current pricing structure, water tariffs consisted of a fixed annual charge and a two-tiered volumetric charge. In the 2004 direction the fixed charge was set at \$75 per year, with three volumetric tariff tiers. This pricing structure resulted in the average price of water increasing as consumption increased, for water consumption over 300 kilolitres.

Actual total revenue was below the revenue forecast in the price determination in both 2003–04 and 2004–05. ACTEW Corporation's total water supply revenue decreased by 12%, from \$57.4 million in 2002–03 to \$50.5 million in 2003–04. This decrease appears principally to reflect a 21% fall in water consumption, due to the implementation of 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 have led to a reduction in the total volume of water supplied, to below expected levels.

The greater than expected capital expenditure of \$39 million in 2003–04 was primarily due to the construction of water treatment plants at the Mt Stromlo and Googong dams. This expenditure had been expected to occur during 2002–03, which explains the 80% shortfall in expenditure in that year.

Capital expenditure in each year varied significantly from the capital expenditure forecasts included in the price determination. The deferral of proposed hydroelectric plants for Corin and Cotter (planned expenditure of \$5.5 million) contributed significantly to the underspending in 2004–05.

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<sup>22</sup> ICRC 2004b, *Final Report and Price Direction—Investigation into Prices for Water and Wastewater Services in the ACT*, Report 8 of 2004, March 2004.

### 3.5 Sewerage services

Revenue increased for the three financial years from 2002–03 to 2004–05 for ACTEW Corporation’s sewerage services.

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

ACTEW Corporation’s revenue from sewerage services increased by 6% to \$67.95 million in 2004–05, from \$64.05 million in the previous year, as shown in Table 13. Between 2002–03 and 2003–04 revenue increased by \$5.51 million.

**Table 13** Key financial performance indicators, wastewater services, ACTEW Corporation, 2002–03 to 2004–05

	Actual			Variation from price determination <sup>a</sup>		
	2002–03	2003–04	2004–05	%		
Number of properties	125,824	131,870	134,423	n.a.	n.a.	n.a.
Number of billable fixtures	46,821	46,431	46,978	n.a.	n.a.	n.a.
<i>Revenue (nominal \$)</i>						
Supply charge	43,673,728	46,707,004	50,451,640	n.a.	n.a.	n.a.
Fixtures charge	14,806,329	17,003,018	17,203,339	n.a.	n.a.	n.a.
Miscellaneous services	63,794	344,683	291,639	n.a.	n.a.	n.a.
<b>Total</b>	<b>58,543,851</b>	<b>64,054,705</b>	<b>67,946,618</b>	<b>8.81</b>	<b>2.95</b>	<b>1.70</b>
<i>Average charges</i>						
Fixtures charge (\$/fixture)	347	354	375	n.a.	n.a.	n.a.
Supply charge (\$/property)	354	366	366	n.a.	n.a.	n.a.
Capital expenditure (\$millions)	6.80	12.00	10.22	-33.72	0.25	-43.74

a See ICRC 2004a. A positive number indicates that the actual number is higher than the price determination.

Notes: The data in this table are based on financial information provided by ACTEW Corporation for its annual pricing proposal, rather than the information provided as part of annual performance reporting.

All values are in nominal dollars.

There was a significant increase in capital expenditure during 2003–04, though the increase was not as great as expected. This trend was maintained into the 2004–05 financial year, though again the total increase was less than expected. ACTEW Corporation cites delays in external decision making as the reason why the capital expenditure did not proceed in the 2004–05 financial year at the level originally projected.<sup>23</sup>

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<sup>23</sup> ActewAGL Submission, *2004–05 Capital Expenditure Report*, April 2005.

## 4 Customer service

The Commission's objectives in collecting customer service data are to:

- establish a base of information on the operation of the market
- subject the performance of utilities to regulatory, customer and public scrutiny.

The particular measures considered in this section are customer complaints (as an indicator of the extent to which services meet customers' expectations), the reliability of utility services, and the efficiency of call centre services. Comparative data for utilities in other jurisdictions are presented, where available.

### 4.1 Complaints

#### 4.1.1 Electricity distribution

During 2004–05, ActewAGL Distribution received 881 complaints. This represents 5.8 complaints for every 1,000 customers and an increase of 38% since 2003–04 (4.2 complaints per 1,000 customers).

Table 14 summarises the trends in complaints received from 2002–03 to 2004–05.

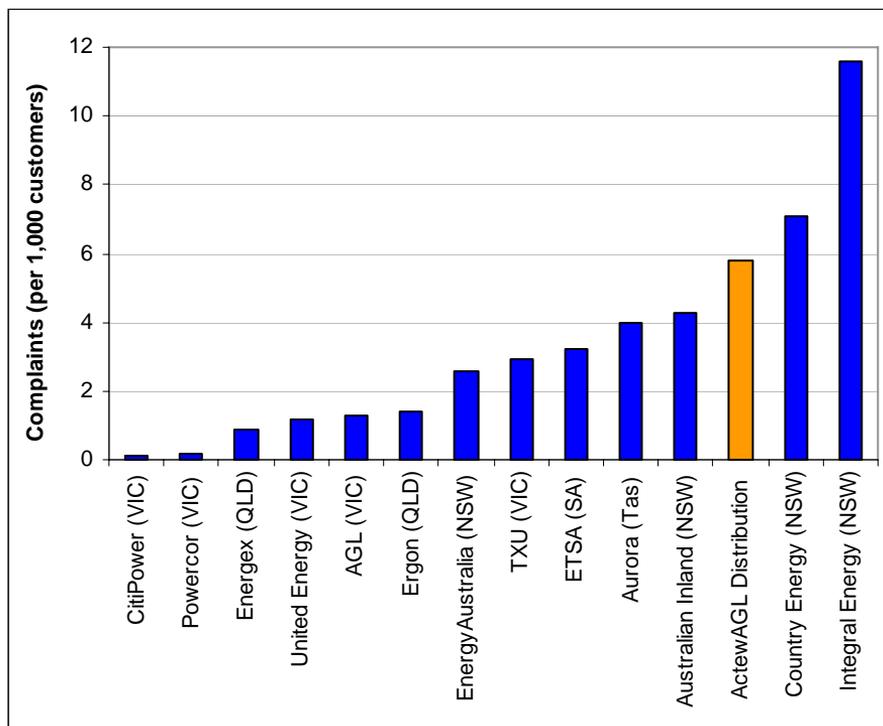
**Table 14** Complaints, electricity distribution, ActewAGL Distribution, 2002–03 to 2004–05

Nature of complaint	2002–03		2003–04		2004–05	
	No./1,000 customers	Proportion of total %	No./1,000 customers	Proportion of total %	No./1,000 customers	Proportion of total %
Notices	n.a.	n.a.	1.23	28.9	1.78	30.5
Customer service	1.00	38.9	1.10	25.8	0.43	7.3
Other network operations	n.a.	n.a.	0.88	20.8	1.51	26.0
Property damage /restoration of property	n.a.	n.a.	0.50	11.8	0.48	8.2
Reliability of supply	0.35	13.7	0.22	5.2	0.12	2.0
Technical quality of supply	0.10	3.9	0.04	1.0	0.03	0.6
Other	1.11	43.4	0.27	6.5	1.48	25.4
<b>Total</b>	<b>2.56</b>	<b>100.0</b>	<b>4.24</b>	<b>100.0</b>	<b>5.83</b>	<b>100.0</b>

‘Notices’ (that is, failure to provide notice, or provision of insufficient notice, about interruptions to supply and performance of works) accounted for 30% of the complaints, and was the main source of complaints in both 2004–05 and the previous year. The next most common sources of complaint in 2004–05 were ‘other network operations’ (for example, service requests not being met, poor timing of work or work being unsightly or noisy) and ‘other’ (for example, disputed fees or staff misbehaviour). Whereas customer service was the source of a large proportion of complaints in 2003–04 (26% of the total), there were relatively few such complaints in 2004–05 (7%).

Figure 18 shows that, as a proportion of its customer base, ActewAGL Distribution’s complaints ratio of 5.8 was relatively high. Complaints ratios for the sampled distributors range from 0.1 per 1,000 customers for CitiPower (Victoria) to 11.6 per 1,000 customers for Integral Energy (New South Wales). The average for the distributors included in the sample is 3.3 complaints per 1,000 customers.

Figure 18 Complaints, electricity distribution, sample of distributors, 2004–05



Note: Data for Victorian distributors are for 1 January–31 December 2004.

Sources: Aurora Energy 2005, ESC 2005b, ESCOSA 2005, IPART 2006b, QCA 2006a, QCA 2006b.

During 2004–05, ActewAGL Distribution received 14 complaints relating to the technical quality of supply, consistent with the numbers received in the past two years (14 in 2003–04 and 15 in 2002–03).

ActewAGL Distribution indicated that the likely causes of the problems leading to the complaints included network limitations (four instances) and internal customer problems (two instances); no network problem was identified in several instances.

Table 15 provides a breakdown of the complaints by category.

**Table 15** Quality of supply complaints, electricity supply, ActewAGL Distribution, 2004–05

Nature of complaint	No. of complaints	Proportion of total %
Voltage dips	1	7.2
TV or radio interference	1	7.2
Voltage swells	3	21.4
Voltage spikes	3	21.4
Low supply voltage	3	21.4
Other	3	21.4
<b>Total</b>	<b>14</b>	<b>100.0</b>

Table 16 summarises ActewAGL Distribution’s performance relative to the performance of other distributors for whom data was available.

**Table 16** Quality of supply complaints, electricity supply, sample of distributors, 2004–05

Distributor	No./1,000 customers	Most common complaints	
		Nature	Proportion of total %
Powercor (VIC)	0.02	Low supply voltage	77
United Energy (VIC)	0.04	TV or radio interference	64
ActewAGL Distribution (ACT)	0.09	Voltage swells and spikes, low supply voltage	64
ETSA Utilities (SA)	0.10	Low supply voltage	36
TXU (VIC)	0.12	Low supply voltage	49
AGL (VIC)	0.40	Low supply voltage	38
Aurora Energy (TAS)	3.00	Not specified	Not specified

Note: Data for Victorian distributors are for 1 January–31 December 2004.

Sources: Aurora Energy 2005, ESC 2004a, ESC 2004c, ESC 2004d, ESC 2004e, ESCOSA 2005.

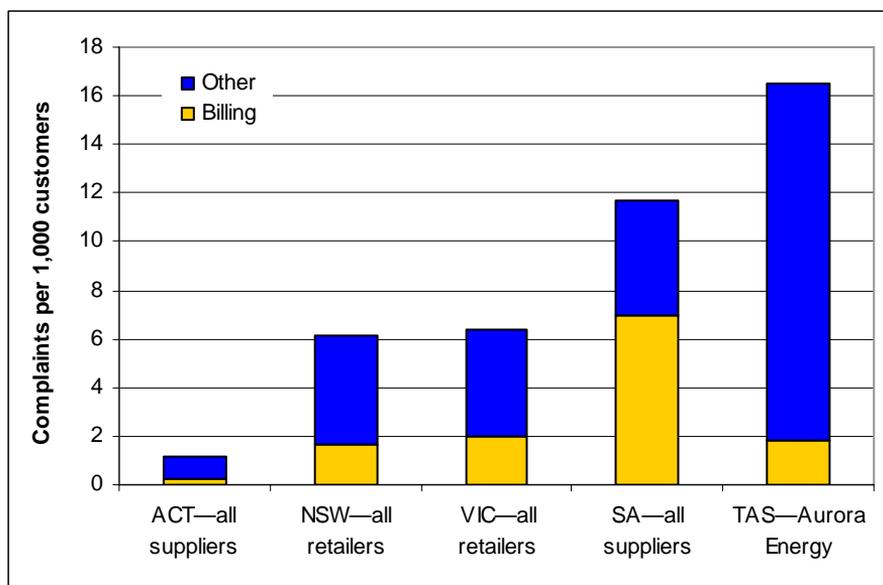
ActewAGL Distribution received 0.09 complaints per 1,000 customers about supply quality, a complaints ratio which was considerably lower than those of several other electricity distributors. The most common cause of quality of supply complaints for most distributors was low-voltage supply. Problems associated with voltage swells and spikes and low-voltage supply accounted for about 64% of the complaints made to ActewAGL Distribution in 2004–05.

### 4.1.2 Electricity supply

The ratio of electricity supply complaints has increased over the past three reporting periods. In 2004–05, the number of complaints increased by 40% to reach 1.2 complaints per 1,000 customers, from 0.86 complaints per 1,000 customers in 2003–04 (0.73 complaints per 1,000 customers in 2002–03).

As in previous years, the incidence of electricity supply complaints in the ACT remained low compared with that in other jurisdictions, as Figure 19 shows. Elsewhere, the incidence of complaints varied from 6.2 complaints per 1,000 customers (New South Wales retailers) to 16.5 complaints per 1,000 customers (Aurora Energy in Tasmania).

Figure 19 Complaints, electricity supply, sample of suppliers, 2004–05



Sources: Aurora Energy 2005, ESC 2005b, ESCOSA 2005, IPART 2006c.

Complaints relating to billing accounted for 24% of all complaints to ACT electricity suppliers in 2004–05, a significant drop from 44% in 2003–04 (74.5% in 2002–03).<sup>24</sup>

‘Marketing’ complaints accounted for 36% of the ACT’s electricity retail complaints, and ‘other’ complaints (generally, customer service complaints) accounted for 40%.

Jurisdictions’ regulatory frameworks have an impact on not only the way utilities handle complaints, but also the number of complaints a utility receives. For example, in the 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 the relative state of development of the ACT energy market, may partially explain the relatively low ratio of electricity retail complaints in the ACT.

#### **4.1.3 Gas distribution**

In 2004–05, ActewAGL Distribution received less than one complaint (0.9) per 1,000 gas customers, down from 1.3 in 2003–04 (1.9 in 2002–03). The nature of the complaints received by ActewAGL Distribution is summarised in Table 17.

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<sup>24</sup> 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, *National Regulatory Reporting for Electricity Distribution and Retailing Businesses*, Discussion Paper, March 2002, p. 24.

Table 17 Complaints, gas distribution, ActewAGL Distribution, 2002–03 to 2004–05

Nature of complaint	2002–03		2003–04		2004–05	
	No.	Proportion of total %	No.	Proportion of total %	No.	Proportion of total %
Metering and meter reading	59	36.0	54	49.1	53	60.9
Connections	22	13.4	14	12.7	6	6.9
Contractor performance	38	23.2	14	12.7	0	0
Property damage and site restoration	24	14.6	7	6.4	19	21.8
Other	21	12.8	21	19.1		10.3
<b>Total</b>	<b>164</b>	<b>100.0</b>	<b>110</b>	<b>100.0</b>	<b>87</b>	<b>100.0</b>

‘Metering and meter reading’ accounted for 61% of the complaints, and was the main source of complaints in 2004–05 and the previous two years. The proportion of complaints from this source has increased, although the absolute number of such complaints has declined. Another increasing proportion of complaints related to ‘property damage and site restoration’ (22%, up from 6% in 2003–04). The numbers of ‘connections’ and ‘other’ complaints have decreased, and there were no complaints about ‘contractor performance’ in 2004–05.

Table 18 makes a comparison of complaints between gas network operators, in terms of numbers of complaints and most common causes of complaint. This table shows that Envestra in South Australia and Queensland had the lowest number of complaints per 1,000 customers of all the gas network operators. ActewAGL Distribution’s number of complaints was less than those of the Victorian distributors and comparable with the result for Allgas in Queensland. Whereas the most common cause of complaint in the ACT related to ‘metering and meter reading’, elsewhere complaints related mainly to ‘connections’ and ‘other’.

**Table 18 Complaints, gas distribution, comparative sample of distributors, 2002–03 to 2004–05**

Distributor	No./1,000 customers	Most common complaints
Envestra (SA)	0.07	Connections
Envestra (QLD)	0.27	Other
Allgas (QLD)	0.95	Connections
ActewAGL Distribution (ACT)	0.98	Metering and meter reading
Envestra (VIC)	1.28	Other
Multinet (VIC)	1.73	Other
TXU (VIC)	2.17	Other

Sources: ESC 2005a, ESCOSA 2005, QCA 2006a.

#### 4.1.4 Gas supply

In 2004–05, gas suppliers received 2.3 complaints for every 1,000 customers, an increase of about 40% since the previous year. As Table 19 shows, complaints were fairly evenly spread between ‘billing and affordability’ and ‘other’ complaints (for example, staff behaviour or metering and meter reading), which accounted for the majority of complaints. The number of ‘marketing’ complaints was negligible.

The increase in the number of complaints appears to correspond with an increase in billing and affordability complaints, which is no doubt a corollary of the increased activity in the gas market. The Commission will monitor these complaints trends closely.

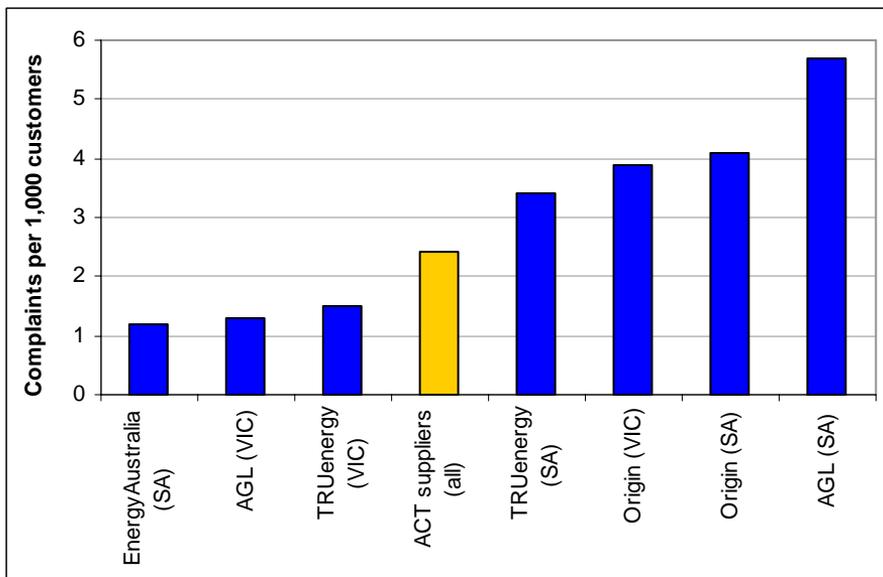
**Table 19 Complaints, gas supply, ACT suppliers, 2002–03 to 2004–05**

Nature of complaint	2002–03 <sup>a</sup>		2003–04 <sup>a</sup>		2004–05	
	No./ 1,000 customers	Proportion of total %	No./ 1,000 customers	Proportion of total %	No./ 1,000 customers	Proportion of total %
Billing and affordability	0.6	32.9	0.3	19.7	1.2	49.5
Marketing	n/a	n/a	n/a	n/a	0.03	1.5
Other	1.2	67.1	1.4	80.3	1.1	49.0
<b>Total</b>	<b>1.8</b>	<b>100.0</b>	<b>1.7</b>	<b>100.0</b>	<b>2.3</b>	<b>100.0</b>

a ActewAGL Retail only; includes Queanbeyan.

The ratio of gas supply complaints received by ACT licensees is high when compared with the ratio of complaints received by electricity suppliers (1.2 complaints per 1,000 customers in 2004–05). Although higher than the ratios of complaints received by several interstate gas suppliers, ACT gas suppliers' incidence of complaints was by no means the highest. As Figure 20 shows, the incidence of complaints ranged from just over 1 per 1,000 customers (EnergyAustralia in South Australia) to about 5.5 per 1,000 customers (AGL in South Australia).

Figure 20 Complaints, gas supply, sample of suppliers, 2004–05



Sources: ESC 2005b, ESCOSA 2005.

#### 4.1.5 Water and sewerage

In 2004–05, ACTEW Corporation received a total of 663 complaints about its water and sewerage services. This represents 4.5 complaints per 1,000 customers for water and 0.5 complaints per 1,000 customers for sewerage. This is an increase of about 18% in water complaints and 31% in sewerage complaints since 2003–04. The Commission notes that the incidence of complaints had dropped quite markedly for both water and sewerage in 2003–04, particularly for network operations. Table 20 summarises the nature of the complaints received by ACTEW Corporation in the past two years.

Table 20 Complaints, water and sewerage services, ACTEW Corporation, 2003–04 to 2004–05

Nature of complaint	2003–04		2004–05	
	No.	Proportion of total %	No.	Proportion of total %
Water quality	258	46.3	339	51.1
Water supply reliability	72	12.9	36	5.4
Property damage and site restoration	68	12.2	77	11.6
Billing and affordability	35	6.3	30	4.5
Sewerage services	22	3.9	7	1.1
Notices	9	1.8	29	4.3
Metering/meter reading	17	3.0	11	1.7
Other—retail	26	4.7	6	0.8
Other—networks	50	9.0	128	19.3
<b>Total</b>	<b>557</b>	<b>100.0</b>	<b>663</b>	<b>100.0</b>

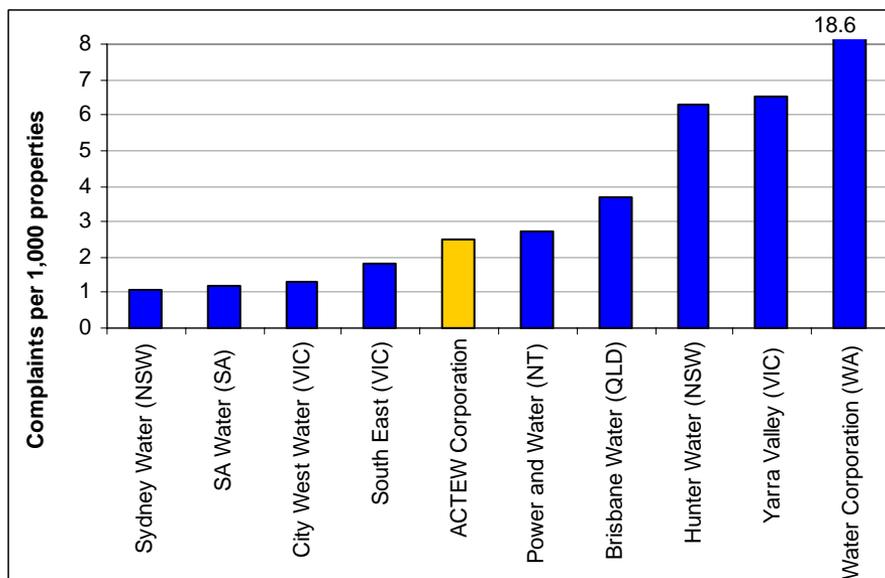
‘Water quality’ accounted for just over half of the complaints received in 2004–05, and was the main source of complaints in both 2004–05 and the previous year. The next most common sources of complaint were ‘property damage and site restoration’ at 12% and ‘water supply reliability’ at 5%. Examples of ‘other’ problems are poor or untimely service (including staff behaviour and information provided); sewer surcharges or blockages, in the case of sewerage; and leaking or noisy pipes, in the case of water supply.

There is little information about complaints against water/sewerage utilities in other jurisdictions with which to compare ACTEW Corporation’s performance. The only information available is for Victorian utilities, compared to which ACTEW Corporation received a relatively high number of complaints overall. Compared to the three Victorian water utilities included in the sample, ACTEW Corporation received fewer complaints per 1,000 customers than Yarra Valley Water (6.4 complaints per 1,000 customers), but considerably more than South East Water (1.8 complaints) and City West Water (1.3 complaints).<sup>25</sup>

<sup>25</sup> ESC 2006a, *Performance of Urban Water and Sewerage Businesses, July 2004–June 2005*, March 2006, pp. 34–37.

Figure 21 compares the incidence of water quality complaints, the primary source of ACTEW Corporation’s water complaints, between a number of water suppliers. Overall, the ratio of water quality complaints received by ACTEW Corporation was relatively low, as was the case in previous years.

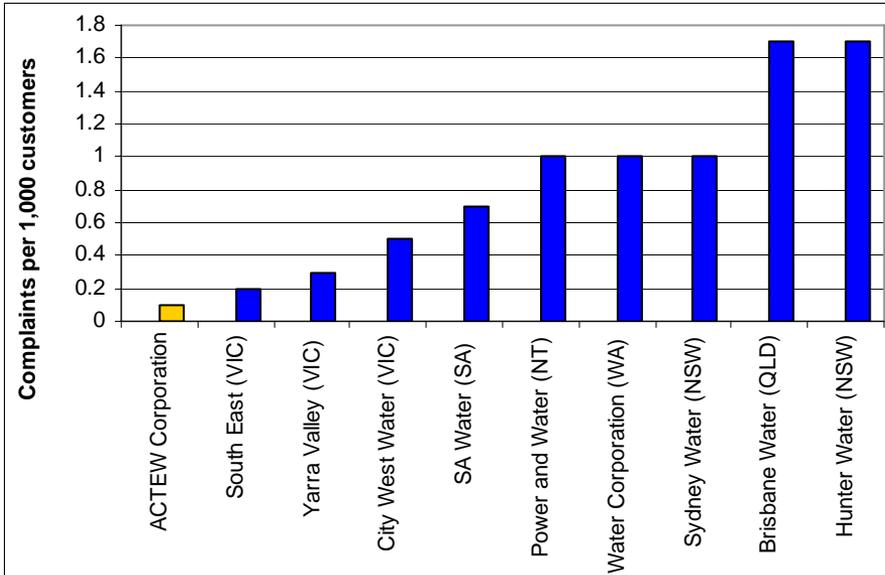
Figure 21 Complaints, water quality, sample of suppliers, 2004–05



Source: WSAA 2005.

Figure 22 compares the incidence of complaints about sewage odour between utilities. This shows that, at 0.1 complaints per 1,000 customers, ACTEW Corporation had the lowest rate of complaint of all the sewerage utilities in 2004–05.

Figure 22 Complaints, sewage odour, sample of utilities, 2004–05



Source: WSAA 2005.

## 4.2 Network service quality

### 4.2.1 Electricity distribution

#### *Connections*

ActewAGL Distribution made 8,772 new connections in 2004–05, which represents about 6% of ActewAGL Distribution’s customer base.

ActewAGL Distribution reported that all new connections were made on or before the date agreed with the customer.

Table 21 shows that a small number of connections were not made by the agreed date in Victoria and New South Wales. In South Australia just under 1% of connections were not made in a timely manner.

**Table 21 Provision of new connections, electricity distribution, comparative sample of distributors, 2004–05**

Distributor	Connections as proportion of customer base %	Proportion of connections not made on or before agreed date %
ACT—ActewAGL Distribution	5.8	0.00
NSW—all utilities	n.a.	0.02
VIC—all utilities <sup>a</sup>	8.6	0.08
SA—ETSA Utilities	1.7	0.91

a Data for Victorian distributors are for 1 January–31 December 2004.

Sources: ESC 2006b, ESCOSA, IPART 2006b.

### ***Reliability of supply by feeder type***

ActewAGL Distribution has been asked to provide 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 do not exceed a threshold system average interruption duration index (SAIDI) of three minutes, or are not caused by exceptional natural or third-party events, or are such that the distributor cannot reasonably be expected to mitigate the effect of the event by prudent asset management.

A further three indicators are typically 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. The average number of interruptions per customer per year is measured by the system average interruption frequency index, SAIFI. CAIDI, the customer average interruption duration index, measures the average duration of each interruption in minutes.

Table 22 provides the annual performance figures for planned interruptions for ActewAGL Distribution’s rural and urban feeders for the past two reporting periods. Information for 2002–03 was distorted by the effects of the January 2003 bushfires and is therefore not included.

Table 22 Performance indices for planned interruptions, electricity distribution, ActewAGL Distribution, 2003–04 to 2004–05

Index	2003–04			2004–05		
	Urban	Rural	Network total	Urban	Rural	Network total
SAIDI	40.71	40.46	40.63	47.14	31.40	46.59
SAIFI	0.21	0.21	0.21	0.22	0.15	0.22
CAIDI	190.54	191.36	190.51	215.92	204.46	215.50

The table shows that, on average, each customer experienced 46.6 minutes off supply for planned interruptions in 2004–05. This represents an increase since 2003–04, and is 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. It should be noted that performance for rural short feeders improved in 2004–05.

The average number of interruptions per customer declined for rural short feeders between the two reporting periods, but remained much the same overall. The average duration of interruptions increased by about 25 minutes for urban feeders, and by 15 minutes for rural short feeders. The increase in the duration of planned outages can be attributed to a number of lengthy outages relating to customer requests and development work, for example on Gungahlin Drive and in Civic.

Performance information for unplanned interruptions for 2003–04 and 2004–05 is shown in Table 23. The table shows that the duration of outages for each customer decreased overall in 2004–05, but increased significantly for rural short feeders. Similarly, while the incidence of outages decreased for urban feeders, it increased substantially for rural feeders (reaching more than two outages per person) and to a lesser degree for the network overall. There was a slight increase in the average duration of outages for urban feeders and for the network as a whole, but a significant improvement for rural feeders.

Table 23 Performance indices for unplanned interruptions, electricity distribution, ActewAGL Distribution, 2003–04 to 2004–05

Index	2003–04			2004–05		
	Urban	Rural	Network total	Urban	Rural	Network total
SAIDI	36.25	40.02	36.55	28.63	93.52	30.99
SAIFI	0.73	0.40	0.72	0.54	2.16	0.60
CAIDI	49.4	116.63	50.89	52.71	43.27	51.48

ActewAGL Distribution attributes the improvement in the overall performance of the network to increased planned maintenance and mild weather conditions. The deterioration in the performance of rural feeders is the result of extensive outages on a small number of feeders. According to ActewAGL Distribution, the outages were caused by storms and exacerbated by access difficulties. There were seven cases where supply was not restored within 12 hours and, in one of these cases, the outage lasted for 91 hours.

It should be noted, however, that year-to-year reliability figures can be volatile because of weather conditions and other external factors. Recent work undertaken by the Energy Network Association indicates that data over a number of years are required to account for random variations and to establish a trend.<sup>26</sup> Five years is considered to be a minimum period necessary to identify trends in data.

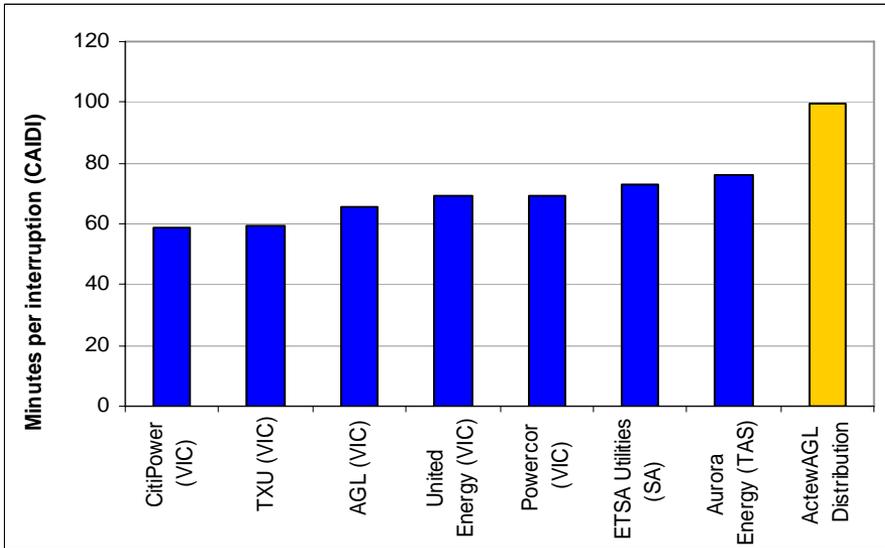
Figures 23 to 26 compare ActewAGL Distribution’s performance for urban and rural short feeders in 2004–05 with the results achieved by interstate electricity distributors.

As Figure 23 shows, the average duration of interruptions to ActewAGL Distribution’s urban network was relatively high compared with the interruption rates for other electricity distributors, such as 59 minutes for CitiPower and TXU in Victoria.

As Figure 24 shows, Australian Inland and Integral Energy in New South Wales had the longest interruptions to their urban networks, at 154 minutes.

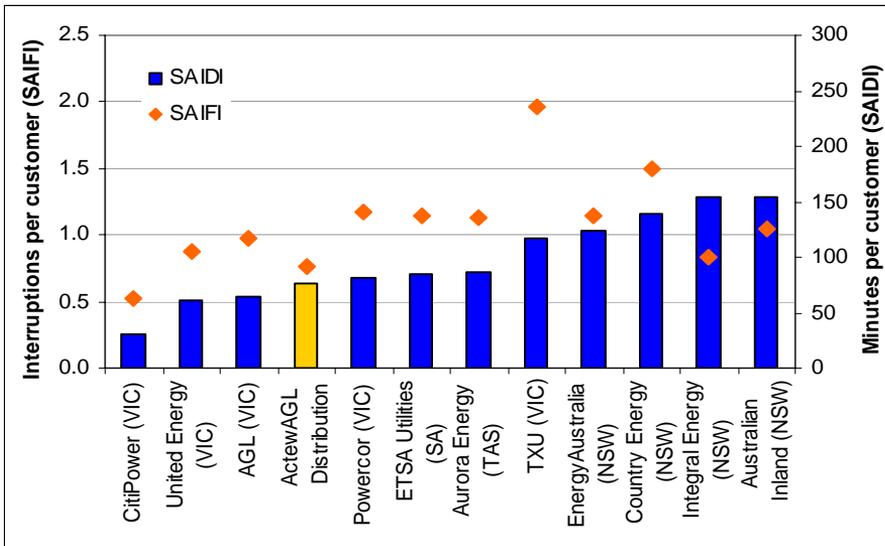
<sup>26</sup> Energy Network Association, Service Standards and Reliability Reporting Framework Discussion Paper, to be published in 2007.

Figure 23 Duration of interruptions, urban feeders, electricity distribution, sample of distributors, 2004–05



Note: Data for Victorian distributors are for 1 January–31 December 2004.  
Sources: Aurora Energy 2005, ESC 2006b, ESCOSA 2005, IPART 2006b.

Figure 24 Frequency and minutes off supply per customer, urban feeders, electricity distribution, sample of distributors, 2004–05

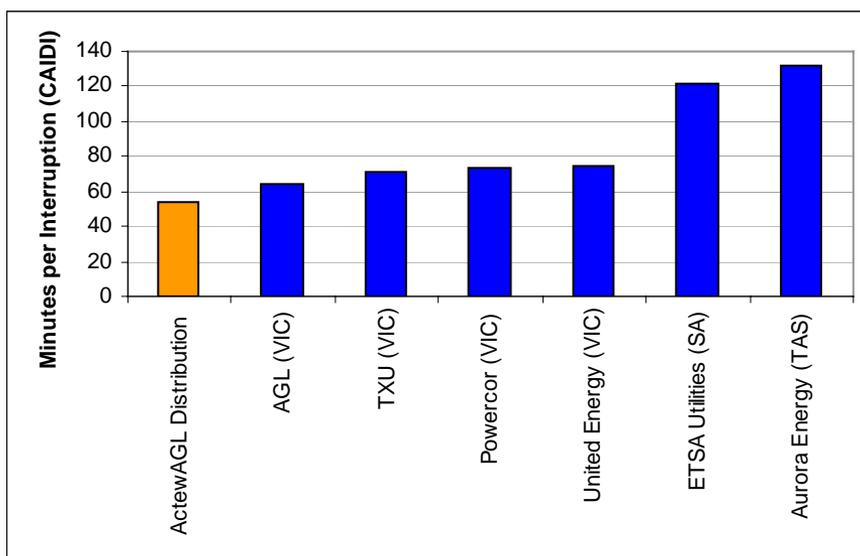


Note: Data for Victorian distributors are for 1 January–31 December 2004.  
Sources: Aurora Energy 2005, ESC 2006b, ESCOSA 2005, IPART 2006b.

In terms of the impact on individual customers, ActewAGL Distribution’s urban network was one of the best performing networks in 2004–05, with interruptions averaging 76 minutes per customer and less than one interruption (0.76) per customer. Only CitiPower in Victoria had fewer minutes off supply per customer for its urban network, and only CitiPower, United Energy and AGL in Victoria had fewer interruptions.

As Figure 25 shows, at 54 minutes, the average duration of interruptions to ActewAGL Distribution’s short rural network was the lowest of all the electricity distributors for whom information was available in 2004–05. The average duration of interruptions to interstate distributors’ short rural networks ranged from 64 minutes for AGL in Victoria to 132 minutes for Aurora Energy in Tasmania.

Figure 25 Duration of interruptions, short rural feeders, electricity distribution, sample of distributors, 2004–05

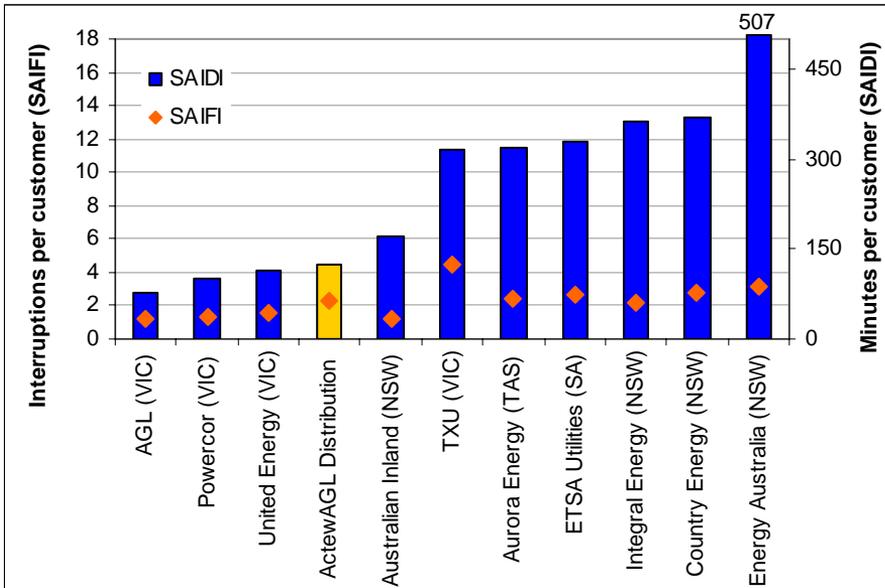


Note: Data for Victorian distributors are for 1 January–31 December 2004.

Source: Aurora Energy 2005, ESC 2006b, ESCOSA 2005, IPART 2006b.

As Figure 26 shows, ActewAGL Distribution’s customers experienced an average of 2.3 interruptions of 125 minutes duration.

Figure 26 Frequency and minutes off supply per customer, short rural feeders, electricity distribution, sample of distributors, 2004–05



Note: Data for Victorian distributors are for 1 January–31 December 2004.

Sources: Aurora Energy 2005, ESC 2006b, ESCOSA 2005, IPART 2006b.

The best performing short rural network in 2004–05 was AGL’s, with an average of 1.2 interruptions of 77 minutes duration per customer. At the other end of the scale were EnergyAustralia in New South Wales, with an average of 3.1 interruptions and 507 minutes off supply per customer, and TXU in Victoria, with an average of 4.5 interruptions of 315 minutes duration.

## 4.2.2 Gas distribution

### *Reliability of supply*

ActewAGL Distribution reported no planned or unplanned interruptions resulting in lost supply to five or more customers in 2004–05. Table 24 illustrates ActewAGL Distribution’s performance with respect to reliability of supply over the past four years. This table shows that the number of interruptions per 1,000 customers has been low throughout this period. Although the hours off supply were high in 2002–03 and 2001–02, it should be noted that the ACT experienced severe bushfires in both those years.

**Table 24** Frequency and duration of unplanned interruptions, gas distribution, ActewAGL Distribution, 2001–02 to 2004–05

	2001–02 <sup>a</sup>	2002–03	2003–04	2004–05 <sup>a</sup>
Number of interruptions per 1,000 customers	0.03	1.2	1.0	0.0
Total hours off-supply per 1,000 customers	5.9	8.5	0.9 <sup>a</sup>	0.0

a Data apply to interruptions affecting five or more customers.

In other jurisdictions interruptions to supply varied from 0.02 per 1,000 customers in South Australia (Envestra) to 21 per 1,000 customers in Victoria (TXU).<sup>27</sup>

### ***Mechanical damage incidents***

In 2004–05, there were 201 mechanical or third-party damage incidents to ActewAGL Distribution’s medium-pressure system mains and services. This equates to 55.5 incidents per 1,000 kilometres of pipe. No mechanical damage incidents were reported for the high-pressure system.

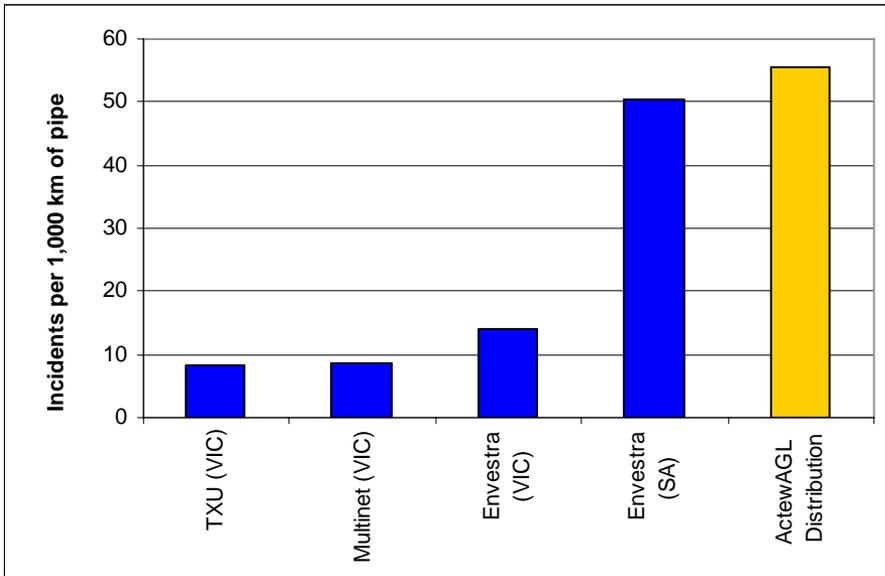
As Figure 27 shows, in 2004–05 the incidence of mechanical damage incidents to ActewAGL Distribution’s network was higher than those of the Victorian and South Australian gas distributors considered in this report. The incidence of mechanical damage to ActewAGL Distribution’s network was only slightly higher than that of Envestra in South Australia (50.4 incidents per 1,000 kilometres), but more than four times greater than that of the Victorian distributors.

While performance against this indicator is largely out of 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’. The Commission notes, however, that ActewAGL Distribution’s number of third-party incidents has decreased from the 203 incidents in 2003–04 and was significantly fewer than the 291 incidents in 2002–03.

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<sup>27</sup> ESCOSA, *SA Energy Distributors 04/05, 2004/05 Annual Performance Report: Performance of South Australian Energy Distributors*, November 2005; ESC 2006a.

Figure 27 Mechanical damage incidents, gas distribution, sample of distributors, 2004–05



Source: ESC 2006a.

### *Gas leaks*

The number of gas leaks identified on a distributor’s network is used as a measure of the effectiveness of the network’s integrity and the distributor’s maintenance strategies. Specifically, 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 primarily by members of the public or through the distributors’ leakage surveys.

In 2004–05, members of the public reported 1,140 gas leaks on ActewAGL Distribution’s gas network. All reported gas leaks related to the medium-pressure system, with no reported leaks from the high-pressure system.

Table 25 examines trends in the incidence of reported gas leaks as a proportion of customers and of kilometres of pipe for the past three years. This table shows that the number of gas leaks reported by the public increased significantly between 2003–04 and 2004–05, as a proportion of both customers (40% higher) and kilometres of pipe (30% higher).

ActewAGL Distribution advises that the number of reported leaks depends greatly on the weather and can be expected to vary significantly from year to year. It further advises that a large proportion of reported gas leaks relate to meter sets and customer piping, which is to be expected because the general public is most exposed to these sections of the network.

**Table 25**      Reported gas leaks, ActewAGL Distribution, 2001–02 to 2004–05

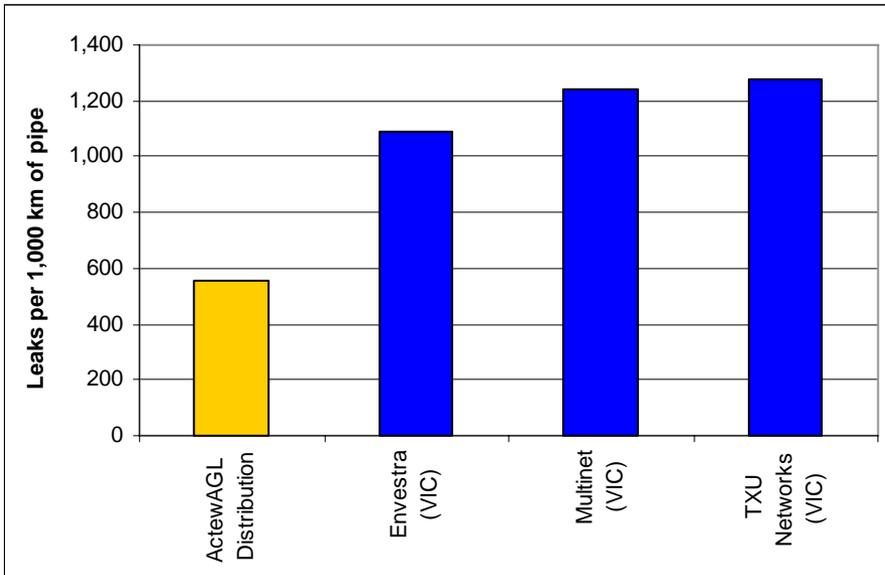
	2001–02	2002–03	2003–04	2004–05
Total number of reported leaks	859	773	767	1,140
Leaks per 1,000 customers	9.7	9.2	9.1	12.9
Leaks per 1,000 kilometres	246	245	241	315

In 2004–05, ActewAGL Distribution detected 885 gas leaks by survey, marginally more than were detected by survey in 2003–04 (868), and significantly more than in 2002–03 (100). In terms of leaks detected per length of distribution mains, the incidence of leaks detected by survey represented 244 leaks per 1,000 kilometres of pipe 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.

This shows that, at 559 gas leaks per 1,000 kilometres of pipe, ActewAGL Distribution’s overall incidence of gas leaks was about half that of the other distributors included in the sample. Comparable data were not available for distributors in other states.

Figure 28 Gas leaks per 1,000 kilometres of pipe, gas distribution, sample of distributors, 2004–05



Source: ESC 2006a.

### 4.2.3 Water

#### *Planned interruptions*

ACTEW Corporation reported planned interruptions to water supply to 6,497 properties in 2004–05, including interruptions for the replacement of water meters. Excluding interruptions to replace water meters, the number of interruption events was 66 and the number of properties affected was 1,587. Most of these outages were necessitated by new subdivisions or large connections to water mains (34) and service line repairs (16).

Table 26 compares the frequency and duration of outages over the four-year period to 2004–05. Excluding meter replacements, there was an average of 51 outages per 1,000 customers in 2004–05, compared with five in the preceding year. This indicates a significant increase in the number of planned interruptions.

The total outage time experienced by each customer was about 1.5 minutes in 2004–05, compared to less than a second in the preceding two years. However, at 24 minutes, the average duration of planned interruptions was around 27% of the 2003–04 average and 20% of the 2002–03 average.

On average, no customer experienced more than three planned interruptions during 2004–05; in 2003–04, no customer experienced more than one planned interruption.

**Table 26** Frequency and duration of planned interruptions, water supply, ACTEW Corporation, 2001–02 to 2004–05

	2001–02	2002–03	2003–04	2004–05 <sup>a</sup>
Total number of interruptions		19	24	66
Average duration of outages (minutes)	39	116	89	24
Average number of outages per 1,000 customers	1,250.0	0.1	5	51
Total outage time experienced by an average customer (minutes)	0.50	0.02	0.02	1.24

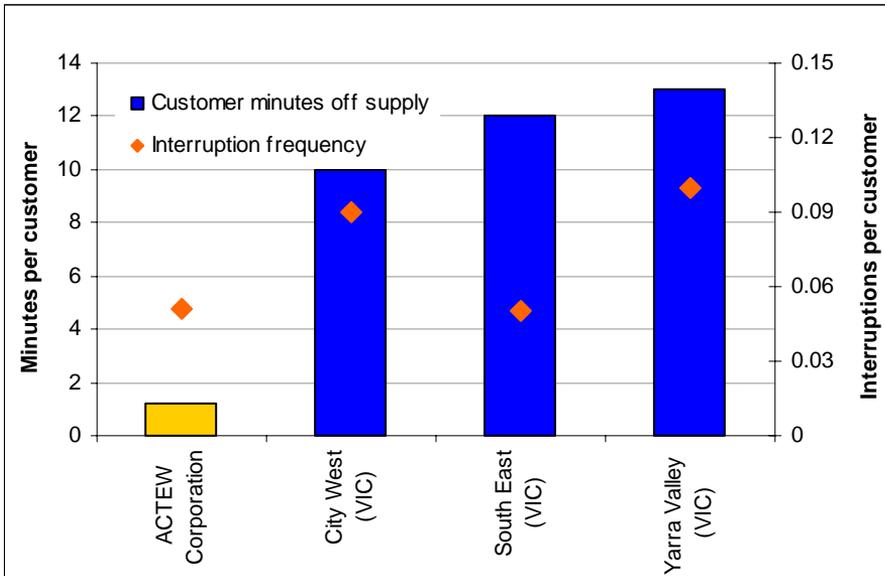
a Excludes meter replacements.

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

Figure 29 shows that, despite the increase in the frequency of planned interruptions for ACTEW Corporation, its network still performed better than those of other water suppliers. In 2004–05, as in previous years, the figures for frequency of planned interruptions and customer minutes off supply for planned interruptions for ACTEW Corporation were much lower than for the Victorian water suppliers.

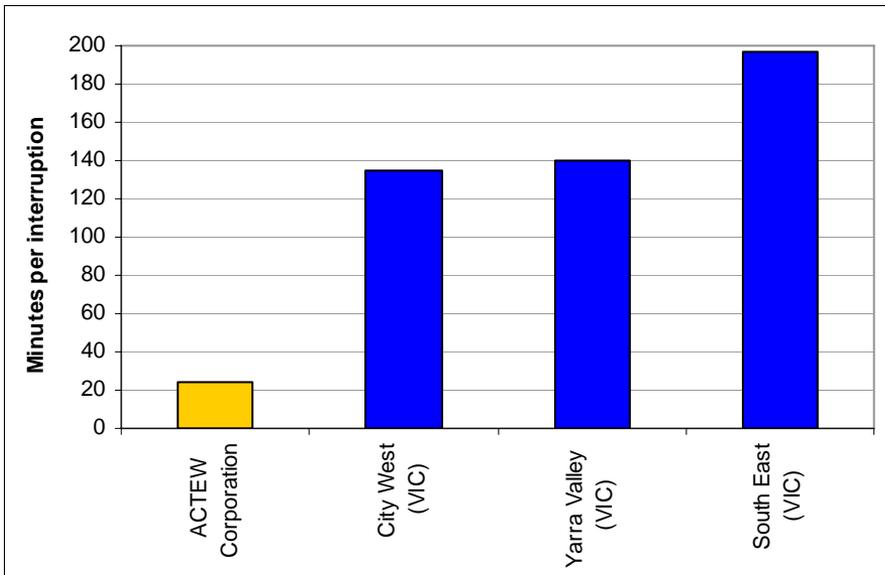
As shown in Figure 30, the average duration of each ACTEW Corporation planned interruption was also relatively low, at 24 minutes, compared to more than two hours for Yarra Valley Water and City West Water, and more than three hours for South East Water.

Figure 29 Frequency and customer minutes off supply, planned interruptions, water supply, sample of suppliers, 2004–05



Source: ESC 2006b.

Figure 30 Average duration of planned interruptions, water supply, sample of suppliers, 2004–05



Source: ESC 2006b.

### ***Unplanned interruptions***

In 2004–05, ACTEW Corporation experienced 713 unplanned interruptions, which collectively affected 14,905 properties. Table 27 examines ACTEW Corporation’s performance for unplanned interruptions over the past four reporting periods.

**Table 27** Frequency and duration of unplanned interruptions, water supply, ACTEW Corporation, 2001–02 to 2004–05

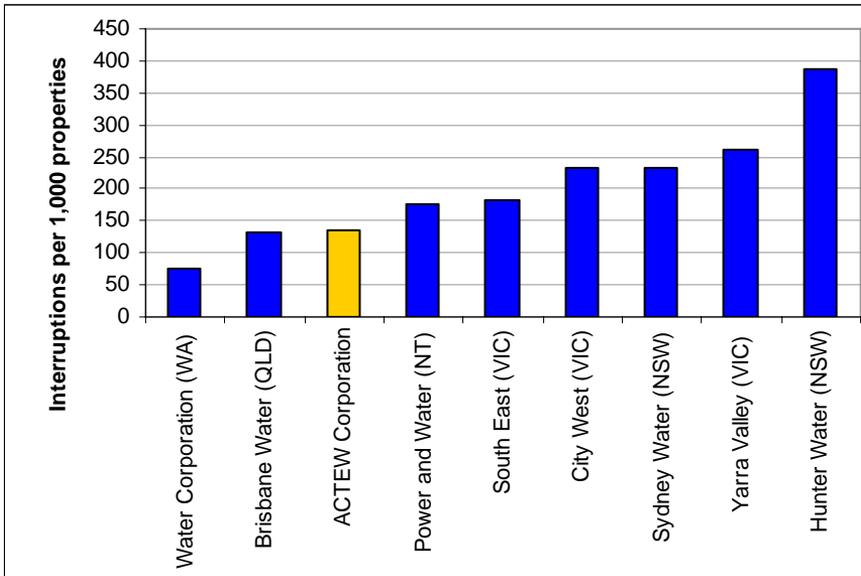
	2001–02	2002–03	2003–04	2004–05
Total number of interruptions	752	780	787	713
Average duration of outages (hours)	1.7	1.6	2.0	1.4
Average number of outages per 1,000 properties	91.8	151.8	151.3	136.1
Total outage time experienced by an average customer (hours)	0.010	0.009	0.300	0.510

Source: WSAA 2005.

The number of unplanned interruptions to water services has been decreasing over this period, as has the average duration of outages. Despite this, the average outage time experienced by individual customers has been increasing. In 2004–05, the average duration of an interruption was approximately half an hour per customer, compared to about 20 minutes in 2003–04 and less than a minute in 2002–03.

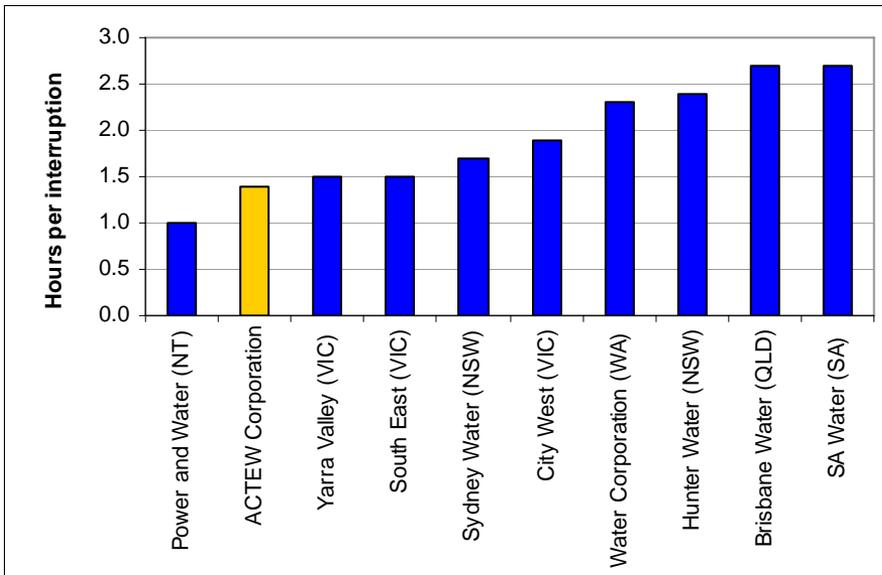
Figures 31 and 32 compare the duration and frequency of unplanned interruptions for ACTEW Corporation’s water network with the results achieved by other metropolitan water suppliers.

Figure 31 Frequency of unplanned interruptions, water supply, sample of suppliers, 2004–05



Source: WSAA 2005.

Figure 32 Average duration of unplanned interruptions, water supply, sample of suppliers, 2004–05



Source: WSAA 2005.

These figures show that ACTEW Corporation's performance compares favourably in terms of both the frequency of unplanned interruptions and the duration of interruptions. In 2004–05, ACTEW Corporation had the third-lowest number of unplanned interruptions and, at less than 1.5 hours, the second-lowest average time off supply per customer.

#### 4.2.4 Sewerage

Planned work on the sewerage system usually does not mean that customers lose access to sewerage services, 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 generally relate to 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. The consequences of a blocked main usually affect only a small number of properties.

ACTEW Corporation reported 2,777 unplanned interruptions to sewerage services in 2004–05, which equates to 20 unplanned interruptions per 1,000 properties. The average duration was 32 minutes per incident and 36 seconds per customer.

There were 3,863 sewer main breaks and chokes in 2004–05, representing 28 breaks or chokes per 1,000 properties. ACTEW Corporation estimates that tree roots were responsible for 95% of the breaks and chokes. There were an additional 2,033 breaks or chokes to property connection branches or property drains, the majority of which (90%) were also caused by tree roots.

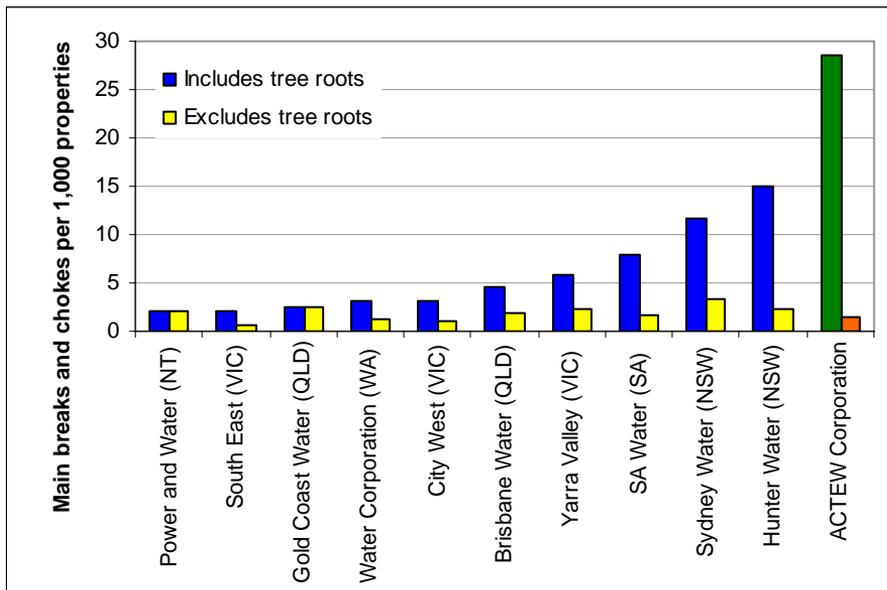
Table 28 provides data on the frequency and duration of unplanned interruptions to sewerage services from 2001–02 to 2004–05. However, the information is patchy, making it difficult to draw any conclusions.

**Table 28** Frequency and duration of unplanned interruptions, sewerage services, ACTEW Corporation, 2001–02 to 2004–05

	2001–02	2002–03	2003–04	2004–05
Total number of interruptions	n.a.	2,505	2,394	2,777
Average duration of outages (minutes)	2.5	127.8	n.a.	31.8
Average number of outages per 1,000 properties	n.a.	18.9	17.7	20.0
Total outage time experienced by an average customer (minutes)	0.04	2.4	n.a.	0.6

Figures 33 to 35 compare ACTEW Corporation’s performance with results achieved by other sewerage utilities.

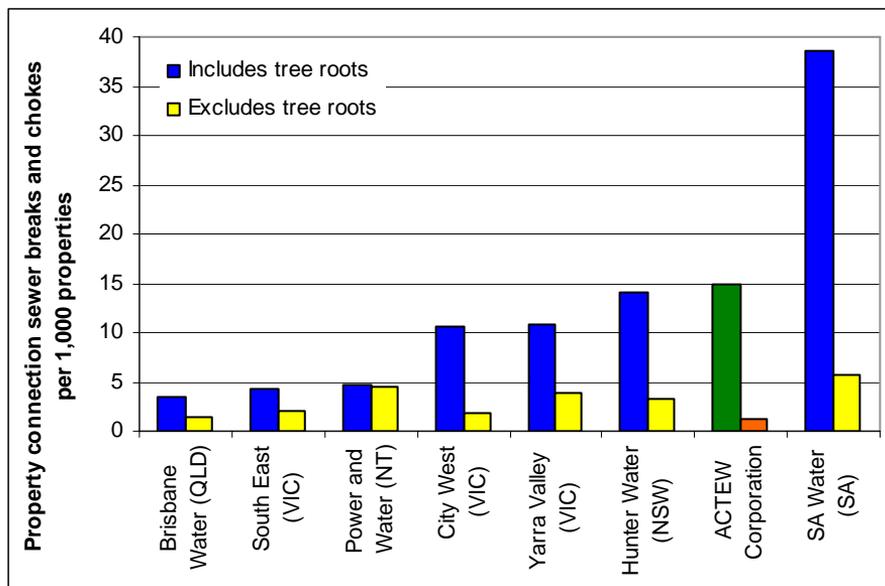
**Figure 33** Number of main breaks and chokes, sewerage, sample of utilities, 2004–05



Source: WSAA 2005.

As Figure 33 shows, the incidence of main breaks and chokes was significantly higher for ACTEW Corporation in 2004–05 than it was for any of the other utilities in the sample. Similarly, ACTEW Corporation’s incidence of property connection sewer breaks and chokes was high, as shown in Figure 34.

Figure 34 Number of property connection sewer breaks and chokes, sewerage, sample of utilities, 2004–05

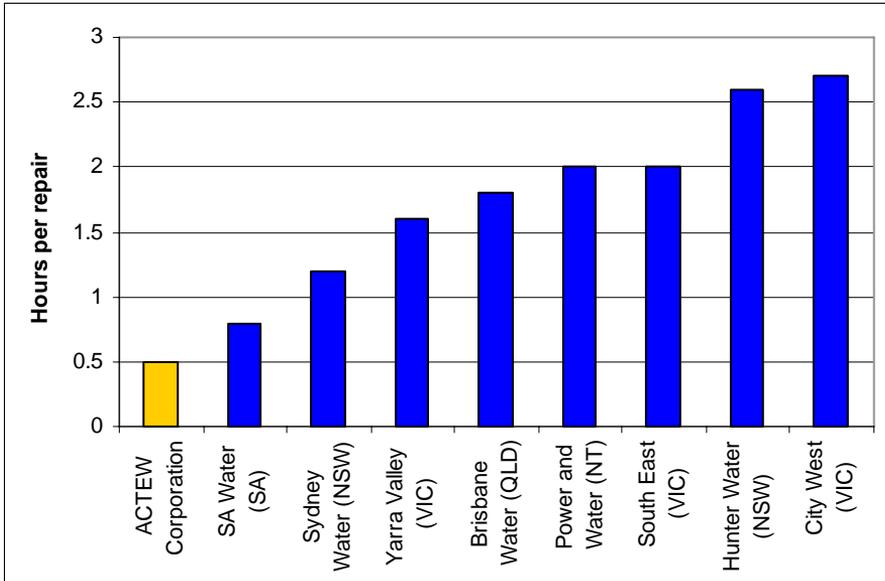


Source: WSAA 2005.

As noted earlier, a large proportion of ACTEW Corporation’s chokes and breaks are caused by tree roots—about 95% in the case of mains and 90% in the case of property connections. Elsewhere in Australia, tree roots contribute far less to breaks and chokes—in most jurisdictions between 50% and 75% of breaks and chokes are attributed to tree roots; in the Northern Territory, the figure is less than 5%. The figures therefore also compare the incidence of breaks and chokes after the effect of tree roots has been excluded.

When these incidents are excluded, ACTEW Corporation’s performance for main breaks and chokes compares favourably with that of the other sewerage utilities. ACTEW Corporation had the lowest incidence of breaks and chokes for property connections in 2004–05, if the effect of tree roots is excluded.

Figure 35 Average break/choke repair time, sewerage, sample of utilities, 2004–05



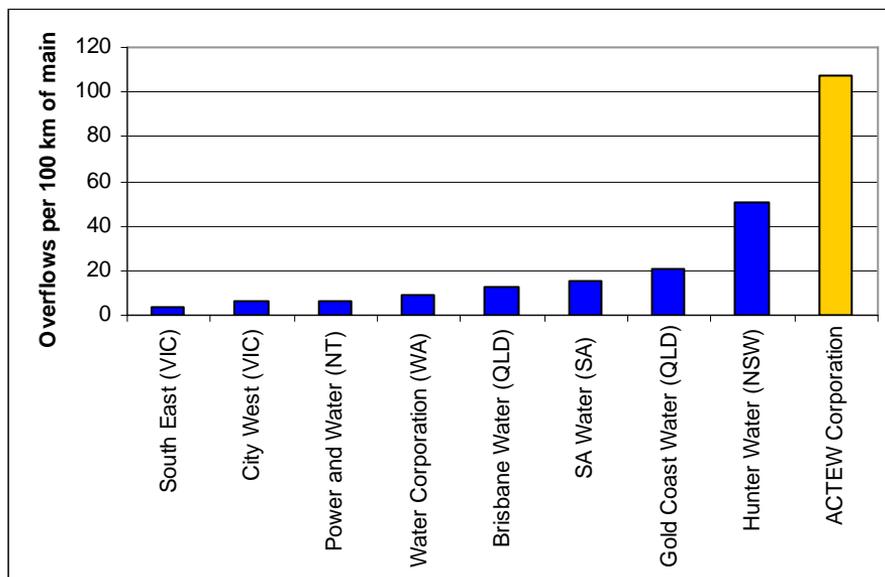
Source: WSAA 2005.

Figure 35 compares the average time taken by utilities to repair breaks and chokes. With an average repair time of 30 minutes in 2004–05, ACTEW Corporation outperformed the other utilities, whose average repair times ranged from three-quarters of an hour (SA Water) to just under three hours (City West, Victoria).

However, as shown in Figure 36, the reverse applies for the incidence of sewage overflows. In 2004–05, ACTEW Corporation had by far the highest incidence of overflows per 100 kilometres of sewer main—107 compared with 20 or less for all but one other utility (50 for Hunter Water in New South Wales). Moreover, ACTEW Corporation’s incidence of overflows has steadily increased over the last few reporting periods, more than doubling since 2000–01.<sup>28</sup>

<sup>28</sup> WSAA 2005.

Figure 36 Number of overflows, sewerage, sample of utilities, 2004–05



Source: WSAA 2005.

ACTEW Corporation attributes the high incidence of sewer overflows to problems with tree roots, which are intensified in the ACT by the extensive tree plantings on Canberra’s nature strips, a relatively low average rainfall (compared to other major cities), years of drought, and the tendency of tree roots to seek out water.

### 4.3 Call centre performance

In the ACT, ActewAGL Retail (electricity) and ACTEW Corporation share a call centre for retail inquiries. Call centres for other ACT retailers are provided either on a national basis or for combined ACT–New South Wales regions. The network operators—ACTEW Corporation, ActewAGL Distribution (gas) and ActewAGL Distribution (electricity)—have separate call centres and separate numbers for general and emergency network inquiries and/or notifications. ACTEW Corporation also has a drought advisory line.

### 4.3.1 Electricity distribution

Information about telephone responsiveness is one of several indicators used to measure the quality of customer service. ActewAGL Distribution's call centre answered 43,259 calls in 2004–05 (total calls received were 52,037). Of these, 66% of calls were answered within 30 seconds. This proportion is slightly lower than for the previous year (76%), but still an improvement over the result for 2002–03 (30%). The average waiting time for customers was 29 seconds, down from 33 seconds in 2003–04.

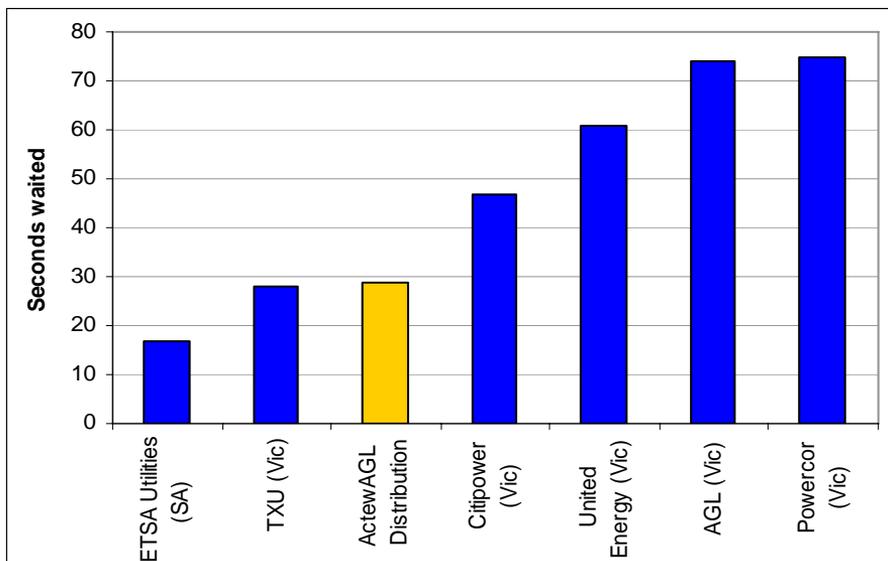
In 2004–05, the rate of calls abandoned for ActewAGL Distribution was 17%, although ActewAGL Distribution advises that this figure includes calls from customers whose query was answered by a recorded message. ActewAGL Distribution reported 733 overload events in 2004–05. An overload event occurs when the number of incoming calls to the call centre exceeds the capacity of the call centre. During an overload event, calls are either diverted to another call centre or not answered.

Figures 37 and 38 compare the performance of ActewAGL Distribution's call centre with the results achieved by distributors in other jurisdictions.

Figure 37 shows that, compared to other electricity distributors, ActewAGL Distribution performed well in terms of response times. At 29 seconds, the average waiting time for customers phoning ActewAGL Distribution's call centre was one of the lowest in the sample.

However, as Figure 38 shows, ActewAGL Distribution's call centre did not fare as well in terms of the proportion of calls answered within 30 seconds, and the proportion of calls abandoned. Similarly, ActewAGL Distribution was the only electricity retailer that reported any overload events in 2004–05.

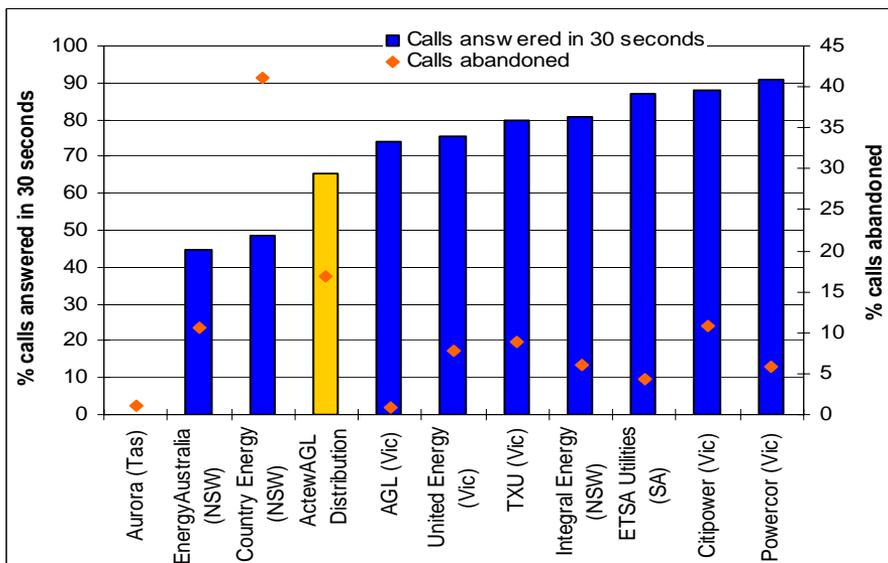
Figure 37 Average call centre response time, electricity distribution, sample of distributors, 2004–05



Note Data for Victorian distributors are for 1 January–31 December 2004.

Sources: ESC 2004a–2004e, ESCOSA 2005.

Figure 38 Call centre performance, electricity distribution, sample of distributors, 2004–05



Note: Data for Victorian distributors are for 1 January–31 December 2004.

Sources: Aurora Energy 2005, ESC 2004a–2004e, ESCOSA 2005, IPART 2006b.

### 4.3.2 Electricity supply

Because many of the electricity suppliers licensed in the ACT operate in a number of jurisdictions, information is typically provided for suppliers' national call centres, or, where possible, for New South Wales and the ACT. It should be noted that while ActewAGL Retail has provided data specific to the ACT, the ActewAGL Retail call centre fields queries relating to water and sewerage, in addition to electricity supply queries. Retailers of large customers generally do not provide a call centre, because such customers tend to contact their account managers directly.

Table 29 shows that call centre performance varied significantly between the ACT's electricity suppliers.

Table 29 Call centre performance, electricity supply, ACT suppliers, 2002–03 to 2004–05

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

In terms of responsiveness, the proportion of calls responded to in 30 seconds varied from 98% for ENERGEX to 57% for EnergyAustralia.<sup>29</sup> The average waiting time for calls to be answered ranged from 28 seconds for Country Energy to 85 seconds for EnergyAustralia; the percentage of abandoned calls averaged around 2% to 3%.

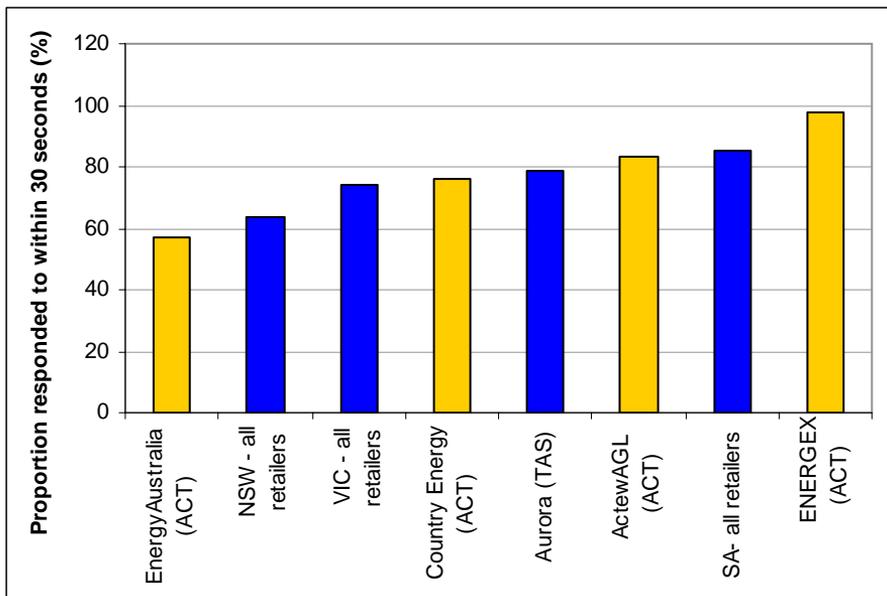
Table 29 further shows that call centre performance for ACT electricity suppliers has generally improved across all indicators over the past three reporting periods, with responsiveness improving, the average waiting time for calls to be answered decreasing (for all but EnergyAustralia), and the call abandonment rate decreasing.

<sup>29</sup> TRUenergy Yallourn reported a response rate of 100%, but this was based on only 10 phone calls.

Figures 39 to 41 compare ACT electricity retailers' performance with the results achieved by retailers in other jurisdictions.

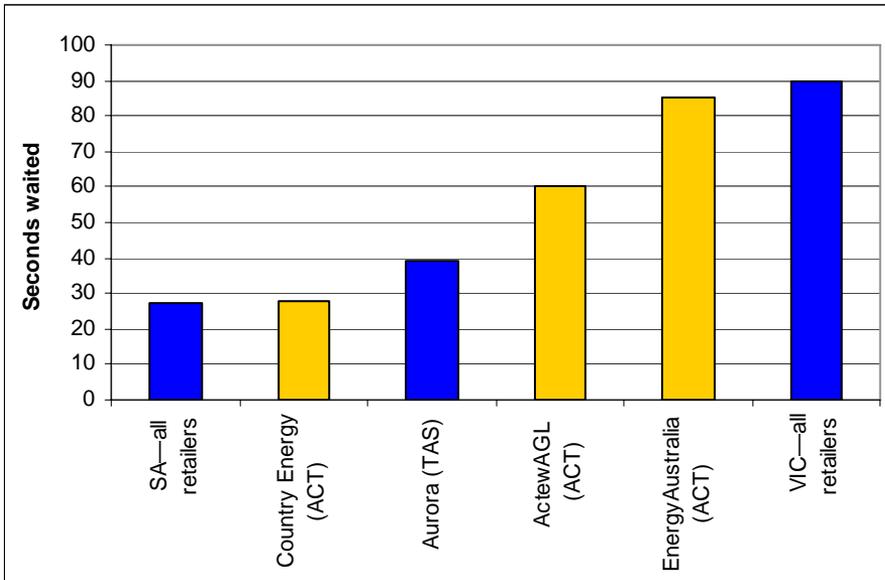
Only the South Australian retailers consistently outperformed ACT retailers. ENERGEX, Country Energy and ActewAGL Retail also performed favourably against a number of the call centre indicators.

Figure 39 Calls to call centre responded to within 30 seconds, electricity supply, sample of suppliers, 2004–05



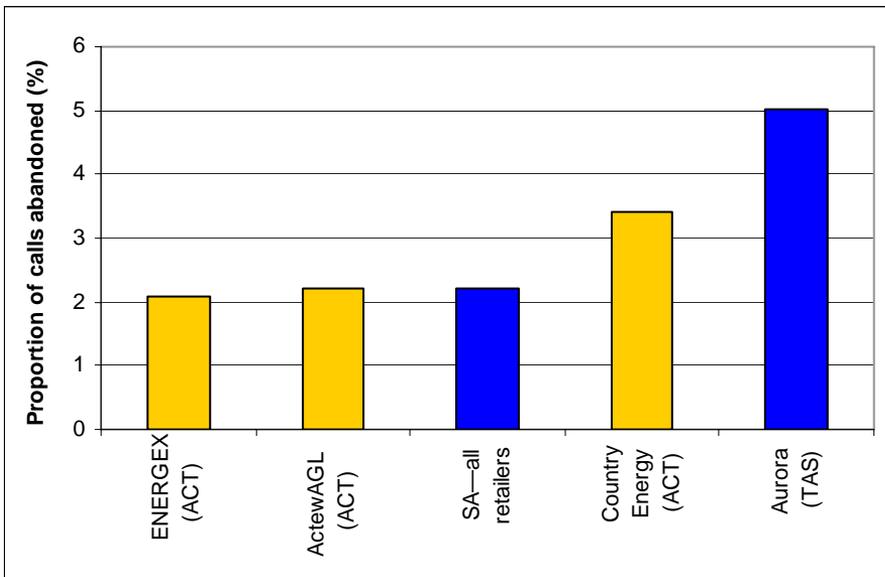
Sources: Aurora Energy 2005, ESC 2005b, ESCOSA 2005, IPART 2006a.

Figure 40 Average waiting time for call centre response, electricity supply, sample of suppliers, 2004–05



Sources: Aurora Energy 2005, ESC 2005b, ESCOSA 2005.

Figure 41 Calls abandoned, electricity supply, sample of suppliers, 2004–05



Sources: Aurora Energy 2005, ESCOSA 2005.

### 4.3.3 Gas distribution

As in previous years, ActewAGL Distribution (gas) did not provide the Commission with call centre performance data. ActewAGL Distribution has indicated that it does not have the facility to separate calls made within the ACT from calls made within the greater Canberra region, as they are all directed to the same call centre.

### 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 30 shows that call centre performance varied significantly between the ACT's three active gas suppliers in 2004–05.

Table 30 Call centre performance, gas supply, ACT suppliers, 2002–03 to 2004–05

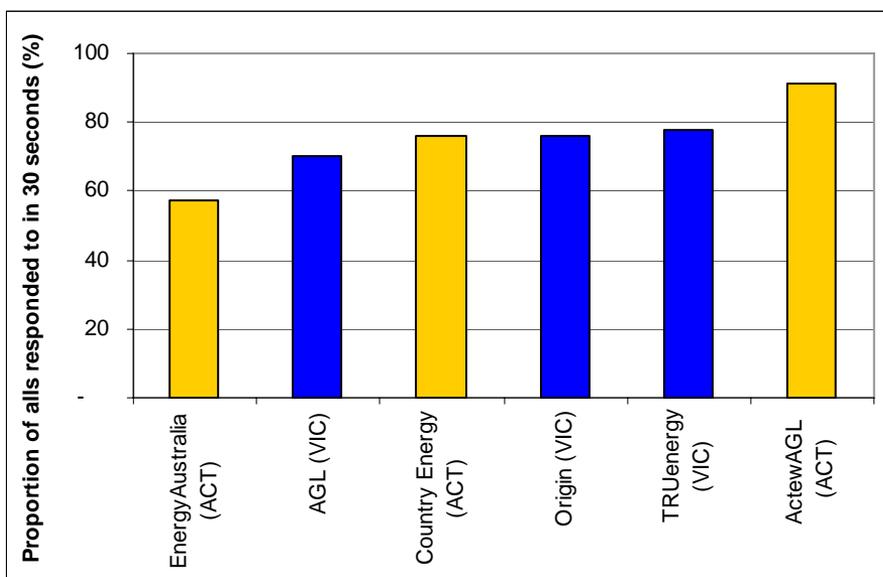
	Calls responded to in 30 seconds			Average waiting time			Calls abandoned		
	%			seconds			%		
	2002 –03	2003 –04	2004 –05	2002 –03	2003 –04	2004 –05	2002 –03	2003 –04	2004 –05
ActewAGL Retail	87	82	91	19	19	17	2	1	1
EnergyAustralia			57			38			5
Country Energy		72	76		38	28		4	3

The percentage of calls responded to within 30 seconds varied from 57% of calls (EnergyAustralia) to 91% of calls (ActewAGL Retail). The average waiting times ranged from 17 seconds (ActewAGL Retail) to 38 seconds (EnergyAustralia). Only 1% of ActewAGL Retail's calls were abandoned, compared with 5% of EnergyAustralia'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 30 shows, ActewAGL's and Country Energy's call centre performance has improved across all indicators for which data are available.

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 42 below. This shows that, in 2004–05, ActewAGL Retail’s call centre was the best in terms of responding within 30 seconds of a call being made. Country Energy’s call centre was also one of the better performing, while EnergyAustralia had the worst performing call centre in 2004–05.

Figure 42 Calls to call centre responded to within 30 seconds, gas supply, sample of suppliers, 2004–05



Source: ESC 2005b.

#### 4.3.5 Water and sewerage

In 2004–05, ACTEW Corporation received approximately 33,000 water and sewerage calls on its non-emergency numbers and a further 18,000 enquiries on its drought advisory line.<sup>30</sup> This represents 390 calls per 1,000 customers; in 2003–04, there were only 32 calls per 1,000 customers.

<sup>30</sup> ActewAGL Retail receives retail inquiries on behalf of ACTEW Corporation through its electricity retail call centre.

ACTEW Corporation also received about 32,000 calls on its emergency number. This equates to 244 calls per 1,000 customers in 2004–05, a similar ratio to that for the previous year (248 calls per 1,000 customers).

Table 31 summarises ACTEW Corporation’s call centre performance from 2002–03 to 2004–05. This shows an overall improvement in performance for both the non-emergency call centre and the emergency call centre.

**Table 31** Call centre performance, water and sewerage services, ACTEW Corporation, 2002–03 to 2004–05

Performance indicator	Non-emergency call centre			Emergency call centre		
	2002–03	2003–04	2004–05	2002–03	2003–04	2004–05
Number of calls received	35,564	41,958	51,930	34,127	32,861	32,436
Proportion answered within 30 seconds (%)	80	81	85	70	n.a.	77
Proportion of calls abandoned by caller (%)	4	2	2	9	9	4
Average waiting time (seconds) <sup>a</sup>	79	64	30	35	34	30
Number of overload events	0	0	0	n.a.	n.a.	15

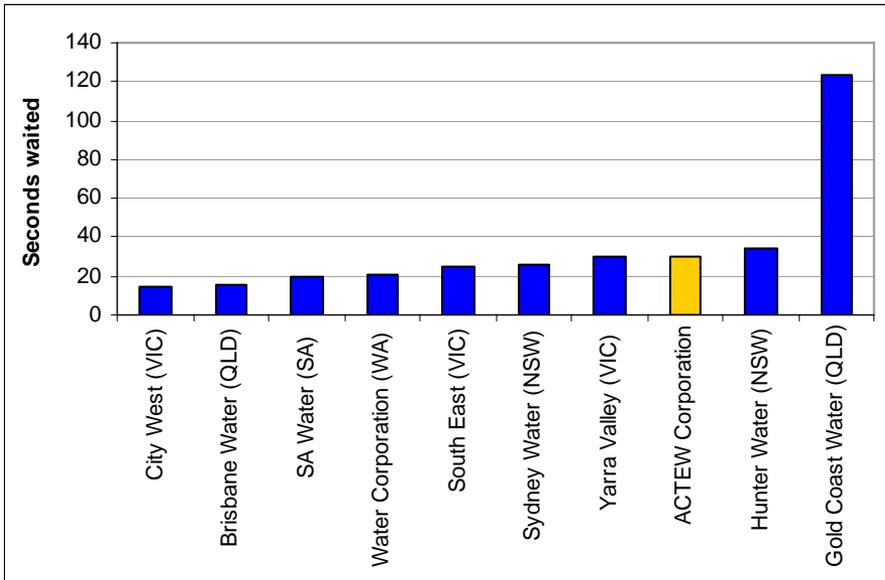
a Refers to time spent waiting before being answered by a person.

The proportion of calls answered within 30 seconds increased, with 85% of non-emergency calls and 78% of emergency calls being answered within 30 seconds in 2004–05. Both the call abandonment rate and the average waiting time decreased for non-emergency and emergency calls. Just over 2% of non-emergency calls were abandoned in 2004–05, which is slightly more than in 2003–04 but less than in 2002–03. At less than 4%, the abandonment rate for emergency calls was significantly lower than in 2003–04.

The average waiting time for non-emergency calls dropped to 30 seconds, from 64 seconds in 2003–04 (79 seconds in 2002–03); the average waiting time for emergency calls also dropped to 30 seconds, from 34 seconds in 2003–04. The emergency call centre experienced 15 overload events in 2004–05.

As Figure 43 shows, the average call waiting time for ACTEW Corporation was comparable with the results achieved by other metropolitan water suppliers, most of whom averaged response times between 20 seconds and 30 seconds.

Figure 43 Average call centre response time, water supply, sample of suppliers, 2004–05



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 2005.

## 5 Non-price safety net arrangements

Customers' access to utility services is determined by their ability to pay bills, which is, in turn, a function of the price of the service. 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.<sup>31</sup> These requirements include a suite of hardship indicators for electricity retailers, such as disconnection for non-payment of accounts and reconnection of customers within seven days of disconnection, use of instalment payment plans, direct debit defaults, and 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.<sup>32</sup>

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 better identify customers in genuine hardship: namely, reconnection of a customer with the same name at the same premises within seven days.

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<sup>31</sup> Utility Regulators Forum 2002.

<sup>32</sup> Consumer Protection Code, clauses 17.4 and 23.

The Commission has provided jurisdictional comparisons where available. However, it should be noted that definitional differences and differences in safety net arrangements make comparisons difficult.

### 5.1.1 Residential electricity customers

In 2004–05, the ratio of residential electricity customers disconnected for non-payment of accounts was 3.6 per 1,000 customers. As Table 32 shows, this is slightly higher than the result for 2003–04, which was 3.2 per 1,000 customers, but lower than the results for the preceding two reporting periods, suggesting an overall decline in disconnection rates.<sup>33</sup>

**Table 32** Disconnection of residential electricity customers for non-payment of an account, 2001–02 to 2004–05

Item	2001–02 <sup>a</sup>	2002–03 <sup>a</sup>	2003–04 <sup>a</sup>	2004–05
Customers disconnected for non-payment of an account (no./1,000 customers)	4.1	3.9	3.2	3.6
Proportion where the premises was reconnected in the same name within seven days <sup>b</sup> (%)	30.8	79.2	59.4	63.8

a For these years data are for ActewAGL Retail only.

b Data are for residential and non-residential customers

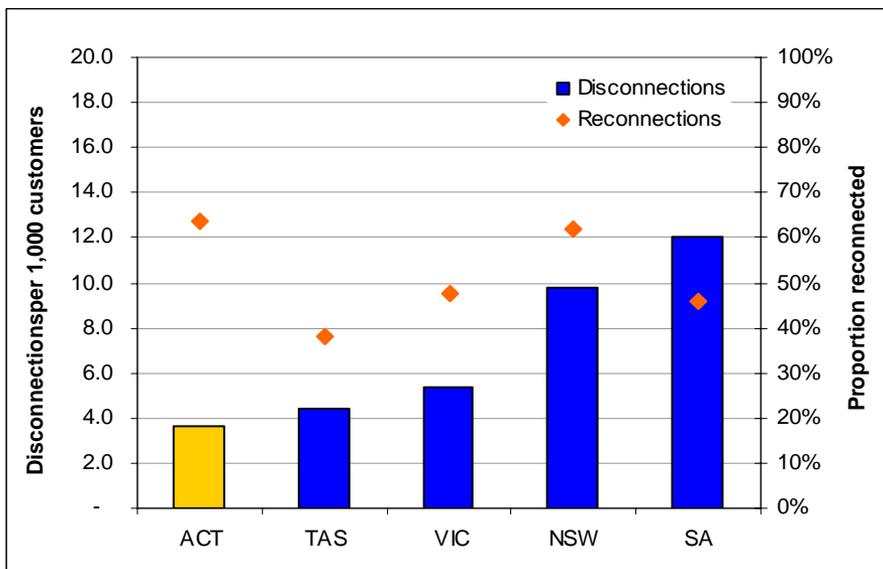
The percentage of customers reconnected within seven days in the same name at the same premises was 64% for all ACT retailers. The percentage of customers reconnected within seven days in the same name and premises has increased to 64% in 2004–05 from 31% in 2001–02.

Figure 44 compares ACT retailers’ residential disconnections with residential disconnections in other jurisdictions. At 3.6 disconnections per 1,000 customers, ACT retailers’ performance compared favourably with the performance of retailers in other jurisdictions. In Tasmania the rate of disconnection of residential customers for non-payment of accounts averaged 4.4 per 1,000 customers; in South Australia it averaged 12 per 1,000 customers.

<sup>33</sup> 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 relate to all ACT electricity suppliers.

The rate of reconnection of residential customers was also higher in the ACT, at 64%, compared with 38% in Tasmania, 46% in South Australia, 48% in Victoria and 62% in New South Wales.

Figure 44 Disconnection of residential customers for non-payment of an account, electricity supply, sample of suppliers, 2004–05



Sources: ESC 2005b, ESCOSA 2005, IPART 2006a, OTTER 2005.

### 5.1.2 Non-residential electricity customers

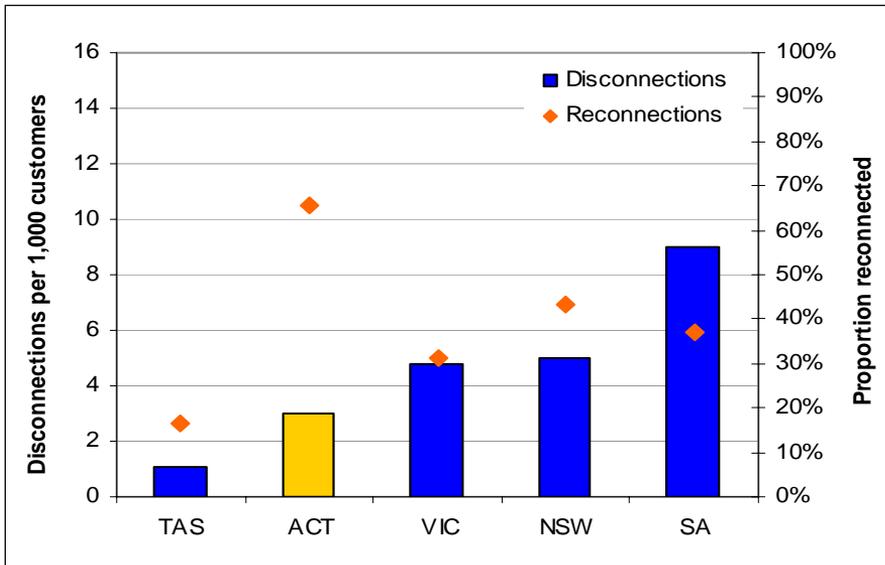
In the ACT, the rate of disconnection for non-payment of an account for non-residential customers was 2.7 per 1,000 customers in 2004–05. No non-residential customers were disconnected for not paying an account in 2003–04; in 2002–03 there were 4.2 disconnections per 1,000 non-residential customers.<sup>34</sup>

As Figure 45 shows, ACT retailers' performance in relation to non-residential disconnections also compared favourably with the performance of

<sup>34</sup> 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 relate to all ACT electricity suppliers.

retailers in other jurisdictions. At just over 1 per 1,000 customers, only Tasmania’s disconnection rate was lower than the ACT’s.

Figure 45 Disconnection of non-residential customers for non-payment of an account, electricity supply, sample of suppliers, 2004–05



Sources: ESC 2005b, ESCOSA 2005, IPART 2006a, OTTER 2005.

ACT retailers also had a higher rate of reconnection of non-residential customers than their interstate counterparts. In Victoria and South Australia, about 5 per 1,000 non-residential customers were disconnected; in New South Wales, the ratio was 9 per 1,000 non-residential customers. The rate of reconnections ranged from 17% (Tasmania) to 44% (New South Wales) of disconnections.

### 5.1.3 Residential and non-residential gas customers

The reported incidence in the ACT of gas supply customers being disconnected for non-payment of an account was 37 per 1,000 customers in 2004–05. Suppliers were unable to provide a breakdown between residential and non-residential customers, so this figure includes both. It does not include disconnections by EnergyAustralia, whose system was unable to provide the information. The total disconnection rate may therefore be higher.

Of the customers disconnected for non-payment of an account in 2004–05, 80% were subsequently reconnected at the same address and in the same name within seven days of the disconnection.

According to ActewAGL Retail, the reason for the relatively high gas disconnection rates (compared with electricity) is that often customers choose to be disconnected after winter then pay their outstanding account at the start of the following winter.

Table 33 compares gas supply disconnection results from 2001–02 to 2004–05.<sup>35</sup> This table shows that the number of gas customers disconnected has increased significantly over the past four reporting years—by 50% in the year since 2003–04 alone.

**Table 33** Disconnection of gas customers for non-payment of an account, 2001–02 to 2004–05

Item	2001–02 <sup>a</sup>	2002–03 <sup>a</sup>	2003–04 <sup>a</sup>	2004–05
Number of customers disconnected for non-payment of an account (no./1,000 customers)	21.3	16.7	24.4	37.0
Proportion where the premises was reconnected in the same name within seven days (%)	43.4	76.8	74.2	80.4

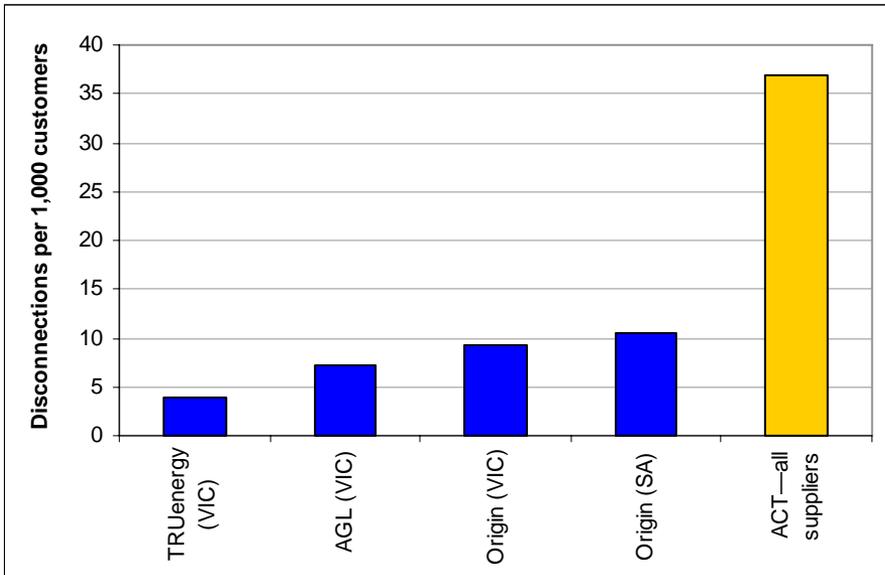
a For these years data are for ActewAGL Retail only.

Compared with the disconnection rate for electricity customers (3.6 per 1,000 customers), the rate of gas supply disconnections is significantly high (37 per 1,000 customers). However, the proportion of customers reconnected with the same name and address within seven days of disconnection has also increased, and is also higher for gas (80%) than it is for electricity (64%).

There is little information available from gas suppliers in other jurisdictions. However, the data that are available suggest that the rate of disconnection by ACT gas suppliers is significantly higher than the disconnection rates of suppliers in Victoria and South Australia, as Figure 46 shows. It is not possible to compare reconnection rates, because that information is not available in those jurisdictions.

<sup>35</sup> Data for the 2001–02 to 2003–04 reporting periods are for ActewAGL Retail only: the results for 2004–05 relate to all ACT gas suppliers. The data for 2001–02 and 2002–03 also include data for Queanbeyan customers.

Figure 46 Disconnection of customers for non-payment of an account, gas supply, sample of suppliers, 2004–05



Sources: ESC 2005b, ESCOSA 2005.

As noted earlier, affordability and access indicators should not be looked at in isolation: usage and lifestyle patterns must also be taken into account. For example, whereas gas tends to be more of an alternate general energy source in Victoria, in the ACT it is used primarily for heating purposes, and many ACT customers elect to disconnect gas in the warmer months.

### 5.1.4 Water and sewerage customers

Under the Consumer Protection Code, ACTEW Corporation 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 customers for failure to pay an account in 2004–05.

## 5.2 Direct debit defaults

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

For electricity and gas suppliers, only ActewAGL Retail was able to provide information about direct debit defaults in 2004–05. The rate of defaults for ActewAGL Retail’s electricity customers was 6% for all customers (6% for residential customers and 3% for non-residential customers). In the preceding reporting years ActewAGL Retail could not differentiate defaults between residential and non-residential customers. As Table 34 shows, the percentage of ActewAGL Retail’s customers defaulting on direct debit payments has declined significantly, from 14% in 2003–04.

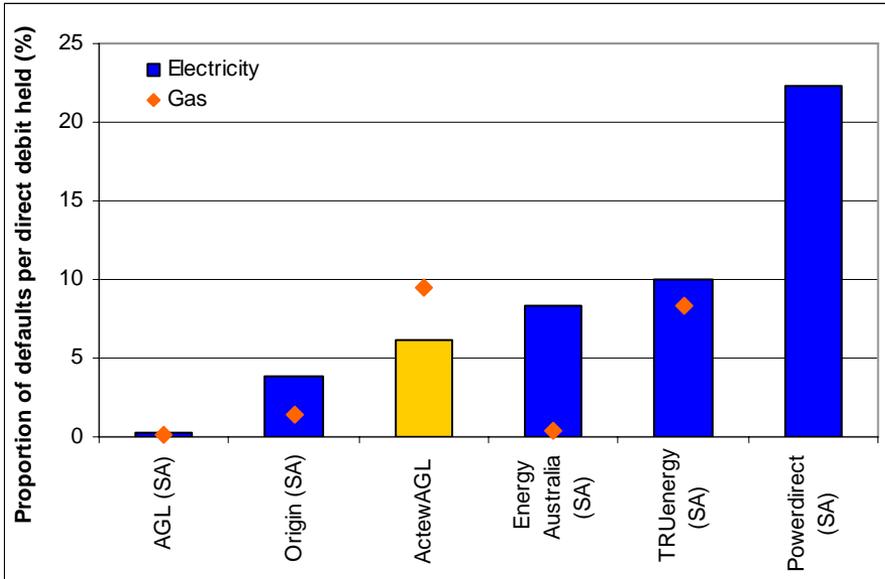
**Table 34** Proportion of customers using direct debit to pay an account who defaulted on a direct debit payment, ActewAGL Retail and ACTEW Corporation, 2002–03 to 2004–05

Utility service	Licensee	2002–03 %	2003–04 %	2004–05 %
Electricity	ActewAGL Retail	10	14.0	6.1
Natural gas	ActewAGL Retail	n.a.	10.1	9.5
Water and sewerage	ACTEW Corporation	n.a.	5.0	2.0

The percentage of gas customers (residential and non-residential) defaulting on their direct debit payments has also fallen, although less dramatically, from just over 10% in 2003–04 to 9.5% in 2004–05. Between 2003–04 and 2004–05 the proportion of ACTEW Corporation’s water and sewerage customers defaulting on direct debit payments more than halved, with only 2% of customers defaulting in 2004–05.

Figure 47 compares the proportion of direct debit defaults by ActewAGL Retail’s electricity and gas customers with results for energy suppliers in South Australia, the only other jurisdiction for which this information is available.

Figure 47 Proportion of customers using direct debit to pay an account who defaulted on a direct debit payment, electricity and gas supply, sample of suppliers, 2004–05



Source: ESCOSA 2005.

This shows that relatively few of ActewAGL Retail’s electricity customers default on direct debit plans: only AGL (0.3%) and Origin (3.9%) had lower default rates. For gas, however, ActewAGL’s customers had the highest default rate. TRUenergy’s default rate was comparable at 8%; all the others were less than 2%.

### 5.3 Instalment plans

There are a number of ways in which utilities can assist customers experiencing financial hardship. One option is through instalment plans or deferred payments.

Although the number of customers on instalment plans is used as a measure of customer hardship, it should be noted that some customers who are not in financial hardship choose to pay by instalment for budgeting reasons. Although retailers are asked not to report on such customers it is possible that not all are screened out. For this reason, too much emphasis should not be placed on the actual number of customers on instalment plans at any one time; rather, the focus should be on their take-up rate over time.

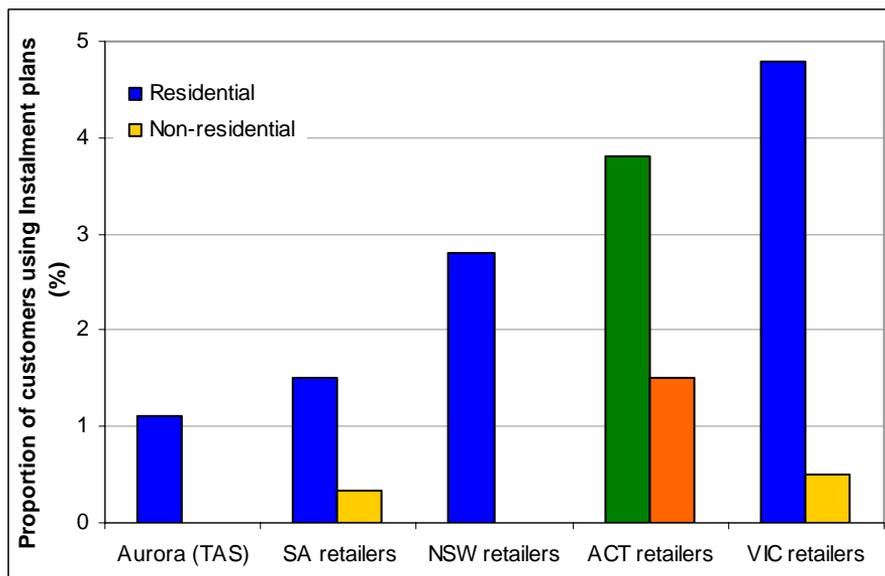
### 5.3.1 Electricity supply

About 4% of ActewAGL Retail’s residential customers, and 3% of EnergyAustralia’s customers, were on instalment plans in 2004–05. For ActewAGL Retail, the only ACT electricity retailer with residential customers on instalment plans in previous years, the proportion of residential customers on instalment plans has increased, from 1% in 2003–04 (1.5% in 2002–03).

The increase in the incidence of instalment plans is not in itself a concern and, in fact, may indicate greater use by a utility of safety net arrangements. As noted earlier, affordability indicators should not be considered in isolation nor as static measures.

As Figure 48 shows, the proportion of residential customers on instalment plans elsewhere varies considerably, from 1.1% (Tasmania) to 4.8% (Victoria).

Figure 48 Instalment plans, residential and non-residential customers, electricity supply, sample of suppliers, 2004–05



Sources: ESC 2005b, ESCOSA 2005, IPART 2006a, OTTER 2005.

In 2004–05, the only non-residential customers on instalment plans in the ACT were ActewAGL Retail customers. For that year, 1.5% of ActewAGL Retail’s non-residential customers were on instalment plans, which is a higher proportion than for previous years (0.8% in 2003–04 and 1% in 2002–03) and for retailers in other jurisdictions (as shown in Figure 48).

### **5.3.2 Gas supply**

In 2004–05, for every 1,000 gas customers (residential and non-residential), 7.6 customers paid their accounts through an instalment plan.<sup>36</sup> This represents a slight increase since 2003–04, when 6.6 per 1,000 customers were on instalment plans.

In South Australia and Victoria instalment plan data is split between residential and non-residential customers, so direct comparisons with the ACT results are not possible. In South Australia, there are 6.4 instalment plans per 1,000 residential customers, and 0.1 per 1,000 non-residential customers. In Victoria, there are 54.5 instalment plans per 1,000 residential customers and 1.7 per 1,000 non-residential customers.

### **5.3.3 Water and sewerage**

At 30 June 2005, 908 water and sewerage customers were on instalment plans: 880 were residential customers and 28 were non-residential customers. This represents 7.1 instalment plans for every 1,000 residential customers and 4.2 instalment plans for every 1,000 non-residential customers. These figures exclude customers on ACTEW Corporation’s direct debit budget plan, of whom there were 2,293 residential and 12 non-residential customers.

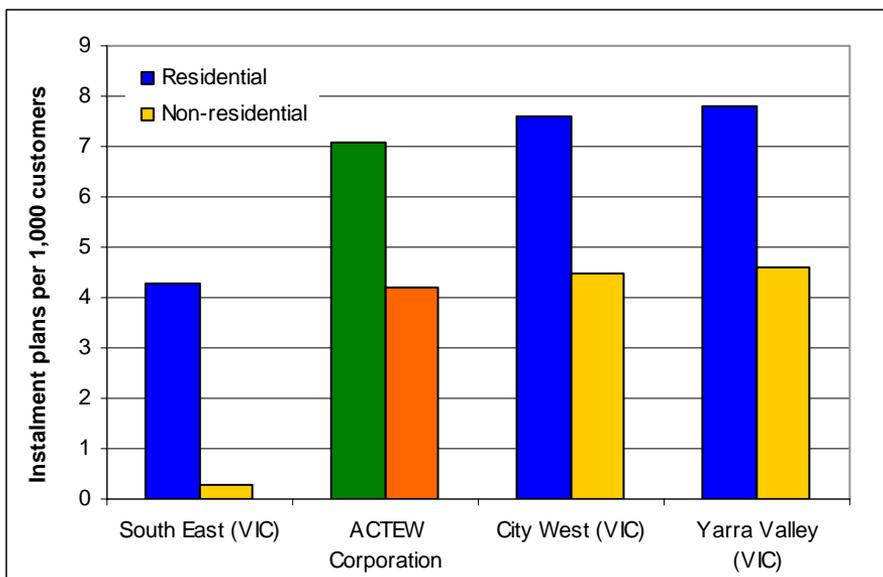
ACTEW Corporation has advised that the figures reported for 2003–04 were incorrect, so it is not possible to make any comparisons including that year. However, the ratio of residential customers on instalment plans in 2004–05 is comparable with that for 2002–03, when there were 7.2 instalment plans per 1,000 residential customers and 3.6 instalment plans per 1,000 non-residential customers.

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<sup>36</sup> This number does not include customers on account smoothing plans, such as ActewAGL Retail’s ‘Even Pay’ scheme.

Figure 49 shows that the incidence of water and sewerage customers on instalment plans in the ACT is comparable with that among customers of Victoria’s Yarra Valley Water and City West Water, for both residential and non-residential customers. However, the ACT ratio is higher than the ratio for Victoria’s South East Water, for both residential and non-residential customers.

Figure 49 Instalment plans, residential and non-residential customers, water supply, sample of suppliers, 2004–05



Source: ESC 2006a.

## 5.4 Security deposits

### 5.4.1 Electricity supply

No ACT retailers held security deposits for either residential or non-residential electricity customers in 2004–05. South Australian electricity retailers, like ACT retailers, do not hold security deposits. The Commission notes that security deposits are still commonplace in other jurisdictions.

### **5.4.2 Gas supply**

ActewAGL Retail was the only ACT gas supplier to hold any security deposits in 2004–05. At 30 June 2005, it held 13 residential security deposits per 1,000 customers. Only one security deposit was held for a non-residential customer. The average value of security deposits was \$79 for residential customers and \$300 for non-residential customers.

In Victoria, gas suppliers averaged 0.1 security deposits per 1,000 residential customers and 1.7 security deposits per 1,000 non-residential customers. In South Australia, gas suppliers held 46.1 security deposits per 1,000 residential customers and 4.5 security deposits per 1,000 non-residential customers. The average value of security deposits in South Australia was \$66 for residential customers and \$369 for non-residential customers.

### **5.4.3 Water and sewerage**

ACTEW Corporation did not hold any security deposits in 2004–05.

## 6 Environment

This section of the report summarises licensees' environmental performance. It should be noted, however, that responsibility for energy, greenhouse and water policy and regulation rests with other ACT Government agencies. This section considers only the environmental issues that are the direct responsibility of the Commission.

### 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. It is therefore 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 consumption, although it was not used for that purpose.

Figure 50 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. Since 2002–03, the proportion of unaccounted-for water has marginally increased, reaching just over 8% of the water extracted in 2004–05.

Figure 50 Volume of unaccounted-for water, ACTEW Corporation, 2001–02 to 2004–05

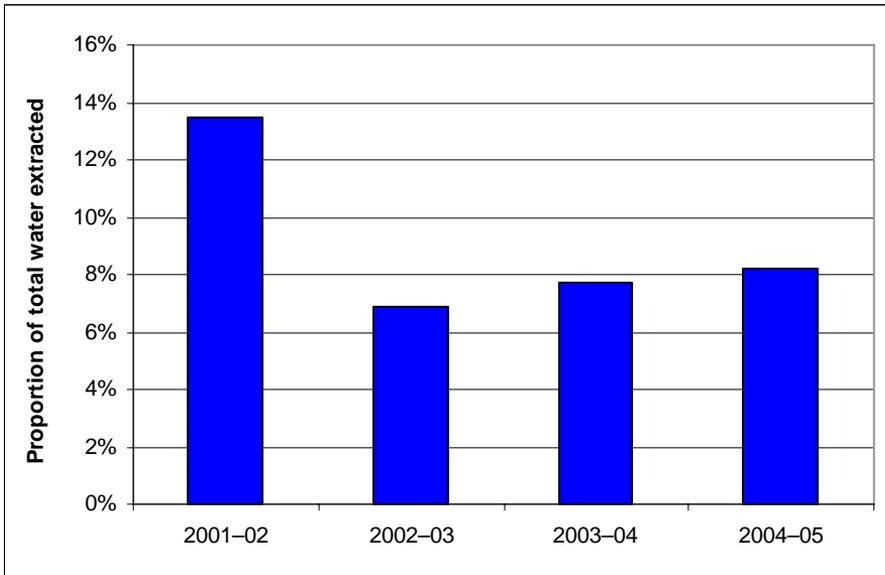
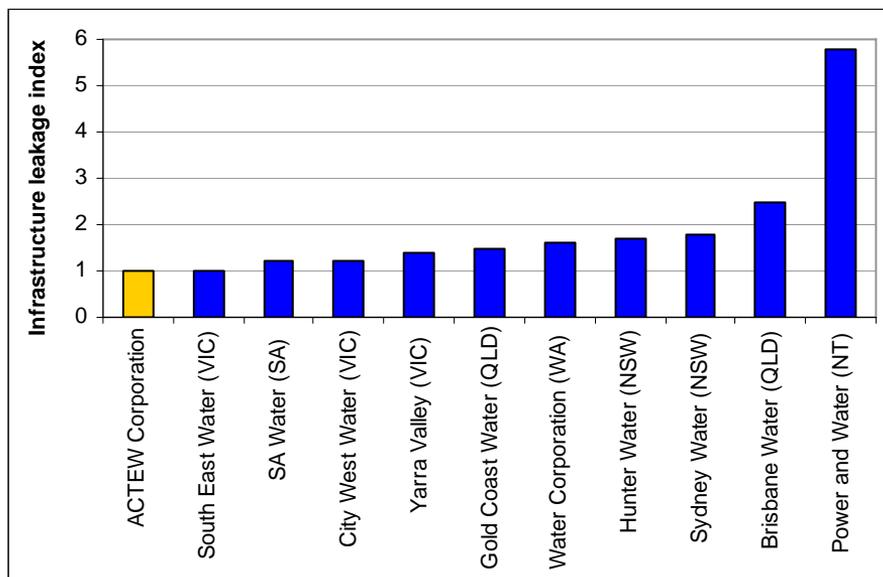


Figure 51 compares ACTEW Corporation’s performance on network losses to the performance of interstate water utilities, using the Water Services Association of Australia infrastructure leakage index (that is, the ratio of current annual real losses to unavoidable real losses).

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.

In 2004–05, only two of the water utilities in the sample had an infrastructure leakage index of 1.0: ACTEW Corporation, and South East Water in Victoria. Power and Water in the Northern Territory had the highest infrastructure leakage index, at 5.8, with indices for the other water utilities ranging from 1.2 to 2.5.

Figure 51 Infrastructure leakage indices, water networks, 2004–05



Source: WSAA 2005.

As part of its annual report to the Commission, ACTEW Corporation is required to report on the strategies it has in place to minimise water losses from its network cost effectively.

In 2004–05, ACTEW Corporation continued its meter replacement and service upgrade programs, which are designed to reduce loss of water through leaks, on the one hand, and to improve measurement by meters, on the other. In addition, ACTEW Corporation established six new district meter areas to monitor night-time flows, taking the total number to 12 (approximately 10% of the system). The intention is to identify any flows that are other than minimal. Such flows would be investigated as water being lost from the network, in order to pinpoint and reduce any 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 variabilities.<sup>37</sup> The ACT *Water Resources Act 1998* requires environmental flows to be defined for all water bodies in the ACT. Environmental flows are defined in the Environmental Flow Guidelines.

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

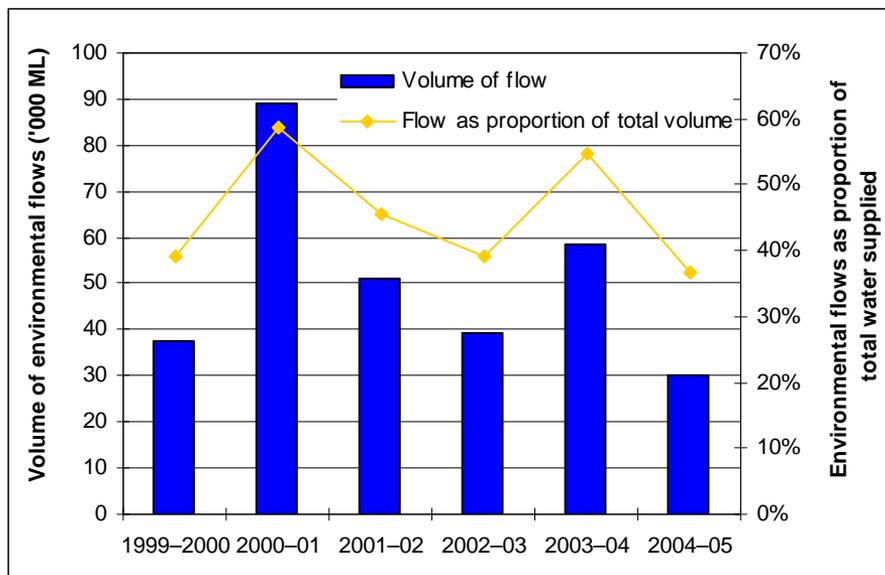
The environmental flows that are recommended for the water supply catchments are based on research and monitoring of environmental flows in the river systems and are intended to ensure that both water supply and conservation objectives are met. In times of drought, special rules apply that recognise that when the urban population faces water restrictions environmental flows should also be reduced.

Figure 52 shows the total volume of environmental flows supplied by ACTEW Corporation, and the environmental flows as a proportion of total water supplied, between 1999–2000 and 2004–05. Although they have varied from year to year, environmental flows supplied by ACTEW Corporation have consistently been more than one-third of the total water supplied in the ACT. In 2004–05, environmental flows represented 37% of the water supplied.

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<sup>37</sup> Environment ACT, *Environmental Flow Guidelines* (2006).

Figure 52 Volume and proportion of environmental flows, ACTEW Corporation, 1999–2000 to 2004–05



## 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.<sup>38</sup>

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 associated with 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, broad scale land clearing and other land use changes, and are believed to be a key factor in climate change.

<sup>38</sup> ACT Government, *Avoid, Abate, Adapt: A Discussion Paper for an ACT Climate Change Strategy*, March 2006, p. 15.

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).<sup>39</sup>

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

Despite an increase in the volume of electricity sold in the ACT in 2004–05, the estimated greenhouse gas emissions fell, as a result of an increase in the volume and proportion of green power sold and a reduction in the AGO emissions intensity coefficient. As shown in Table 35, the estimated volume of greenhouse gas emitted as a result of ACT electricity consumption for 2004–05 was 2,643,921 tonnes CO<sub>2</sub>-e, a decrease of about 4% since 2003–04.<sup>40</sup>

**Table 35** Estimated greenhouse gas emissions arising from ACT electricity consumption, 2002–03 to 2004–05

Item	2002–03	2003–04	2004–05
Volume of electricity sold in the ACT (MWh)	2,545,782	2,636,776 <sup>a</sup>	2,716,628
Volume of green power sold in the ACT (MWh)	30,051	28,692	32,444
Volume of greenhouse gas producing electricity sold in the ACT (MWh)	2,515,731	2,608,084	2,684,184
AGO emissions intensity coefficient (t CO <sub>2</sub> -e/MWh)	1.012	1.054	0.85
Estimated greenhouse gas emissions arising from ACT electricity consumption (t CO <sub>2</sub> -e)	2,545,920	2,748,920	2,643,985

a The figure for volume of green power sold in the ACT for 2003–04 is based on revised data provided by one of the electricity suppliers, and differs from that used in the green power calculations in the Commission’s performance report for 2003–04.

<sup>39</sup> Australian Greenhouse Office (AGO), *AGO Factors and Methods Workbook*, December 2005.

<sup>40</sup> Carbon dioxide equivalent (CO<sub>2</sub>-e) is a measure used to convert an amount of any greenhouse gas to an amount of carbon dioxide with the same greenhouse effect.

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.<sup>41</sup> For natural gas, the AGO provides two coefficients: one for large customers and one for small customers. As shown in Table 36, the estimated volume of greenhouse gas emitted as a result of natural gas consumption in the ACT for 2004–05 was 458,986 tonnes CO<sub>2</sub>-e, representing a 3% reduction since 2003–04.

**Table 36** Estimated greenhouse gas emissions arising from ACT natural gas consumption, 2003–04 to 2004–05

Item	2003–04	2004–05
Volume of natural gas sold in the ACT (TJ)	6,639	6,525
Volume of natural gas sold to large customers (TJ)	295	1,893
AGO emissions intensity coefficient—large customers (t CO <sub>2</sub> -e/TJ)	68.0	68.0
Volume of natural gas sold to small customers (TJ)	6,344	4,632
AGO emissions intensity coefficient—small customers (t CO <sub>2</sub> -e/TJ)	71.3	71.3
Estimated greenhouse gas emissions arising from ACT natural gas consumption (t CO <sub>2</sub> -e)	472,387	458,986

Source: AGO 2005.

## 6.2.2 Consumption efficiency

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

### *Residential energy consumption*

To examine the efficiency of residential energy consumption for consumers, 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.

<sup>41</sup> AGO 2005.

As Figure 53 shows, ACT residential electricity consumption per person has gradually increased over the four years in which the Commission has been collecting data. In 2004–05, consumption reached 3.5 megawatt hours per person, an increase of 2.5% since 2003–04.<sup>42</sup>

Figure 53 Residential electricity consumption per person, ACT, 2001–02 to 2004–05

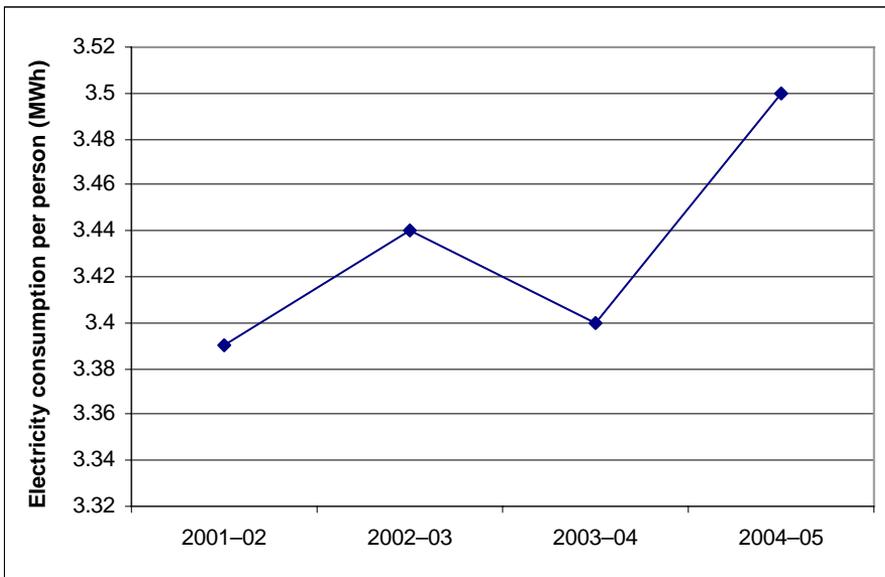
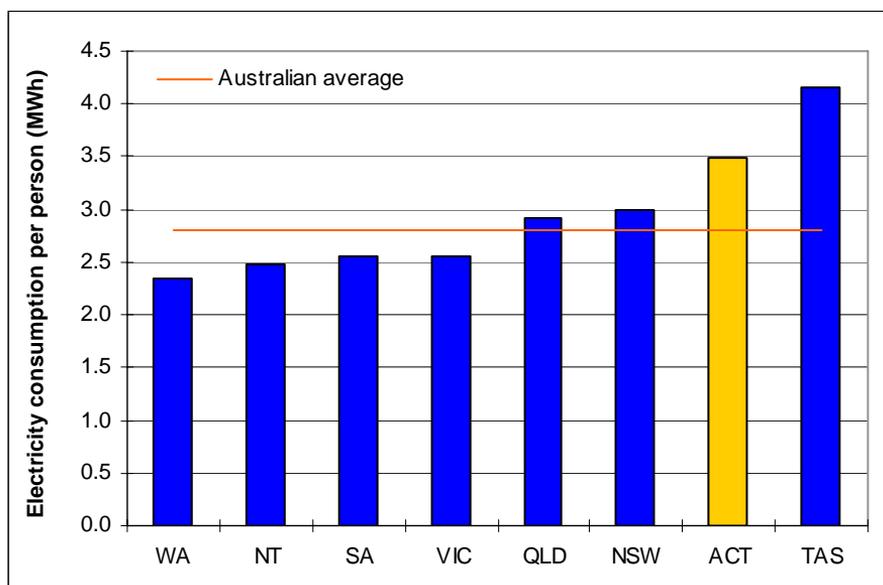


Figure 54 compares residential electricity consumption per person in the ACT with that in other states and territories in 2004–05. It shows that the level of residential electricity consumption in the ACT is the second highest of all the jurisdictions and greater than the national average (2.8 megawatt hours per person).

<sup>42</sup> Australian Bureau of Statistics (ABS), *Population by Age and Sex, Australian States and Territories*, catalogue number 3201.0, June 2005.

Figure 54 Residential electricity consumption per person, Australia, 2004–05



Sources: ESAA 2005, ABS 2005.

ACT residential gas consumption was 12.8 gigajoules per person in 2004–05, down by 3% from 13.2 gigajoules per person in 2003–04. Because gas usage data prior to 2003–04 included data for Queanbeyan, it is not possible to comment further on ACT consumption trends.

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

### ***Business energy consumption***

‘Energy intensity’ refers to the quantity of energy required per unit 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, where multiple technologies or products underlie what is being compared, it is more meaningful to examine the energy intensity of economic output than 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 decreased) by about 2% per year since 2002–03, reaching 88.7 megawatt hours per million dollars of gross state product in 2004–05, from 86.8 megawatt hours in 2003–04 and 85.1 megawatt hours in 2002–03.<sup>43</sup> These statistics indicate that electricity consumption by businesses increased at a faster rate than growth in state gross product.

Interstate comparisons are less meaningful for business electricity use than they are for comparisons of residential use and, as a result, they are not made in this report. This is because some industries (for example, aluminium refining) are more energy intensive than others. Accordingly, the types of industries present 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 respective businesses.

The efficiency of the use of natural gas by businesses appears to have improved over the past two years, with the intensity index declining from 135 gigajoules per million dollars of gross state product in 2003–04 to 131 gigajoules per million dollars of gross state product in 2004–05. However, as with residential gas consumption, there are insufficient trend data for any meaningful conclusions to be drawn.

### 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 electricity network losses are, the more electricity needs to be generated to meet demand, and the greater the potential impact on the environment.

Figure 55, which summarises ActewAGL Distribution's electricity network losses for the years 1999–2000 to 2004–05, shows that ActewAGL Distribution's network losses have been fluctuating in the range from 4.6% to 5.4%. In 2004–05, ActewAGL Distribution's electricity network losses were 5.4% of total network output.

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<sup>43</sup> ABS, *Australian National Accounts, State Accounts, 2004–05*, (catalogue number 5220.0), November 2006. It should be noted 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.

Figure 55 Electricity distribution network losses, ActewAGL Distribution, 1999–2000 to 2004–05

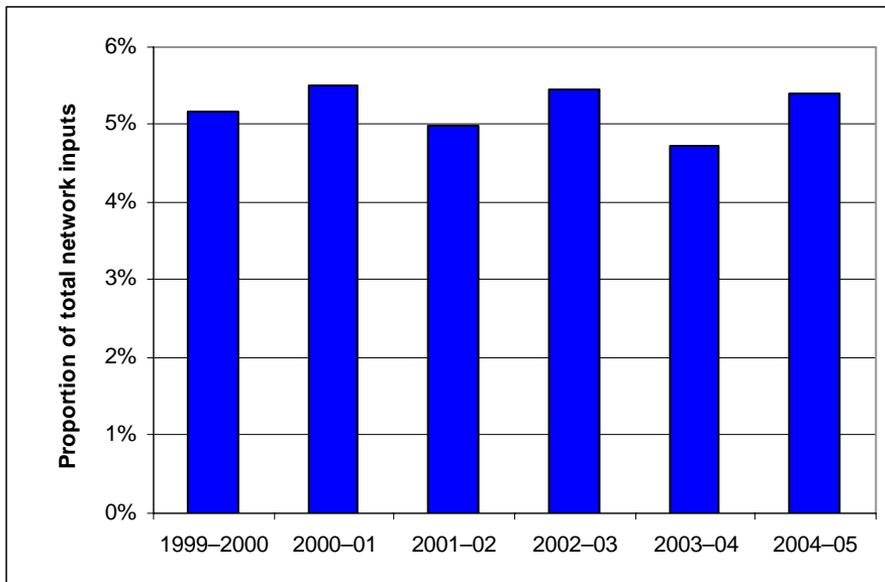
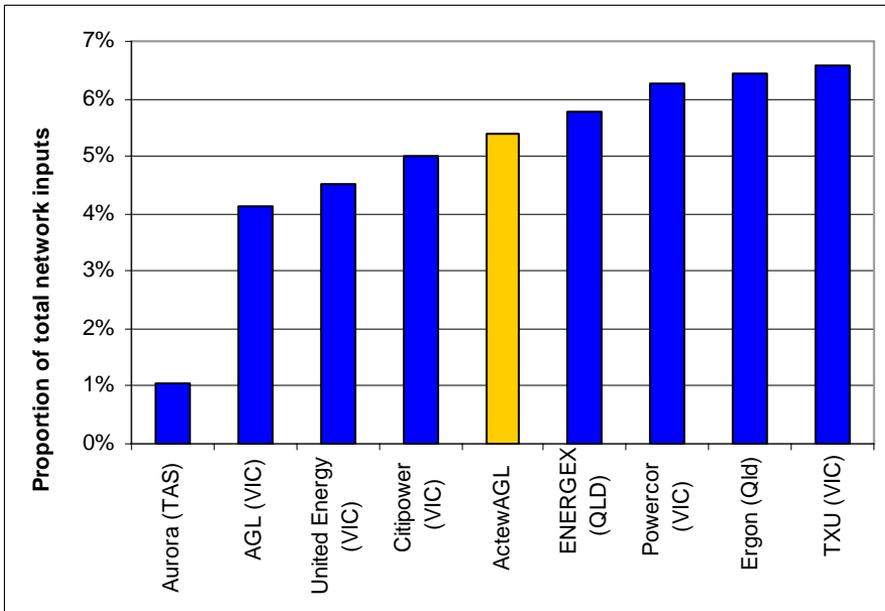


Figure 56 compares ActewAGL Distribution’s electricity network losses with losses from electricity networks in other jurisdictions. In 2004–05, Aurora Energy in Tasmania had the lowest percentage of network losses, at 1% of total network inputs. Network losses for the other electricity distributors in the sample ranged from 4.1% to 6.6%, 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 Ergon in Queensland and Powercor and TXU in Victoria. The distributors with the lower losses tend to have the shorter feeders. The ACT has predominantly short feeders but also has a small number of long feeders.

Figure 56 Electricity distribution network losses, electricity networks, 2004–05



Note: Victorian data are for 1 January–31 December 2004.

Sources: ESC 2004a-e, ESCOSA 2005, OTTER 2005.

ActewAGL Distribution is required to report annually to the Commission on what strategies it has in place to reduce its network losses. ActewAGL Distribution advised that the management of network losses is incorporated into the following functions and strategies:

- planning and design of the network, including the configuration and load/capacity
- load balancing for distribution feeders and subtransmission transformers
- specification/selection of equipment—particularly in the case of transformers, for which loss-related formulas are included in the technical specifications
- specification of limits for load power factor. The power factor limit of 0.9 is specified in the ActewAGL Service and Installation Rules. Higher power factors translate to lower losses. However, there are a number of practical difficulties with monitoring and enforcing power factor limits at the consumer level.

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.

### ***Gas network losses***

In 2004–05, 0.9% of the gas entering the network was unaccounted for, compared with 0.6% in 2003–04. Despite the increase, ActewAGL Distribution’s level of gas network losses is still favourable when compared with losses for gas distributors in Queensland and South Australia, which ranged from 3.4% (Allgas in Queensland) to 5.8% (Envestra in Queensland).

## **6.2.4 Operation and maintenance**

### ***Gas specification***

‘Gas specification’ refers to 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 issues, such as the risk of damage to customers’ equipment.

ActewAGL Distribution indicated that gas specification exceeded the maximum or minimum limits 62 times during 2004–05, down by 30% compared with the result for 2003–04 (gas specification remained within the limits at all times in 2002–03 and 2001–02). According to ActewAGL Distribution, the network operator took mitigating steps and, as a result, there was no impact on customers. Supply was terminated briefly in two instances (less than 10 minutes each). In the other instances, the out-of-specification incident occurred for a very short period and supply was not terminated.

### ***Gas regulator and meter replacements***

As Table 37 shows, ActewAGL Distribution replaced 602 gas regulators in 2004–05, a 40% increase since 2003–04. Of the regulators replaced, 560 were for residential customers and 42 were for non-residential customers. ActewAGL Distribution replaced 281 meters in 2004–05, compared to 252 in 2003–04. Of these replacements, 266 were for residential customers and 15 were for non-residential customers.

Table 37 Gas regulator and meter replacements, ActewAGL Distribution, 2001–02 to 2004–05

	2001–02	2002–03	2003–04	2004–05
Regulators replaced	375	445	432	602
Meters replaced	183	313	252	281

### ***Distribution network pressure***

Potential safety issues arise if the gas network operating pressure falls below the minimum: for example, domestic gas leaks may occur if the pressure is too low to maintain a pilot flame. ActewAGL Distribution indicated that distribution network pressure remained at, or above, the normal operating minimum pressure at all times during 2004–05, as in previous years.

### ***AG750 Environmental Code of Practice and the Australian Pipeline Industry Code of Practice for Pipeline Construction***

ActewAGL Distribution confirmed that its environmental management policies and practices were in line with 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 which 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 ESCC 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 provides advice to the minister responsible for Part 5 of the Act and the Commission on any matter relevant to the ESCC's functions.

## **A1.2 Guidelines and codes**

### **A1.2.1 Guidelines**

#### **Guidelines on Technical and Prudential Criteria for Licence**

**Applications under the *Utilities Act 2000* (November 2004)**—This document provides guidance to those wishing to apply for a licence under the Utilities Act to provide utility services in the ACT.

**Regulatory Reporting Guidelines (July 2002)**—These guidelines are intended to assist utilities licensees to fulfil their reporting requirements (including compliance assessment) under the Utilities Act.

**Retailer of Last Resort Guidelines (December 2002)**—This document sets out the processes to ensure that customers of a failing or failed supplier are

effectively transferred to the so-called ‘retailer of last resort’. Customers are thus provided with a seamless transition in emergency arrangements.

**Ring Fencing Guidelines For Gas and Electricity Network Operators in the ACT (November 2002)**—These guidelines are intended to ensure that businesses operating in regulated monopoly industries do not use their monopoly power, or collude with associated businesses, to give associated businesses an unfair advantage over competitors.

### **A1.2.2 Codes**

#### ***Industry codes***

Industry codes administered by the Commission in 2004–05 include the following.

**Consumer Protection Code (June 2003)**—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 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)**—The purpose of this code is to define 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 Networks 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.

### ***Technical codes***

Technical codes administered by the ACT Planning and Land Authority during 2004–05 include the following.

**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 turn, cause loss of 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 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.

**Franchise Customer Electricity Metering Code (December 2000)**—

This code sets out electricity metering matters with which electricity distributors and electricity suppliers must comply in providing electricity connection services to franchise customers.

**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 networks and quality and pressure standards for gas conveyed through the network.

**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.

### **A1.3 Licence holders in 2004–05**

Licensed utilities providing electricity, gas, water and sewerage services in the ACT are set out in the following table.

## Licensed utilities at 30 June 2005

Service	Licensed utility
Electricity distribution and connection	ActewAGL Distribution
Electricity supply	ActewAGL Retail (franchise and non-franchise customers) AGL Electricity Pty Ltd AGL Victoria Pty Ltd Country Energy (franchise and non-franchise customers) ENERGEX Retail Pty Ltd Energy One Pty Ltd EnergyAustralia Ergon Energy Pty Ltd Integral Energy Australia Origin Energy Electricity Ltd Powerdirect Pty Ltd TRUenergy Pty Ltd TRUenergy Yallourn Pty Ltd
Gas transmission	East Australian Pipeline Ltd
Gas distribution and connection	ActewAGL Distribution
Gas supply	ActewAGL Retail Country Energy ENERGEX Retail Pty Ltd EnergyAustralia
Water supply	ACTEW Corporation Ltd
Sewerage services	ACTEW Corporation Ltd



## Appendix 2 Licensee performance report data

The tables in this appendix show annual performance indicators by industry segment and licensee. Where licensees have provided supporting documentation, this has typically not been included for reasons of brevity. Notes to the tables contain licensees' comments and clarifications of their responses. They do not represent the Commission's views.

### A2.1 Electricity distribution

ActewAGL Distribution was the only electricity distribution licensee in the ACT in 2004–05.

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 these requirements, including definitions of terms, can be downloaded from the Utility Regulators Forum website.<sup>44</sup> The ACT's 2004–05 reports can be viewed on the Commission's website.<sup>45</sup>

#### A2.1.1 Business descriptors

Number of metered supply points, electricity distribution, 2004–05

Feeder category	Total	By type of customer		By supply voltage		
		Residential	Non-residential	Sub-transmission	High-voltage	Low-voltage
CBD	Nil <sup>a</sup>	Nil	Nil	Nil	Nil	Nil
Urban and rural short <sup>b</sup>	151,308	137,731	13,577	0	23	151,285

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.

<sup>44</sup> Follow the links to the Utility Regulators Forum from [www.accc.gov.au](http://www.accc.gov.au).

<sup>45</sup> See the Energy page at [www.icrc.act.gov.au](http://www.icrc.act.gov.au).

### Energy delivered (GWh), electricity distribution, 2004–05

Feeder category	Total	By type of customer		By supply voltage		
		Domestic	Non-Domestic	Sub-transmission	High-voltage	Low-voltage
CBD	Nil <sup>a</sup>	Nil	Nil	Nil	Nil	Nil
Urban and rural short <sup>b</sup>	2,629	1,119	1,510	0	343	2,286

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.

### Line length (km), electricity distribution, 2004–05

Feeder category	Total	By supply voltage				
		Under-ground	Overhead	Sub-transmission	High-voltage	Low-voltage
CBD	Nil <sup>a</sup>	Nil	Nil	Nil	Nil	Nil
Urban and rural short <sup>b</sup>	4,676	2,217	2,459	205	2,264	0

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, 2004–05

Network	Number	Capacity (MVA)
Subtransmission	28	1,286
Distribution	4,463	1,644

### Other business descriptors, electricity distribution, 2004–05

Descriptor	Value
Distribution losses	4.60%
Network service area	2,358 km <sup>2</sup>
Number of poles	52,462
Peak demand	573 MW

#### A2.1.2 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 in respect of a product or service offered or provided by the licensee, and where a response is explicitly or implicitly expected. It does not include general enquiries or requests for advice.

### Customer service, electricity distribution, 2004–05

Indicator	Response
<i>Call centre performance</i>	
How many ACT customers made calls to the licensee's call centre in 2004–05?	52,037
How many calls were answered within 30 seconds?	34,153
What was the average waiting time before a call was answered by a person?	29 seconds
How many calls were abandoned before being answered by a person?	8,778
How many overload events occurred?	733
<i>Customer complaints</i>	
What was the total number of customer complaints received by the licensee in 2004–05?	881
Of the complaints received in 2004–05, how many related to:	
Reliability of supply?	18
Technical quality of supply?	5
Administrative process or customer service?	64
Property damage/restoration of property?	72 <sup>a</sup>
Connections?	12 <sup>b</sup>
Metering/meter reading?	4
Failure to provide, or insufficient, notice?	269
Other network operations?	213 <sup>c</sup>
Other?	224 <sup>d</sup>

a There were 49 complaints about property damage and 23 about site restoration.

b There were six complaints each about connections and disconnections.

c Specifically, there were 82 complaints about the timing of work, 35 about service requests not being met, 26 about wires in trees, 23 about noise and unsightly work/equipment, 21 about entry to land, 14 about safety/health, six about environmental damage, three about faulty work and three about damage or fault with the licensee's asset.

d Most of the complaints related to fees and charges; there was also a small number of complaints about staff, and late or missed appointments.

### A2.1.3 Supply reliability

#### Supply reliability, electricity distribution, 2004–05

Dataset	CBD <sup>a</sup>	Feeder category		
		Urban	Rural short	Network total
<i>System average interruption duration index (SAIDI) (minutes)</i>				
Overall	n.a.	75.77	124.92	77.58
Distribution network—planned	n.a.	47.14	31.40	46.59
Distribution network—unplanned	n.a.	28.63	93.52	30.99
Normalised distribution network	n.a.	28.63	93.52	30.99
<i>System average interruption frequency index (SAIFI) (minutes)</i>				
Overall	n.a.	0.76	2.31	0.82
Distribution network—planned	n.a.	0.22	0.15	0.22
Distribution network—unplanned	n.a.	0.54	2.16	0.60
Normalised distribution network	n.a.	0.54	2.16	0.60
<i>Customer average interruption duration index (CAIDI) (minutes)</i>				
Overall	n.a.	99.7	54.08	94.61
Distribution network—planned	n.a.	215.92	204.46	215.5
Distribution network—unplanned	n.a.	52.71	43.27	51.48
Normalised distribution network	n.a.	52.71	43.27	51.48

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

## A2.1.4 Technical quality of supply

### Technical quality of supply, electricity distribution, 2004–05

Indicator	Response
<i>Number of complaints</i>	
Total number of technical quality of service complaints	14
<i>Complaints by category</i>	
Low supply voltage	3 <sup>a</sup>
Voltage dips	1 <sup>b</sup>
Voltage swell	3 <sup>c</sup>
Voltage spike	3 <sup>d</sup>
Waveform distortion	0
TV or radio interference	1 <sup>e</sup>
Noise from appliances	2
Other	1 <sup>f</sup>
<i>Likely cause of problem</i>	
Network equipment faulty	0
Network interference by network service provider equipment	0
Network interference by another customer	1 <sup>g</sup>
Network limitation	4 <sup>h</sup>
Customer internal problem	2 <sup>i</sup>
No problem identified	6 <sup>j</sup>
Environmental	0
Other	1 <sup>k</sup>

a Internal load increase, mains upgraded.

b Commonly called flickering of supply.

c Reports of high volts.

d Reports of transients/surges.

e Checked and cleaned insulators at a rural substation, no problem found.

f Electrical noise via modem.

g Faulty motor control equipment.

h Incorrect transformer settings and under-rated mains.

i Incorrectly rated control equipment for lift/incorrect tap setting for laser cutter.

j Possible internal problems/noise within transformers found to be within limits.

k Lightning strike to Telstra line caused modem to fail and gave electrical noise over the phone line when PC was on.

### **A2.1.5 Regulatory accounts**

In 2004–05, 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, 2004–05

Item		Value	Notes
<i>Revenue (nominal \$000)<sup>b</sup></i>			
Network charges	Residential	37,185	Regulated
	Non-residential low-voltage	56,556	Regulated
	Non-residential high-voltage	9,860	Regulated
	Non-residential subtransmission	0	
	Total network charges	103,600	Regulated <sup>b</sup>
Public lighting		n.a. <sup>c</sup>	n.a.
Customer contributions		5,636	Regulated
Other distribution services		0	
Profit from sale of assets	Gross sale proceeds	55	Regulated
	Book value of assets sold	0	
Other revenue (excludes community service obligations)		1,871	Regulated
<i>Capital expenditure and additions to fixed assets (nominal \$000)</i>			
System assets	Subtransmission lines	365	Financial accounting value—includes zone substation assets (additions less write-offs)
	Distribution lines	11,614	Financial accounting value (additions less write-offs)
	Low-voltage supply	n.a. <sup>d</sup>	
	Substations	2,646	Financial accounting value for distribution substations (additions less write-offs)
	Distribution transformers	n.a. <sup>e</sup>	
	Meters	3,323	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	2,252	Financial accounting value (additions less write-offs)
Total system assets	20,199	Financial accounting value (additions less write-offs)	
Public lighting		0	Financial accounting value (additions less write-offs)

Item	Value	Notes
Non-system assets	566	Financial accounting value (additions less write-offs) <sup>f</sup>
<i>Capital expenditure on system assets by purpose (nominal \$000)</i>		
Asset replacement	10,324	Financial accounting value (capex)
Demand related	13,911	Financial accounting value (capex)
Reliability and quality improvements	1,329	Financial accounting value for augmentation (capex) <sup>g</sup>
Environmental, safety and legal obligations		
Full retail contestability	n.a.	
Other	3,670	Financial accounting value (capex)
<i>Depreciation (nominal \$000)</i>		
Current year depreciation charge	22,113	Financial accounting value (not regulatory)
Depreciation methodology used	Straight line	
<i>Weighted average (expected and remaining) lives (years)</i>		
System assets	n.a. <sup>h</sup>	
Non-system assets	n.a.	
<i>Operating costs (nominal \$000)</i>		
Network operating costs	11,854	Regulated
Network maintenance costs	1,496	Regulated
	Maintenance and repair	3,629 Regulated
	Vegetation management	1,791 Regulated
	Emergency response	2,588 Regulated
	Other network maintenance	0
	Total network maintenance	9,504 Regulated
Other costs	Meter reading	744 Regulated
	Customer service	0
	Advertising and marketing	1,176 Regulated
	Full retail contestability	0
	Other operating costs	5,664 Regulated
	Corporate management fee	10,218 Regulated
	Business services provided by ActewAGL Retail	1,788 Regulated
	Total other costs	19,590 Regulated
Public lighting	0	
Total corporate overheads included in cost categories	16,407 <sup>i</sup>	Regulated

Item	Value	Notes
<i>Related party transactions (nominal \$000)</i>		
Total value of related party transactions	2,964 <sup>i</sup>	

- 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 ICRC declined to recognise. The ICRC opted to use an overall average life expectancy of 24 years in its last pricing determination.
- j Total charges from corporate for business support services and associated overheads.
- j Payments to ActewAGL Retail.

## A2.2 Electricity supply

There were 13 licensed electricity suppliers in the ACT in 2004–05. Information is presented only for suppliers who were active in the ACT electricity market in 2004–05.

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 these requirements, including definitions of terms, can be downloaded from the Utility Regulators Forum website.<sup>46</sup> The ACT's 2004–05 report can be viewed on the Commission's website.<sup>47</sup>

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 presentation reasons, each section has two tables, the first covering suppliers alphabetically from ActewAGL Retail to EnergyAustralia and the

<sup>46</sup> Follow the links to the Utility Regulators Forum from [www.accc.gov.au](http://www.accc.gov.au).

<sup>47</sup> See the Energy page at [www.icrc.act.gov.au](http://www.icrc.act.gov.au).

second covering suppliers alphabetically from Ergon Energy to TRUenergy Yallourn.

### **A2.2.1 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 in respect of a product or service offered or provided by the licensee, and where a response is explicitly or implicitly expected. It does not include general enquiries or requests for advice. Note that 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, electricity supply, 2004–05, suppliers A to EnergyAustralia

Issue	ActewAGL Retail	AGL Electricity	AGL Victoria	Country Energy	ENERGEX	Energy- Australia
<i>Call centre performance</i>						
How many calls did ACT customers make to the licensee's call centre in 2004–05?	215,809 <sup>a</sup>	0	0	1,026,895 <sup>b</sup>	485 <sup>c</sup>	461,438 <sup>d</sup>
Number of calls answered within 30 seconds	180,200	n.a.	n.a.	780,154	475	269,005
What was the average waiting time before a call was answered by a person? (seconds)	60	n.a.	n.a.	28	n.a.	85 (residential) 57 (non-residential)
How many overload events occurred?	0	n.a.	n.a.	0	n.a.	n.a.
Number of calls abandoned before being answered by a person	4,726	n.a.	n.a.	34,973	10	26,902
<i>Complaints</i>						
What was the number of complaints received in 2004–05?	151	0 <sup>e</sup>	0 <sup>e</sup>	6	0	12 <sup>f</sup>
Of the complaints received in 2004–05, how many related to:						
Billing and affordability?	28	0	0	4	0	8
Marketing?	0	0	0	0	0	3
Other retail matters?	65	0	0	2	0	1

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 located in New South Wales and those in the ACT, as these customers 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 is a very small number of national customers in the ACT and these are 'account managed'.

f Complaints relate to 'dual fuel' matters.

## Customer service, electricity supply, 2004–05, 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 2004–05?	0 <sup>a</sup>	0	0 <sup>b</sup>	not provided <sup>c</sup>	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 2004–05? <sup>d</sup>	0	0	0	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.

d No further complaints information is provided for these suppliers, as they did not receive any complaints in 2004–05.

### A2.2.2 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 purposes.

## Affordability and access, electricity supply, 2004–05, suppliers A 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 2005	8,597 <sup>a</sup>	n.a.	n.a.	0	n.a.	75
How many were:						
Residential customers?	8,401	n.a.	n.a.	0	n.a.	75
Non-residential customers?	196	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	28,437	n.a.	n.a.	19	n.a.	data not available
How many were:						
Residential customers?	27,551	n.a.	n.a.	18		n.a.
Non-residential customers?	886	n.a.	n.a.	1		n.a.
<i>Direct debit defaults</i>						
Number of customers that used direct debit defaulted on direct debit payments	1,730	n.a.	n.a.	0	0	n.a.
How many were:						
Residential customers?	1,701	n.a.	n.a.	0	n.a.	n.a.
Non-residential customers?	29	n.a.	n.a.	0	n.a.	n.a.
<i>Disconnections/reconnections</i>						
Number of residential customers that were disconnected in 2004–05 for failure to pay an amount due	468	n.a.	n.a.	2	n.a.	data not available

Issue	ActewAGL Retail	AGL Electricity	AGL Victoria	Country Energy	ENERGEX	Energy- Australia
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	298	n.a.	n.a.	2	n.a.	n.a.
Number of non-residential customers that were disconnected in 2004–05 for failure to pay an amount due	35	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	23	n.a.	n.a.	0	n.a.	n.a.
<i>Security deposits</i>						
Proportion of customers that had a security deposit lodged with the licensee at 30 June 2004	0	n.a.	n.a.	0	n.a.	0
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 2004–05	1,303	n.a.	n.a.	0	n.a.	data not available

a Includes 1,303 customers paying by Centrepay, and 3,515 residential and four non-residential customers paying by ActewAGL Retail's Direct Debit Budget plan.

## Affordability and access, electricity supply, 2004–05, 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 <sup>a</sup>	0	0	0	0	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 2004–2005 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 <sup>b</sup>	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.

## A2.3 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. Performance indicators were therefore considered in the Commission's utilities compliance report, released in February 2006.

## A2.4 Gas distribution

ActewAGL Distribution was the only gas distribution licensee in the ACT in 2004–05.

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.

### A2.4.1 Business descriptors

#### Business descriptors, gas distribution, 2004–05

Indicator	Response
<i>Connection points</i>	
How many DPLs did the licensee have at 30 June 2005?	89,202
<i>Customers</i>	
How many customers were connected to the licensee's network at 30 June 2005?	88,659
How many new customers were connected to the licensee's network in 2004–05?	2,842
<i>Volume of gas (TJ)</i>	
Aggregate quantity of gas entering the distribution network	7,048
Aggregate quantity of gas billed	6,987
<i>Length of network (km)</i>	
Total pipeline length by pressure classes at 30 June 2005	3,621
Length of which is medium pressure	3,557
Length of which is high pressure	64

### A2.4.2 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 in respect of a product or service offered or provided by the licensee, and where a response is explicitly or implicitly expected. It does not include general enquiries or requests for advice.

## Customer service, gas distribution, 2004–05

Indicator	Response
<i>Call centre performance</i>	
How many calls did ACT customers make to the licensee's call centre in 2004–05?	data not provided <sup>a</sup>
How many calls were answered within 30 seconds?	n.a.
What was the average waiting time before a call was answered by a person? (seconds)	n.a.
How many overload events occurred?	n.a.
How many calls were abandoned before being answered by a person?	n.a.
<i>Complaints</i>	
What was the total number of complaints received in 2004–05?	87
Of the complaints received in 2004–05, how many related to:	
Property damage/restoration of property?	19
Administrative process or customer service?	0
Quality and reliability of supply?	1
Connections?	6
Metering/meter reading?	53 <sup>b</sup>
Unplanned interruptions?	0
Failure to provide, or insufficient, notice?	1
Other network operations?	5 <sup>c</sup>
Contractor performance?	0
Other?	2 <sup>d</sup>

a The facility to separate ACT and New South Wales calls is not available.

b Includes two capital contributions complaints.

c Includes three (non-network) service complaints, one relating to faulty work and one to an inlet service delay.

d One complaint related to incorrect information and one to the failure of the licensee to reply.

### A2.4.3 Supply reliability

#### Supply reliability, gas distribution, 2004–05

Indicator	Planned interruptions	Unplanned interruptions (excluding transmission outages)	All interruptions
Number of interruptions affecting five or more customers	0	0	0
Customer hours off supply for interruptions affecting five or more customers	n.a.	n.a.	n.a.
In 2004–05, 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.	181	181 <sup>a</sup>
Any other burst or leaking pipes?	n.a.	473	473 <sup>b</sup>
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.	0	0
Within 48 hours, in the case any other burst or leaking pipes?	n.a.	0	0

a Such leaks and third-party hits are issued with top-priority 00.

b Leaks and hits with lower priorities.

## Incidents and maintenance, gas distribution, 2004–05

Indicator	Response
<i>Incidents</i>	
Number of gas leaks (from mains, service and meters) reported by the public to the licensee	1,140
Of these, number from medium-pressure infrastructure	1,140
Number from high-pressure infrastructure	0
Number of mechanical damage incidents to mains and services	201
Of these, number from medium-pressure infrastructure	201
Number from high-pressure infrastructure	0
Number of times gas specification reached the maximum or minimum limits	62
<i>Operations and maintenance</i>	
Number of significant gas leaks detected by survey	885
Of these, number from medium-pressure infrastructure	885
Number from high-pressure infrastructure	0
Number of gas regulators replaced	602
Of these, number for residential customers	560
Number for industrial/commercial customers	42
Number of meter replacements	281
Of these, number for residential customers	266
Number for industrial/commercial customers	15
Number of times distribution network pressure fell below normal operating system minimum pressure by pressure classes	0
Of these, number from medium-pressure infrastructure:	0
Number from high-pressure infrastructure:	0
<i>Unaccounted-for gas (TJ)</i>	
In 2004–05, what is the volume of unaccounted gas as a percentage of gas entering the distribution network?	61 <sup>a</sup>

a Includes Queanbeyan portion of the network.

## A2.5 Gas supply

For the 2004–05 financial year, there were four licensed gas suppliers in the ACT. Information is provided for ActewAGL Retail, Country Energy and EnergyAustralia, as only these suppliers were active in the ACT gas market in 2004–05.

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. Note that 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.

### **A2.5.1 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 in respect of a product or service offered or provided by the licensee, and where a response is explicitly or implicitly expected. It does not include general enquiries or requests for advice. Note that 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, 2004–05

Issue	ActewAGL Retail	Country Energy	Energy Australia
<i>Call centre performance</i>			
How many calls did ACT customers make to the licensee's call centre in 2004–05?	216,180 <sup>a</sup>	1,026,895	1,026,895
How many calls were answered within 30 seconds?	197,678	780,154	780,154
What was the average waiting time before a call was answered by a person? (seconds)	16.67	28	28
How many overload events occurred?	179 <sup>b</sup>	0	0
How many calls were abandoned before being answered by a person?	1,751	34,973	34,973
<i>Complaints</i>			
What was the number of complaints received in 2004–05?	192	0	12 <sup>c</sup>
By small customers	183	0	12
By large customers	9	0	0
Of the complaints received in 2004–05, how many related to:			
Billing and affordability	93	0	8
And were from small customers?	92	0	8
And were from large customers?	1	0	0
Marketing	0	0	3
And were from small customers?	0	0	3
And were from large customers?	0	0	0
Other retail matters	99	0	1
And were from small customers?	91	0	1
And were from large customers?	8	0	0

a Includes New South Wales customers.

b Estimate.

c Complaints relate to 'dual fuel'.

### A2.5.2 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 purposes.

## Affordability and access, gas supply, 2004–05

Issue	ActewAGL Retail	Country Energy	Energy Australia
<i>Instalment plans</i>			
Number of customers on instalment plans at 30 June 2005	6,749 <sup>a</sup>	0	75
How many were residential customers?	n.a. <sup>b</sup>	n.a.	75
How many were non-residential customers?	n.a. <sup>b</sup>	0	0
<i>Use of direct debit</i>			
How many customers used direct debit facilities to pay customer accounts?	12,672	0	data not available
How many were residential customers?	n.a. <sup>c</sup>	n.a.	n.a.
How many were non-residential customers?	n.a. <sup>c</sup>	n.a.	n.a.
<i>Direct debit defaults</i>			
How many customers who used direct debit defaulted on direct debit payments?	1,200 <sup>d</sup>	n.a.	n.a.
How many were residential customers?	n.a. <sup>e</sup>	n.a.	n.a.
How many were non-residential customers?	n.a. <sup>e</sup>	n.a.	n.a.
<i>Disconnections/reconnections</i>			
How many residential customers were disconnected in 2004–05 for failure to pay an amount due?	3,210 <sup>f</sup>	n.a.	data not available
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?	2,580 <sup>f</sup>	n.a.	n.a.
<i>Security deposits</i>			
Number of security deposits lodged with the licensee at 30 June 2005	1,128	0	0
By residential customers	1,127	0	n.a.
By non-residential customers	1	0	n.a.
What was the total value of the security deposits lodged?	\$89,734	\$0	n.a.
By residential customers?	\$89,434	\$0	n.a.
By non-residential customers?	\$300	\$0	n.a.
How many security deposits has the licensee held for 12 months or more?	1,128	0	n.a.
For residential customers?	1,127	0	n.a.
For non-residential customers?	1	0	n.a.

Issue	ActewAGL Retail	Country Energy	Energy Australia
<i>Centrelink Centrepay</i>			
How many customers used Centrelink's Centrepay option in 2004–05?	1,061	0	data not available

- 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.

## A2.6 Water and sewerage services

In the 2004–05 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.

### A2.6.1 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 A2.6.2 and A2.6.3 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 purposes.

#### Customer service, water network and service, 2004–05

Indicator	Response
<i>Telephone enquiries: non-emergency call centre</i>	
How many calls were made to the licensee's non-emergency call centre in 2004–05?	51,930 <sup>a</sup>
How many calls were answered within 30 seconds?	43,989
How many calls dropped out or were abandoned before being answered by a person?	1,242
What was the average waiting time before the call was answered by a person? (seconds)	30 <sup>b</sup>
How many overload events occurred?	0
<i>Telephone enquiries: emergency number</i>	
How many calls were made to the licensee's emergency call centre in 2004–05?	32,436
How many calls were answered within 30 seconds?	25,046
How many calls dropped out or were abandoned before being answered by a person?	1,155
What was the average waiting time before the call was answered by a person? (seconds)	30
How many overload events occurred?	15

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: 60 seconds for the retail call centre, 21 seconds for the Fyshwick call centre, and 10 seconds for the Drought Advisory Office.

## Affordability and access, water network and services, 2004–05

Indicator	Response
<i>Instalment plans</i>	
How many residential customers were on instalment plans (for debt-related payments) at 30 June 2005?	3,173 <sup>a</sup>
How many non-residential customers were on instalment plans (for debt-related payments) at 30 June 2005?	40
Of these, how many were on extensions to accounts?	136 <sup>b</sup>
<i>Direct debit defaults</i>	
How many customers used direct debit facilities to pay customer accounts in 2005–05?	29,675
How many residential customers?	29,160
How many were non-residential customers?	515
How many customers who used direct debit defaulted on direct debit payments?	610
How many residential customers who used direct debit defaulted on direct debit payments?	607
How many non-residential customers who used direct debit defaulted on direct debit payments?	3
<i>Security deposits</i>	
How many security deposits were lodged with the licensee at 30 June 2005 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 2005 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 2004–05?	136

a Of these customers, 2,293 were on ACTEW Corporation's Direct Debit Budget plans.

b Comprises 694 residential customers, and 27 non-residential customers.

## A2.6.2 Water network and service

### Business descriptors, water network and service, 2004–05

Indicator	Response
<i>Properties</i>	
How many properties were connected to the licensee's network at 30 June 2005?	133,410
How many of these were residential properties?	127,039
How many of these were non-residential properties?	6,371
<i>Customers</i>	
How many customers did the licensee have at 30 June 2005?	131,886
How many of these were residential customers?	125,456
How many of these were non-residential customers?	6,430
<i>Water consumption</i>	
What was the volume of water supplied in 2004–05? (kL)	52,275,568
What was the volume of water supplied to the following customer categories in 2004–05 (kL):	
Residential—standard	26,039,532
Residential—flats and units	4,926,199
Commercial (includes Government) <sup>a</sup>	11,263,080
Educational premises and ecclesiastical institutions <sup>a</sup>	1,271,980
Individual bulk supplies	4,007,440
Other identifiable categories:	
Non-potable and Pierce's Creek and Uriarra	562,648
System losses	4,204,689

a Includes irrigation of parks and sports grounds.

### *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 A2.6.1.

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

## Customer service, water network and service, 2004–05

Indicator	Response
<i>Complaints</i>	
What was the total number of complaints received by the licensee in 2004–05?	600
Of these complaints, how many related to:	
Water quality?	339
Water supply reliability?	36
Property damage/restoration of property?	65 <sup>a</sup>
Accounts/billing?	30
Metering/meter reading?	11
Failure to provide, or insufficient, notice?	26
Other retail complaints?	6
Other network complaints?	87

a There were 21 complaints about property damage and 44 about site restoration.

### ***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 this table:

- ‘Average water supply interruption frequency’ records the proportion of all properties supplied with water that had a supply interruption during the year. This is calculated by dividing the total number of properties whose water supply was interrupted during the year by the total number of properties supplied with water.
- ‘Average water supply interruption duration’ records 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 look at 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. These indicators are shown in the second table below.

#### Supply reliability, water network and services, 2004–05

Indicator	Planned interruptions	Unplanned interruptions
How many interruptions to water supply services were there in 2004–05?	6,947 <sup>a</sup>	713
Average water supply interruption frequency	0.051	0.14
Average water supply interruption duration (minutes)	24	1.37
Total interruption time faced by an average customer in 2004–05 (minutes per customer)	1.24	0.51
Customer water supply interruption frequency:		
1 interruption	0.04473	0.10
2 interruptions	0.00566	0.01
3 interruptions	0.00077	0.001
4 interruptions	0	0.0003
5 or more interruptions	0	0

a Of these, 5,360 premises had their supply interrupted for water meter replacements.

#### Incidents and maintenance, water network and services, 2004–05

Indicator	Response
<i>Burst or leaking pipes</i>	
How many instances were there in 2004–2005 of burst or leaking pipes that affected public health, or were causing or likely to cause substantial damage or harm to people or property?	119
In how many of these instances did the licensee respond within three hours?	119
How many instances were there in 2004–2005 of burst or leaking pipes that did not affect public health, or cause or were likely to cause substantial damage to people or property?	1,007
In how many instances did the licensee respond within 24 hours?	867

### A2.6.3 Sewerage network and service

#### Business descriptors, sewerage network and service, 2004–05

Indicator	Response
<i>Properties</i>	
How many properties were connected to the licensee's network at 30 June 2005?	132,842
How many of these were residential properties?	127,039
How many of these were non-residential properties?	5,803
<i>Customers</i>	
How many customers did the licensee have at 30 June 2005?	128,451
How many of these were residential customers?	122,589
How many of these were non-residential customers?	5,862

#### *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 A2.6.1.

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

#### Customer service, sewerage network and service, 2004–05

Indicator	Response
<i>Complaints</i>	
What was the total number of complaints received by the licensee in 2004–05?	63
Of these complaints, how many related to:	
Sewerage odour complaints?	7
Sewerage services reliability and quality?	0
Property damage/restoration of property?	12 <sup>a</sup>
Failure to provide, or insufficient, notice?	3
Other network complaints?	41

a Of these, seven related to site restoration and five to property damage.

### *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’ records the proportion of all properties served by the sewerage network that had a service interruption during the year. This is calculated by dividing the total number of properties whose sewerage service was interrupted during the year by the total number of properties served by the sewerage network.
- ‘Average sewerage service interruption duration’ records 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. These indicators are shown in the second table below.

#### **Service reliability, unplanned interruptions, sewerage network and services, 2004–05**

<b>Indicator</b>	<b>Response</b>
How many interruptions to sewerage services were there in 2004–05?	2,777
Average sewerage service interruption frequency	0.02
Average sewerage service interruption duration (minutes)	32
Total interruption time faced by an average customer in 2004–05 (minutes/customer)	0.65

#### **Incidents and maintenance, sewerage network and services, 2004–05**

<b>Indicator</b>	<b>Response</b>
<i>Sewer main breaks and chokes</i>	
Total number of sewer main breaks and chokes	3,863
Number caused by tree roots	3,658
<i>Total number of property connection sewer breaks and chokes</i>	
Total number of property connection sewer breaks and chokes	2,033
Number caused by tree roots	1,823

# Glossary and abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
AGO	Australian Greenhouse Office
CAIDI	customer average interruption duration index
capex	capital expenditure
CBD	central business district
CO <sub>2</sub> -e	carbon dioxide equivalent
Commission	Independent Competition and Regulatory Commission
DPI	Distribution Point Identifier
EAPL	East Australian Pipeline Limited
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
IPART	Independent Pricing and Regulatory Tribunal
kL	kilolitre
km	kilometre

kWh	kilowatt hour
ML	megalitre
MWh	megawatt hour
n.a.	not applicable
NEM	National Electricity Market
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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