



independent competition and regulatory commission

Licensed Electricity, Gas, Water and Sewerage Utilities

**Compliance and Performance
Report for 2008–09**

Report 5 of 2011

June 2011

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

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Foreword

Utilities licensed to supply electricity, gas, water and sewerage services in the ACT are required to comply with a number of statutory and regulatory obligations established through the *Utilities Act 2000*, licence conditions, and industry and technical codes. One such requirement is to report annually to the Independent Competition and Regulatory Commission (the Commission) on the utility's compliance with those obligations and its performance of functions under the Act.

Each year, the Commission prepares a report summarising utilities' compliance with their statutory obligations, and a complementary report commenting on the annual performance of individual businesses and of utility sectors and on trends over time.

This is the eighth year for which the Commission has prepared reports. With the exception of the reports for 2003–04 and 2004–05, the compliance and performance reports have been combined in a single publication. A full list of Commission reports is in Appendix 4.

The compliance component of this report documents compliance with a broad range of obligations imposed on licensed utilities by ACT regulatory instruments: the Utilities Act, utility licences and industry codes made under the Utilities Act. The performance component of this report has a broader focus: in particular, on financial performance, customer service standards, safety net arrangements and the environment.

Much of the information in the report is derived from utilities' reporting against compliance and performance indicators that have been agreed nationally by the Utility Regulators Forum, a cooperative arrangement of state and national utility regulators.

Utilities' compliance reports serve a number of purposes. First, they are the principal means by which the Commission monitors utility service providers' statutory compliance. Second, they provide information to interested parties on the nature and extent of licensees' compliance and performance. Third, by identifying underperformance or non-compliance, the reports provide utilities and consumers with a signal about the need for performance improvements.

The approach taken to the content of this report is broadly consistent with that taken in previous Commission reports. The principal difference between previous reports and the 2008–09 report is that this report incorporates major issues associated with the technical regulation of utilities in the ACT that the ACT Planning and Land Authority has brought to the attention of the Commission. The report also includes discussion of compliance in relation to the Electricity Feed-in Scheme and the GreenPower scheme, both of which commenced in 2008–09.

During the period covered by this report, the Commission had responsibilities for setting prices for water and sewerage services and retail electricity, and for the utility licence framework established under the Utilities Act. Responsibilities for the economic regulation of electricity and gas distribution businesses were transferred to the Australian Energy Regulator prior to the period of this report.

Malcolm Gray
Acting Senior Commissioner

June 2011

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Executive summary

Background to this report

The Commission has a number of statutory roles in relation to the licensing of electricity, gas, and water and sewerage network service providers and/or retail suppliers operating in the Australian Capital Territory (ACT). One of those roles is to monitor licensees' compliance with the conditions of their licences. In partial discharge of this responsibility, the Commission prepares an annual report on licensee compliance and performance.

An operating licence issued under the *Utilities Act 2000* requires utilities to notify the Commission of any material breaches of licence conditions, legislation, codes of practice, directions or guidelines as soon as they become aware of them. The Utilities Act also requires utilities to report annually on the performance of their functions under the statute and their compliance with licence conditions.

Licensees are required to report against a number of performance indicators, such as numbers of customers, and complaints and response times. Although this form of reporting is different from compliance reporting, and serves a different purpose, it forms part of the Commission's overall reporting program.

Reporting performance information is both a utility's obligation under the conditions of its licence and an important public accountability mechanism. It provides assurance that service quality and other service obligations are being met. Through these reports, regulators and consumers can judge whether utilities in the ACT are meeting their service obligations and how they are performing in comparison with the market generally.

Utility services—main features

The following is a brief overview of the utility services regulated by the Commission, including information on customer numbers, consumption volumes and overall trends in each utility sector.

Electricity—distribution and supply

- During 2008–09, ActewAGL's distribution network delivered electricity to more than 161,000 metered supply points, of which nearly 145,000 were residential customers and more than 16,000 were non-residential customers.
- The ACT electricity retail market comprises mainly residential customers (about 140,000 at the end of June 2009, or just over 90% of total customer numbers). However, power sales to residential customers account for just on 40% of total sales.
- Average annual electricity consumption by residential customers fell in years the years to 2008–09, from about 8.69 MWh in 2004–05 to 8.35 MWh in 2008–09.
- Total sales of electricity during 2008–09 amounted to 2,866 GWh, of which 1,201 GWh (42%) was attributed to customers on standard contracts; the balance of 1,664 GWh (58%) was attributed to customers on negotiated contracts. Customers who purchased less than 100 MWh in 2008–09 accounted for just over 51% of all sales; medium and large customers accounted for 37% and 12%, respectively.

Natural gas—transmission, distribution and supply

- At 30 June 2009, ActewAGL Distribution’s network comprised 3,718 km of medium-pressure and 249 km of high-pressure mains.
- In 2008–09, ActewAGL distributed 7,695 TJ of gas to just over 100,000 delivery point identifiers.
- The volume of gas distributed in the ACT fluctuated over the six years to 2008–09. The volume of 7,695 TJ in 2008–09 approached the record high of 7,731 TJ in 2005–06. The volume of gas distributed in Queanbeyan and Bungendore, both in New South Wales, is included in the figures for the ACT.

Water and sewerage services

- Drought conditions and low inflows into the ACT’s reservoirs continued through 2008–09. At the beginning of the year, total water storages were at 45.5% of capacity, before rising to a peak of 52.1% in October 2008 and then falling to 43.1% by the end of June 2009.
- Inflows over 2008–09 totalled 43.8 GL, well below the long-term annual average of 188.4 GL. ACTEW continued to draw water from the Murrumbidgee River, when conditions allowed, to supplement water from the four reservoirs that supply the ACT.
- ACTEW Corporation delivered 44,955 ML of water to 144,785 ACT premises and properties and 3,639 ML to Queanbeyan (bulk water) in 2008–09. In addition, under the environmental flow requirements, ACTEW Corporation released 5,262 ML as environmental flows.
- Residential properties accounted for around 95% of all properties supplied by ACTEW Corporation, but for only 61% of the water supplied to ACT properties. Average water consumption by residential premises rose from 194 kL in 2007–08 to 200 kL in 2008–09, while the average volume supplied to non-residential premises rose from 1,520 kL to 2,355 kL over the same period.

Utility compliance

- Licensees did not report any material breaches of their regulatory requirements in 2008–09.
- The Office of Fair Trading reported that its records did not show any complaints relating to marketing by utilities for 2008–09.
- The principal issues that the ACT Civil and Administrative Tribunal (ACAT) identified related to ActewAGL Distribution’s gas supply. ACAT reported that during 2008–09 the AGL gas call centre in Melbourne did not take a proactive approach to identify problems and advise customers and the energy industry ombudsman about them.
- ACAT noted that ActewAGL Electricity had not established a hardship program equivalent to that offered by almost all other energy utilities in Australia, and its lack of progress was of concern to the tribunal.
- ACT Health advised that it had not recorded any complaints in the 2008–09 reporting period about the operation of licensed utilities.
- The Environment Protection Authority advised the Commission that utilities holding environmental authorisations under the *Environment Protection Act 1997* had complied, to the satisfaction of the authority, with the conditions of their authorisations. The authority advised the Commission that two incidents were reported during 2008–09.
- The Office of the Commissioner for Sustainability and the Environment advised that it registered only one complaint about utility performance in 2008–09. The matter, part of a broader query on constraints to water reuse innovation, was successfully addressed.

- During 2008–09, the Commission accepted the surrender of Energy One’s electricity supply licence. The surrender of licence took effect on 19 December 2008.
- The \$5,000 of rebates paid in 2008–09 was just above the \$4,960 paid the previous year. The Commission notes that although 50 rebates were paid out during the year, only one complaint was made.

Financial outcomes

- In 2008–09, ActewAGL Distribution reported capital expenditure of \$39.2 million, down slightly from \$40.0 million the previous year but well above the ICRC-determined level of \$24.5 million for 2008–09. This continued a trend of capital expenditure being greater than the benchmark.
- ActewAGL Distribution’s total revenue in 2008–09 was \$139.1 million, up 5.5% from the previous year, while operating costs rose by 26% to \$49.2 million over the period. This resulted in a decrease in earnings before interest and tax from \$70.5 million in 2007–08 to \$67.3 million in 2008–09.
- For the residential sector, revenue from charges by ActewAGL Distribution increased to \$49.6 million in 2008–09, continuing the trend of rising charges, energy deliveries and average charges for this sector.
- For the non-residential sector, revenue from charges fell slightly in 2008–09, and although energy deliveries increased to just over 1,703 GWh, the average charge for power fell from 4.56c/kWh in 2007–08 to 4.41c/kWh in 2008–09.
- While revenue from the residential sector was fairly flat at around \$43 million over the four years to 2006–07, it rose by nearly 10% to over \$47 million in 2007–08 and to just under \$50 million in 2008–09. Over the same period, non-residential revenue continued to rise, from just under \$62 million in 2003–04 to just over \$75 million in 2008–09.

Customer complaints and responses

- In the electricity distribution sector, complaints about customer service were the most common (30% of all complaints), while in the gas distribution sector, complaints about connection issues were the most common (29%).
- The number of complaints received about electricity distribution trended down significantly over the three-year period, falling from 817 in 2006–07 to 611 in 2008–09.
- For electricity suppliers, complaints relating to disconnections and service requests not being met were by far the most common (68% of all complaints), while for gas suppliers, complaints about marketing were the most common (30%).
- During 2008–09, ActewAGL gas distribution received 14 complaints, up from 12 in 2007–08 but down from the 16 complaints in 2006–07.
- ActewAGL Retail, being the main gas retailer in the ACT, accounted for the bulk of complaints received. Of the 964 complaints received by all four utilities, billing and affordability accounted for 42%, ‘other retail matters’ for 54% and marketing for less than 3%.
- In 2008–09, ACTEW Corporation received a total of 541 complaints about water supply to premises in the ACT, well up from the 401 complaints in 2007–08 and the 363 complaints in 2006–07. Complaints about water quality (191 in 2008–09) featured prominently. The main increase during the year, from 140 to 219, was in the general category of ‘other network complaints’.
- During the year, 100 complaints were received about sewerage services, a slight rise from 97 the previous year, but twice the number received in 2006–07. The main categories of complaints continued to be sewage odour, sewerage services and reliability, as well as property damage and unplanned interruptions.

Reliability of services

- The ACT Planning and Land Authority (ACTPLA) reported that audit programs instituted in 2008–09 for the gas industry sector have improved the response by the network operator to technical safety issues.
- ACTPLA reported that it has continued to scrutinise water and sewerage network systems, with the aim of ensuring that the network operator benchmarks its performance against national data.
- ACTPLA noted the importance of pole inspection and maintenance. Of the 35,117 timber poles in the network, 7,721 were inspected by ActewAGL Distribution during the year; 1,493 were condemned.
- Average time without power (SAIDI) for the overall network fell in 2008–09 to 58.6 minutes after rising over the three earlier years.
- The average number of interruptions per customer (SAIFI) remained relatively stable over the four years.
- The average duration of interruptions in minutes (CAIDI) rose steadily over the three years to 2007–08, from 215 minutes in 2005–06 to nearly 255 minutes in 2007–08, but fell to just under 235 minutes in 2008–09.
- Audits by ACTPLA of high-pressure meter sets and secondary district regulator sets revealed a deterioration of the gas network assets over time and a lack of planning to redress maintenance issues. Issues identified included gas escapes; a lack of required gas detection devices, fire sprinklers and vent lines; compromised fire security; absence of lighting and required signage; and drainage and cleanliness issues.
- In 2008–09, members of the public reported 1,185 gas leaks in ActewAGL Distribution’s gas network, reversing the trend over the previous three years of decreasing reports of leaks. All reported gas leaks related to the medium-pressure system; none involved the high-pressure system.
- During 2008–09, there were eight instances of burst or leaking pipes that affected public health or caused, or were likely to cause, substantial damage or harm to people or property, well up from the one instance in the previous year and double the number recorded for 2006–07. However, in 2008–09 (and earlier years) the licensee was able to respond to the incidents within the required three-hour timeframe.
- The number of unplanned interruptions to sewerage services increased from 2,059 in 2007–08 to 2,229 in 2008–09, but remained well down from the 2,777 recorded in 2004–05.
- In 2008–09, ActewAGL Distribution’s call centre answered 70% of all calls within 30 seconds. Eighteen per cent of all calls were classed as ‘abandoned’, up slightly from 14% in 2007–08.
- Among the utilities, the percentage of calls answered within 30 seconds ranged from a low of 71% for Country Energy to 85% for ActewAGL Retail during the year.
- ACTEW Corporation received 43,370 water and sewerage calls on its non-emergency numbers and 27,510 calls on its emergency number; average waiting times were 50 and 20 seconds, respectively.

Customer safety net arrangements

- Between 2004–05 and 2008–09, the rate of disconnections of electricity customers for non-payment of accounts fell from 4.0 per 1,000 customers in 2004–05 to a low of 2.7 per 1,000 in 2008–09. Over the same period, the proportion of customers reconnected within seven days of disconnection remained constant at just over 60%.
- The reported incidence of disconnections of gas supply customers for non-payment of accounts was 13 per 1,000 customers in 2008–09, up slightly from the previous year but well down from 39 per 1,000 in 2005–06.

Environmental performance

- In 2008–09, ActewAGL Distribution’s electricity network losses were 4.4% of total network inputs, unchanged from the 2007–08 level.
- While there has been a considerable increase in the amount of GreenPower sold since 2004–05, the amount sold in 2008–09 was just 3.8% of total electricity sold.
- The estimated volume of greenhouse gases emitted as a result of natural gas consumption in the ACT in 2008–09 was 469,310 tonnes of carbon dioxide equivalent, a decrease of 1.4% from the 2007–08 volume.
- Total emissions have remained relatively constant over recent years at about 3.3 million tonnes of carbon dioxide equivalent each year. However, total emissions per head of population have fallen since 2005–06, declining from 10.2 tonnes per head in that year to 9.7 tonnes in 2008–09.
- Environmental flows released by ACTEW from water storages during the year were equal to just under 10% of the total water supplied in the ACT.

1 Introduction

The Commission has a number of statutory roles in relation to the licensing of electricity, gas, and water and sewerage network service providers and/or retail suppliers operating in the ACT. One of those roles is to monitor licensees' compliance with the conditions of their licences. In discharging that responsibility, the Commission prepares an annual report on licensee compliance and performance. An operating licence issued under the *Utilities Act 2000* requires utilities to notify the Commission of any material breaches of the licence conditions, legislation, codes of practice, directions or guidelines as soon as is practicable. Utilities are also required to report annually on the performance of their functions under the statute and on their compliance with licence conditions, including any non-material breaches.

Utility licences specify that reports must be on a financial year basis and must be submitted to the Commission no later than three months from the end of the financial year (that is, by 1 October).

Licensees are also required to report against a number of performance indicators, such as numbers of customers and complaints. Although this form of reporting is different from compliance reporting, and serves a different purpose, it forms part of the Commission's overall reporting program.

A number of other ACT Government agencies are also responsible for administering parts of the Utilities Act. In 2008–09, they included the ACT Planning and Land Authority (ACTPLA; Part 5 of the Act—Technical Regulation) and the ACT Civil and Administrative Tribunal (ACAT; Parts 11 and 12—Complaints).¹

Other agencies that played a role in 2008–09 in regulating utilities' performance are ACT Health, for example through the Public Health (Drinking Water) Code of Practice, and the Department of Territory and Municipal Services, for example through water resources management and environmental protection. Where appropriate, the Commission seeks advice from these agencies on utilities' performance against the respective statutory requirements.

The Commission's objectives under the Utilities Act include:

- to encourage the provision of safe, reliable, efficient and high-quality utility services at reasonable prices
- to minimise the potential for misuse of monopoly power in the provision of utility services
- to promote competition in the provision of utility services
- to encourage long-term investment, growth and employment in utility services
- to promote ecologically sustainable development in the provision of utility services
- to protect the interests of consumers
- to ensure that the government's programs for the provision of utility services are properly addressed.

The Commission is also the regulator of the Greenhouse Gas Abatement Scheme (GGAS) in the ACT. The scheme is implemented through the *Electricity (Greenhouse Gas Emissions) Act 2004*. Under that Act, the Commission's main functions are:

- to establish greenhouse gas benchmarks for participants

¹ Following the passage of the *Justice and Community Safety Legislation (Amendment) Act 2008 (No. 2)*, the ESCC was renamed the Energy and Water Consumer Council in July 2008. In February 2009, the functions of the council were subsumed into the ACT Civil and Administrative Tribunal (ACAT).

- to monitor benchmark participants' compliance, and report to the Minister on the extent to which participants comply with greenhouse gas benchmarks
- to impose penalties if required.

Each year, benchmark participants are required to reduce their emissions of greenhouse gases to the level of their greenhouse gas benchmarks. Where a benchmark participant's emissions are above its benchmark, excess emissions must be offset through the surrender of abatement certificates. The scheme's operation is effected through electricity supply licences.

The Electricity Feed-in Scheme for feed-in from renewable energy generators to the electricity network is established under the *Electricity Feed-in (Renewable Energy Premium) Act 2008*. The scheme commenced on 1 March 2009. The Electricity Feed-in Code is an industry code determined by the Commission under Part 4 of the Utilities Act. The code sets out practices and standards for the operation of the scheme.

1.1 Structure of this report

This report reviews the compliance and performance of licensed utilities that supplied services in the ACT during 2008–09. The utility services examined include electricity and gas distribution, the retailing (supply) of gas and electricity, and the provision of water and sewerage services.

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

- Chapter 2 describes the utility services regulated by the Commission and gives information on customer numbers and consumption volumes. It also comments on overall trends in each utility sector.
- Chapter 3 documents the extent to which, in 2008–09, licensed utilities complied with the broad range of obligations imposed on them by ACT regulatory instruments: the Utilities Act, utility licences, industry codes and, where applicable, ring fencing guidelines.
- Chapter 4 provides information on the financial performance of licensed energy utilities, including capital expenditure levels, revenues, operating costs, user charges and average bills.
- Chapter 5 deals with the customer service performance of licensed utilities. It focuses on customer complaints and network service quality.
- Chapter 6 examines network reliability, serviceability and maintenance. It includes material on planned and unplanned interruptions to services, as well as on utilities' responses to those interruptions. The chapter also details network serviceability and maintenance issues brought to the attention of the Commission by ACTPLA, the Technical Regulator.
- Chapter 7 reports on utilities' call centre performance. It includes statistics on calls made, calls answered within specific timeframes, waiting times for responses and calls abandoned.
- Chapter 8 reports on safety net arrangements for electricity and gas supply customers as well as for customers receiving water and sewerage services. It covers items such as the availability of instalment plans, flexibility in payment arrangements, credit management strategies and the use of security deposits.
- Chapter 9 covers the performance of utilities in relation to environmental issues that are a direct responsibility of the Commission, such as water losses, greenhouse gas emissions and consumption efficiency.
- Appendix 1 describes the ACT's utilities regulatory framework and lists the industry and technical codes in force in 2008–09.
- Appendix 2 sets out the data used to compile the figures in the report.

- Appendix 3 provides further information on the licensed suppliers (retailers) operating in the ACT on 30 June 2009.
- Appendix 4 lists compliance and performance reports published between 2004 and 2009.

The report also contains a list of acronyms and abbreviations.

1.2 Commercial-in-confidence information

To enable the Commission to undertake its responsibilities for compliance and performance reporting, licensees are required to provide information that may be commercially sensitive. Such information has been excluded from this report or published in an aggregated form to protect confidential commercial information. For example, this report gives the total volume of energy sold in the ACT, rather than the volume of energy sold by each supplier.

1.3 Accuracy of data

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

1.4 Comparison with earlier reports

The approach taken to utility licence compliance in this report is broadly similar to that taken in previous reports. Utilities were required to report to the Commission on their compliance with a number of key obligations under the Utilities Act, licence conditions, industry codes and, where applicable, ring fencing guidelines. In addition, the Commission consulted with other ACT regulators.

The report highlights compliance issues that arose during the reporting year, updates compliance issues that were discussed in earlier reports, and provides a summary of compliance against the minimum service standards set out in schedules to the Consumer Protection Code. New in the 2008–09 report are reports on compliance with the Electricity Feed-in Scheme and the GreenPower scheme. The performance content in this report continues the approach taken in the 2007–08 report.

As in previous reports, the Commission’s aim is to present comparisons with interstate jurisdictions that:

- can be attributed to authoritative published data
- avoid duplicating comparative analyses already published in other publications (including the Australian Energy Regulator’s *State of the energy market* report and the national performance reports jointly produced by the Water Services Association of Australia, the National Water Commission and the parties to the National Water Initiative)
- focus on matters of previous concern about the performance of ACT utilities or the ACT in general, or matters that have been of demonstrated interest to key stakeholders.

Incorporated into this report, in chapter 6, are major issues associated with the technical regulation of utilities in the ACT. For the most part, that material has been extracted from the Chief Planning Executive’s statutory report to the Commission for 2008–09.²

² This requirement is provided for in s. 66, Part 5 (Technical regulation) of the Utilities Act. The Chief Executive of the Department responsible for Part 5 of the Act is sometimes referred to as the ‘Technical Regulator’. Under the Administrative Arrangements in place during 2008–09, this was the Chief Planning Executive of ACTPLA.

The earlier practice of publishing the complete details of all reports provided by the licensees in an appendix has been discontinued for this report. The data, depending on its confidential nature, may be available on request to the Commission.

1.5 Utilities licensed in the ACT

Licensed utilities in the ACT during 2008–09 are set out in Table 1.1. Further information on licensed supply utilities is provided in Appendix 3, including the dates on which their licences commenced and, for the 2008–09 reporting year, whether the suppliers sold energy to customers.

Table 1.1 ACT licensed utilities, 1 July 2008 to 30 June 2009

Service	Licensed utility
Electricity distribution and connection	ActewAGL Distribution ^a
Electricity supply	ActewAGL Retail ^b
	AGL Sales Pty Ltd
	AGL Sales (Queensland Electricity) Pty Ltd
	Aurora Energy Pty Ltd
	Australian Power and Gas Pty Ltd
	Country Energy ^c
	Dodo Power & Gas Pty Ltd
	EnergyAustralia
	Energy One Pty Ltd ^d
	ERM Power Retail Pty Ltd
	Integral Energy Australia
	Jackgreen (International) Pty Ltd
	Origin Energy Electricity Ltd
	Powerdirect Pty Ltd
	Red Energy Pty Ltd
	SUN Retail Pty Ltd
	TRUenergy Pty Ltd
	TRUenergy Yallourn Pty Ltd
	Sanctuary Energy Pty Ltd ^e
Gas transmission	East Australian Pipeline Limited
Gas distribution and connection	ActewAGL Distribution ^a
Gas supply	ActewAGL Retail ^b
	Australian Power and Gas Pty Ltd
	Country Energy
	Dodo Power & Gas Pty Ltd
	EnergyAustralia
	Jackgreen (International) Pty Ltd
	SUN Retail Pty Ltd
	TRUenergy Pty Ltd
Water supply	ACTEW Corporation Ltd
Sewerage services	ACTEW Corporation Ltd

a ACTEW Distribution Ltd and, until August 2008, Alinta CGA Pty Ltd, trading as ActewAGL Distribution; from August 2008, ACTEW Distribution Ltd and Jemena Networks (ACT) Pty Ltd.

b ACTEW Retail Ltd and AGL ACT Retail Investments Pty Ltd, trading as ActewAGL Retail.

c The right to supply to franchise customers applies only to those customers serviced by that part of Country Energy's distribution network that is within the ACT. Country Energy has been exempted from the requirement to hold an electricity distribution licence.

d Energy One's licence was surrendered on 19 December 2008.

e Sanctuary Energy was granted a licence on 29 June 2009. The licence was effective from 1 July 2009.

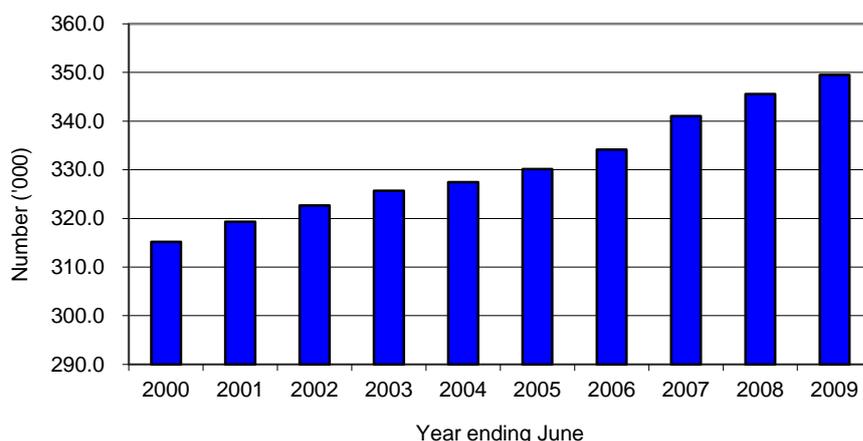
1.6 Key features of the ACT

This section outlines the population, climate and topography of the ACT.

1.6.1 Population

At 30 June 2009, the ACT had an estimated resident population of 349,500, an increase of 34,300 from 315,200 at 30 June 2000 (see Figure 1.1)

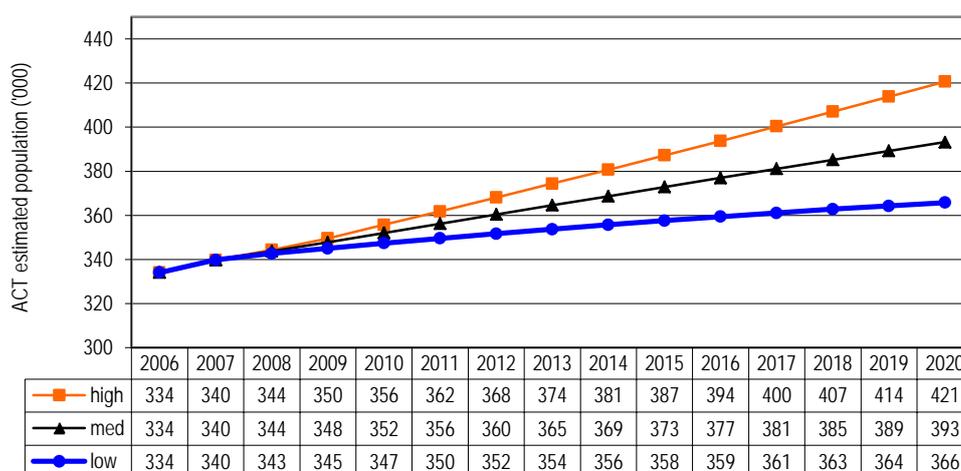
Figure 1.1 ACT population, 2000 to 2009



Source: Australian Bureau of Statistics (ABS), *Australian demographic statistics*, Table 4E, Estimated resident population, states and territories (number), cat. no. 3101.0, ABS, Canberra.

The population of the ACT is forecast to increase to just over 400,000 by 30 June 2022 (medium range projection) or by 30 June 2017 (high range; see Figure 1.2). Based on recent and forecast trends, it is unlikely that the low-range increase will occur. It has been included for comparison with the high and medium projections. The projected population levels provide an indication of the demand for utility services in future years.

Figure 1.2 ACT forecast population, low, medium and high ranges, 2006 to 2020

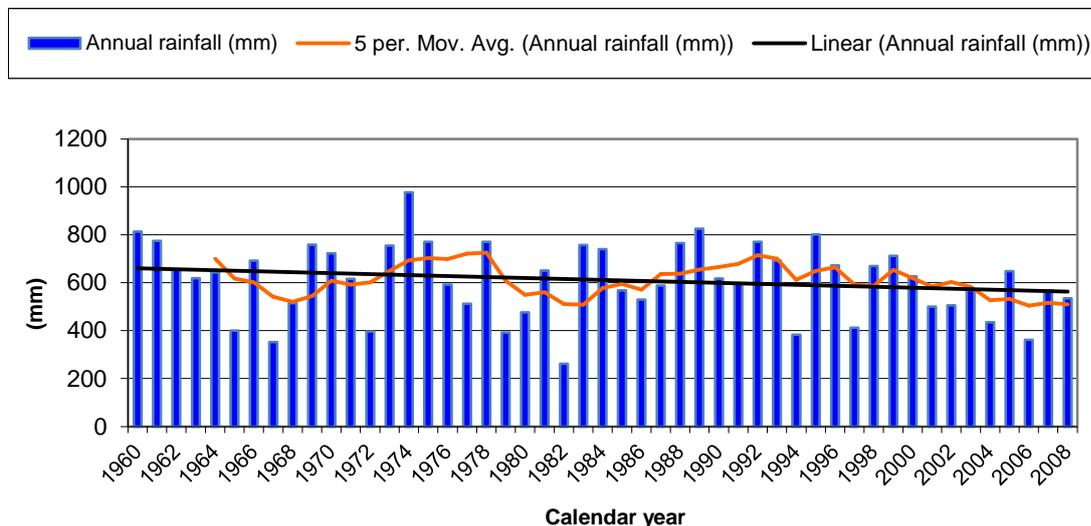


Source: ABS, *Population projections, Australia*, Table 5.11, Summary Tables, 2006 to 2101, cat. no. 3222.0, p. 88.

1.6.2 Climate

The ACT's climate is essentially temperate, with hot summers and cold winters. Much of the rain that falls during the summer occurs with storms. Annual rainfall from 1960 to 2009, shown in Figure 1.3, shows a declining trend that is expected to continue over coming years.

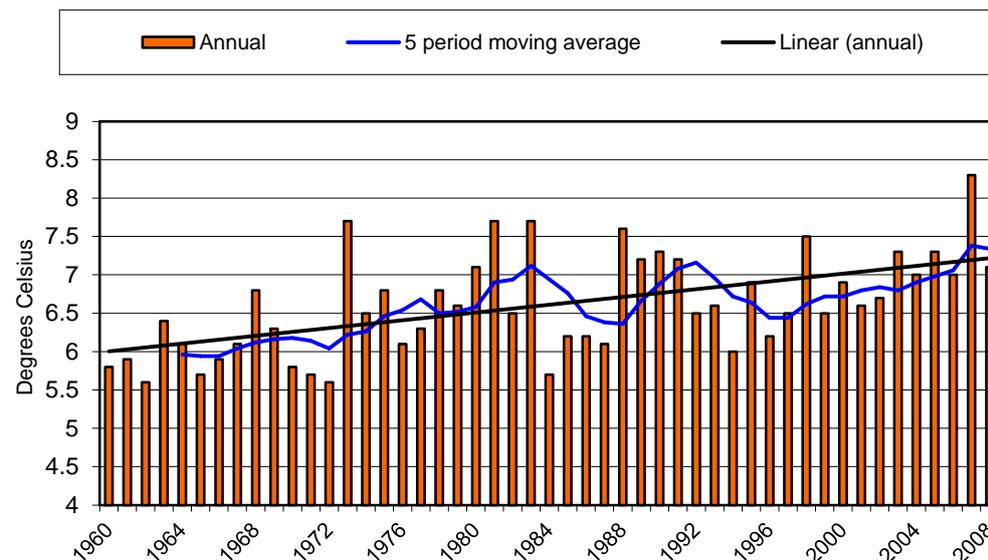
Figure 1.3 ACT annual rainfall, calendar years 1960 to 2008



Source: Bureau of Meteorology, <http://www.bom.gov.au/climate/data/weather-data.shtml>.

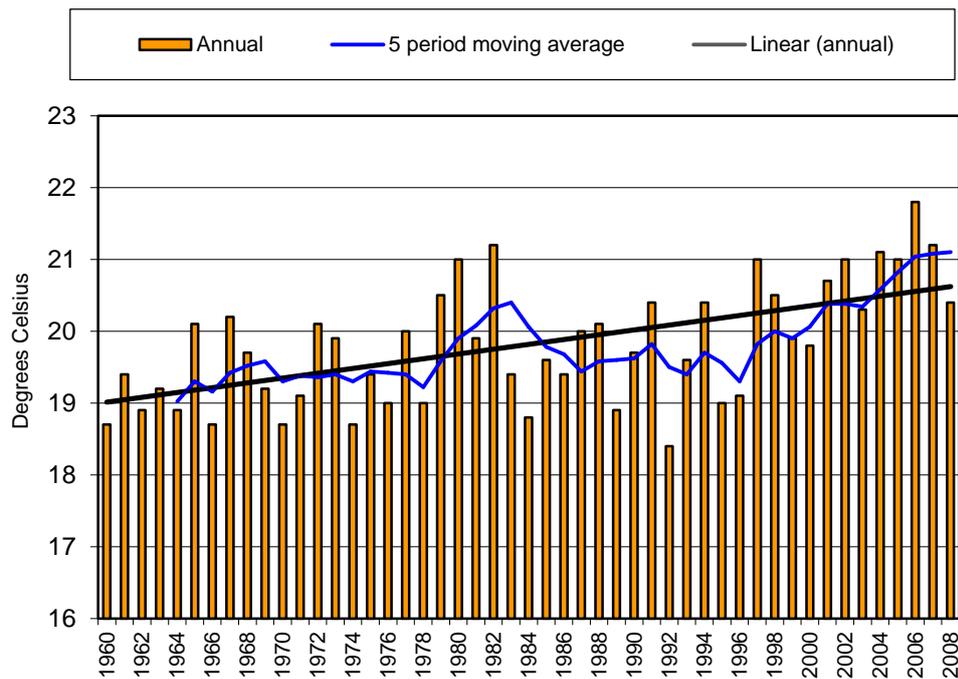
Both minimum (Figure 1.4) and maximum (Figure 1.5) temperatures in the ACT have tended to rise over the past few decades. The annual average minimum temperature rose from 6°C in 1960 to 7.2°C in 2008, while the average maximum temperature over the same period rose from 19°C to 20.6°C.

Figure 1.4 ACT mean minimum temperatures, calendar years 1960 to 2008



Source: Bureau of Meteorology, <http://www.bom.gov.au/climate/data/weather-data.shtml>.

Figure 1.5 ACT mean maximum temperatures, calendar years 1960 to 2008



Source: Bureau of Meteorology, <http://www.bom.gov.au/climate/data/weather-data.shtml>.

1.6.3 Topography

The total area of the ACT is 2,351.6 square kilometres (about 235,000 hectares), of which 60% is hilly or mountainous. The highest peak in the ACT is Mount Bimberi (1,911 metres). The ACT's main physical features are timbered mountains (in the south and west), and plains and hill country (in the north).

The ACT is within the upper Murrumbidgee River catchment in the Murray–Darling Basin. The Murrumbidgee flows through the territory from the south, and its tributary, the Molonglo, from the east. Other tributaries of the Murrumbidgee include the Cotter, Paddys, Naas and Gudgenby rivers. The Molonglo River was dammed in 1964 to form Lake Burley Griffin.

2 Utility services—main features

This chapter provides a brief overview of the utility services regulated by the Commission. It includes information on customer numbers and consumption volumes and discusses overall trends in each utility sector.

2.1 Sources of ACT 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 territory's total electricity is generated in the ACT.³

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

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

The Canberra substation is supplied by four incoming 330 kV transmission lines and has three outgoing 132 kV sub-transmission lines. Other outgoing 132 kV sub-transmission lines supply New South Wales areas.

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

The two bulk supply substations and the incoming lines are owned and operated by TransGrid. The Australian Energy Regulator regulates the transmission network. The 132 kV and 66 kV sub-transmission systems supplying the ACT are owned and operated by ActewAGL Distribution. Electricity from the NEM is sold to customers via the electricity transmission and distribution networks by electricity suppliers (retailers).

2.2 Electricity transmission

The Utilities (Electricity Transmission) Regulation 2006 made transmission a utility service when declared by the Minister. Section 4 provides that the transmission of electricity through an electricity transmission network declared under section 5 is a utility service. In 2006, TransGrid was exempted from the requirement to hold a licence on condition that it comply with specific conditions relating to minimum reliability standards governing bulk electricity supply arrangements and with appropriate technical, safety and prudential standards detailed in the exemption instrument.⁴

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

⁴ Utilities (Exemption) 2006 (No. 1) Disallowable instrument DI2006-47 (repealed) and Utilities (Exemption) 2009 (No. 3) Disallowable instrument DI2009-144.

2.3 Electricity distribution

The ACT has one licensed electricity distributor: ActewAGL Distribution.⁵ ActewAGL Distribution's licence authorises it to provide electricity distribution services and electricity connection services. During 2008–09, ActewAGL's distribution network delivered electricity to more than 161,000 metered supply points, of which nearly 145,000 were to residential customers and more than 16,000 were to non-residential customers. During the year, 2,879 GWh of electricity was delivered; 1,703 GWh, or just over 59%, went to non-residential customers (see Table 2.1).

Table 2.1 ActewAGL Distribution's network, supply points and energy delivered, 2008–09

Category	Total	By type of customer		By supply voltage		
		Residential	Non-residential	Sub-transmission	High voltage	Low voltage
Number of metered supply points (at end June 2009) ^a	161,061	144,929	16,132	0	22	161,039
Energy delivered (GWh)	2,879	1,176	1,703	0	379	2,500

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

Source: ActewAGL Distribution's 2008–09 annual report to ICRC.

Table 2.2 shows that there has been a steady increase in both the number of metered supply points and the amount of energy delivered since 2003–04, mainly due to increased demand.

Table 2.2 ActewAGL Distribution's network, supply points and energy delivered, 2003–04 to 2008–09

Category	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Number of metered supply points (end June)^a						
Residential	132,588	137,731	140,849	142,410	143,281	144,929
Non-residential	13,466	13,577	13,661	13,949	15,174	16,132
Total supply points	146,054	151,308	154,510	156,359	158,455	161,061
Energy delivered (GWh)						
Residential	1,101	1,119	1,180	1,148	1,150	1,176
Non-residential	1,518	1,510	1,593	1,651	1,681	1,703
Total energy delivered	2,619	2,629	2,773	2,799	2,831	2,879
Energy delivered as proportion (%)						
Residential	42.0	42.6	42.6	41.0	40.6	40.8
Non-residential	58.0	57.4	57.4	59.0	59.4	59.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

a This 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.

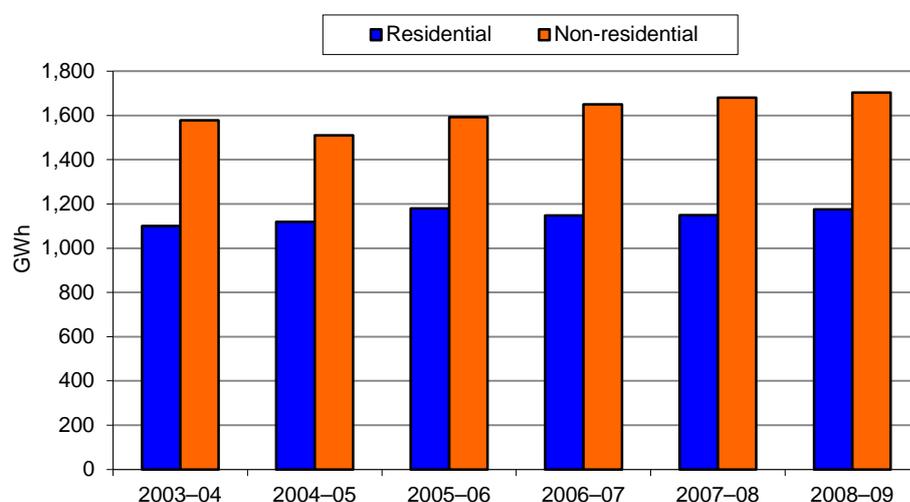
Source: ActewAGL Distribution reports to ICRC.

Figure 2.1 shows changes in the amount of energy distributed from 2003–04 to 2008–09, as reported for distribution services. While distribution to non-residential connections tended to increase over the

⁵ Country Energy has been granted an exemption from the requirement to hold a licence to provide electricity distribution and connection services for the electricity distribution line that it owns and operates in the ACT. The line is approximately 12 kilometres long and runs along the ACT – New South Wales border.

six-year period, distribution to the residential market remained relatively flat, suggesting that residential consumers have been more responsive to calls to reduce power consumption.

Figure 2.1 Energy distributed, electricity distribution, ActewAGL Distribution, 2003–04 to 2008–09



Source: ActewAGL Distribution's annual reports to ICRC.

At 30 June 2009, ActewAGL's distribution network, as shown in Table 2.3, consisted of 4,795 km of power lines. Overhead and underground lines are about equal in length. Details of the network since 30 June 2004 are shown in Table 2.4.

Table 2.3 ActewAGL Distribution's network, line length, 2008–09 (km)

Feeder category	Total	By placement		By supply voltage		
		Underground	Overhead	Sub-transmission	High voltage	Low voltage
Urban and rural short	4,795 ^a	2,400	2,395	205 ^b	2,322	2,268 ^c

a Includes circuits operating at 132 kV, 66 kV, 22 kV and 11 kV.

b Includes 132 kV, 66 kV and 22 kV lines.

c Excludes circuits classified as services.

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

Source: ActewAGL Distribution's 2008–09 annual report to ICRC.

Table 2.4 ActewAGL Distribution's network, urban and rural short, line length, 2003–04 to 2008–09 (km)

Year ending June	Total ^a	By placement		By supply voltage		
		Underground	Overhead	Sub-transmission ^b	High-voltage	Low-voltage ^c
2003–04	4,623	2,149	2,474	169	2,264	2,190
2004–05	4,676	2,217	2,459	205	2,264	n.a.
2005–06	4,691	2,251	2,440	205	2,280	2,206
2006–07	4,696	2,283	2,413	205	2,282	2,209
2007–08	4,696	2,283	2,413	205	2,282	2,209
2008–09	4,795	2,400	2,395	205	2,322	2,268

n.a. = not available.

a Includes circuits operating at 132 kV, 66 kV, 22 kV and 11 kV.

b Includes 132 kV, 66 kV and 22 kV lines.

c Excludes circuits classified as services.

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

Source: ActewAGL Distribution's annual reports to ICRC.

At 30 June 2009, there were 28 sub-transmission transformers with a capacity of 1,342 MVA, while the number of distribution transformers totalled 4,822, with a capacity of 1,872 MVA (see Table 2.5).

Table 2.5 Number of transformers, electricity distribution, ActewAGL Distribution, 2008–09

Network	Number	Capacity (MVA)
Sub-transmission	28 ^a	1,342
Distribution	4,822 ^b	1,872

MVA = megavolt ampere.

a Number of transformers and their capacity at 132 kV and 66 kV.

b Number of sub-stations and their capacity at 22 kV and 11 kV.

Source: ActewAGL Distribution's 2008–09 annual report to ICRC.

Table 2.6 shows other key statistics of ActewAGL's electricity distribution network during 2007–08 and 2008–09. Distribution losses were around 4.3% for both years, while the level of peak demand in 2008–09 (607 MW) was slightly higher than in 2007–08 (589 MW).

Table 2.6 Key business descriptors, electricity distribution, ActewAGL Distribution, 2007–08 and 2008–09

Descriptor	2007–08	2008–09
Distribution losses ^a (%)	4.390	4.325
Network service area (km ²)	2,358	2,358
Number of poles—distribution	53,037	53,020
Peak demand—distribution (MW)	589	607

a Based on five-year moving average.

Source: ActewAGL Distribution's 2007–08 and 2008–09 annual reports to ICRC.

2.4 Electricity supply

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

Franchise customers become non-franchise customers if they elect to enter into a negotiated supply contract with any electricity supplier. The retail tariff for non-franchise customers is not regulated.

2.4.1 Electricity sales and consumption

Table 2.7 provides details of customer numbers, customer sales and average electricity consumption, broken down into residential and non-residential categories. Figure 2.2 shows customer growth trends over the past six reporting periods, while Figure 2.3 shows the total volume of electricity sold to residential and non-residential customers over the same period. Figures 2.4 and 2.5 show the average consumption of each category over the six-year period.

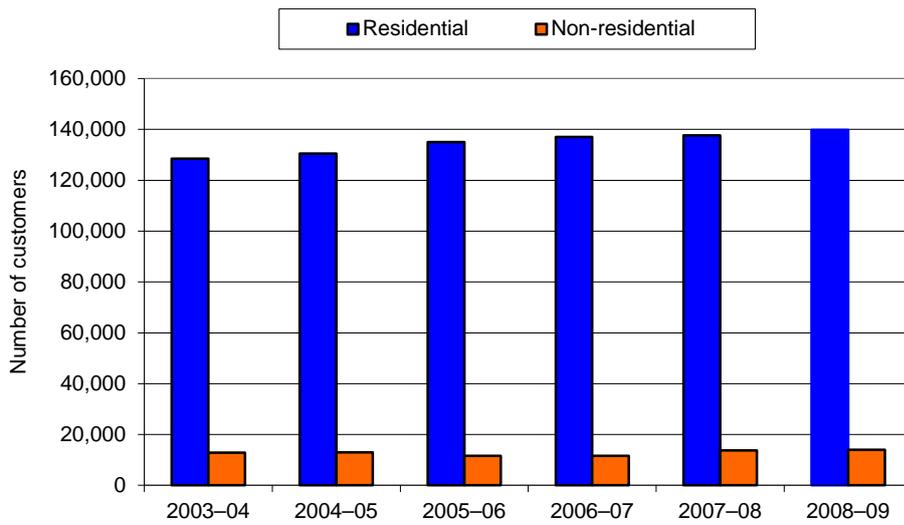
The ACT electricity retail market comprises mainly residential customers (about 140,000 at the end of June 2009, accounting for just over 90% of total customer numbers). However, power sales to residential customers account for just on 40% of total sales. Average electricity consumption by residential customers has tended to fall over recent years, from about 8.69 MWh in 2004–05 to 8.35 MWh in 2008–09. The trend in average non-residential consumption is also down.

Table 2.7 Customer numbers and sales, electricity supply, ACT, 2004–05 to 2008–09

	2004–05	2005–06	2006–07	2007–08	2008–09
Customer numbers (end June)					
Residential	130,548	134,979	137,016	137,582	139,793
Non-residential	13,046	11,618	12,421	13,772	14,026
Total numbers	143,594	146,597	149,437	151,354	153,819
Customer sales (GWh)					
Residential	1,134	1,162	1,148	1,142	1,167
Non-residential	1,583	1,659	1,651	1,676	1,699
Total sales	2,717	2,821	2,799	2,818	2,866
Average consumption (MWh/customer)					
Residential	8.69	8.61	8.38	8.30	8.35
Non-residential	121.34	142.80	132.92	121.69	121.13
Average, all categories	18.92	19.24	18.73	18.62	18.63

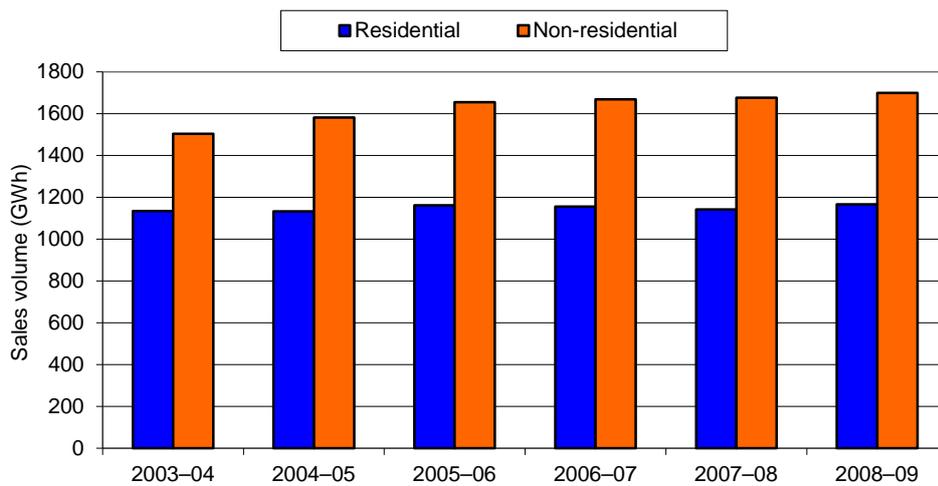
Note: Reported sales by suppliers may not equate to the distribution volumes reported by distributors because of differences in the timing of billing cycles.
Source: Licensed electricity utilities' annual reports to ICRC.

Figure 2.2 Customer numbers, electricity supply, ACT, end June, 2003–04 to 2008–09



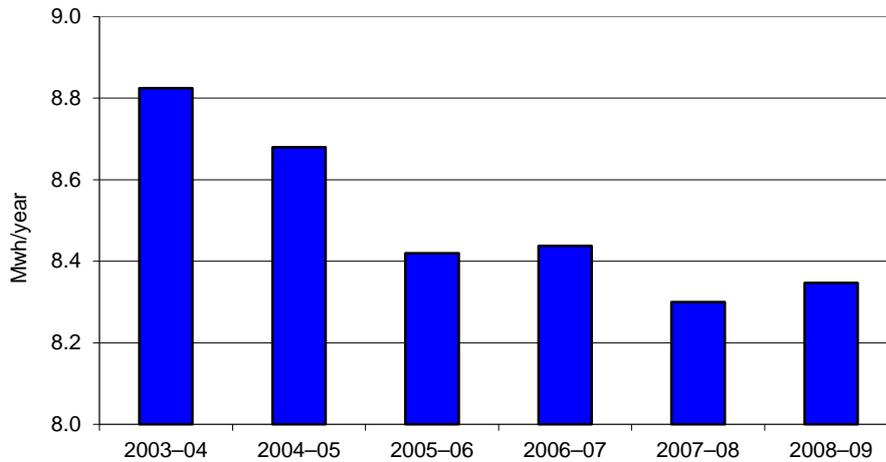
Source: Licensed electricity suppliers' annual reports to ICRC.

Figure 2.3 Sales volume, electricity supply, residential and non-residential, ACT, 2003–04 to 2008–09



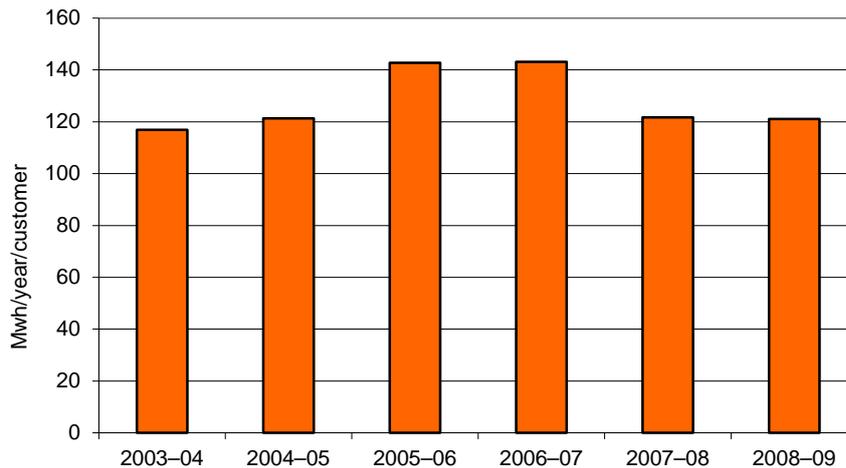
Source: Licensed electricity utilities' annual reports to ICRC.

Figure 2.4 Average electricity consumption, residential customers, ACT, 2003–04 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

Figure 2.5 Average electricity consumption, non-residential customers, ACT, 2003–04 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

Table 2.8 provides a more detailed breakdown of customer numbers by size, contract type and residential and non-residential categories for 2007–08 and 2008–09. Customers range from small customers consuming less than 100 MWh/year to large customers consuming more than 160 MWh/year. Some key points to be taken from this table are as follows:

- Residential customers made up about 91% (139,793) of the total number of customers (153,819) in 2008–09, similar to 2007–08.
- Customers (residential and non-residential) consuming less than 100 MWh/year accounted for 98% (151,377) of the total number of customers in in 2008–09, similar to 2007–08.
- Customers (residential and non-residential) on standard contracts (122,489) accounted for just under 80% of the total number of customers in 2008–09, a slight increase on the level (78%) in 2007–08.

Table 2.8 Customer numbers by category, electricity supply, ACT, 2007–08 and 2008–09

	Small (<100 MWh/year)		Medium to large (>100 MWh/year)		Totals	
	2007–08	2008–09	2007–08	2008–09	2007–08	2008–09
Customers on standard contract						
Residential	107,490	112,012	0	0	107,490	112,012
Non-residential	10,504	10,477	0	0	10,504	10,477
Subtotal	117,994	122,489	0	0	117,994	122,489
Customers on negotiated contracts						
Residential	30,092	27,781	0	0	30,092	27,781
Non-residential	902	1,107	2,366	2,442	3,268	3,549
Subtotal	30,994	28,888	2,366	2,442	33,360	31,330
Total customer numbers						
Residential	137,582	139,793	0	0	137,582	139,793
Non-residential	11,406	11,584	2,366	2,442	13,772	14,026
Total numbers	148,988	151,377	2,366	2,442	151,354	153,819

Source: Licensed electricity utilities' 2007–08 and 2008–09 annual reports to ICRC.

Sales of electricity to various categories of customers during 2008–09 are shown in Table 2.9. Total sales amounted to 2,865,755 MWh, or 2,866 GWh, during the year, of which 1,201 GWh (42%) was to customers on standard contracts and 1,664 GWh (58%) was to customers on negotiated contracts. Small customers (those who purchased less than 100 MWh in 2008–09) accounted for just over 51% of all sales; medium (100–160MWh) and large customers (>160Mwh) accounted for 37% and 12%, respectively.

Table 2.9 Electricity sales by contract type and usage level, electricity supply, ACT, 2008–09

Contracts	Sales to small customers ^a (MWh)	Sales to medium customers ^b (MWh)	Sales to large customers ^c (MWh)	Total
Customers on standard contract				
Residential	922,418	0	0	922,418
Non-residential	278,839	0	0	278,839
Subtotal	1,201,257	0	0	1,201,257
Customers on negotiated contracts				
Residential	244,384	0	0	244,384
Non-residential	28,611	1,061,796	329,706	1,420,114
Subtotal	272,995	1,061,796	329,706	1,664,498
Total sales				
Residential	1,166,802	0	0	1,166,802
Non-residential	307,450	1,061,796	329,706	1,698,953
Total sales	1,474,252	1,061,796	329,706	2,865,755

a 'Small' customers use <100 MWh/year.

b 'Medium' customers use 100–160 MWh/year.

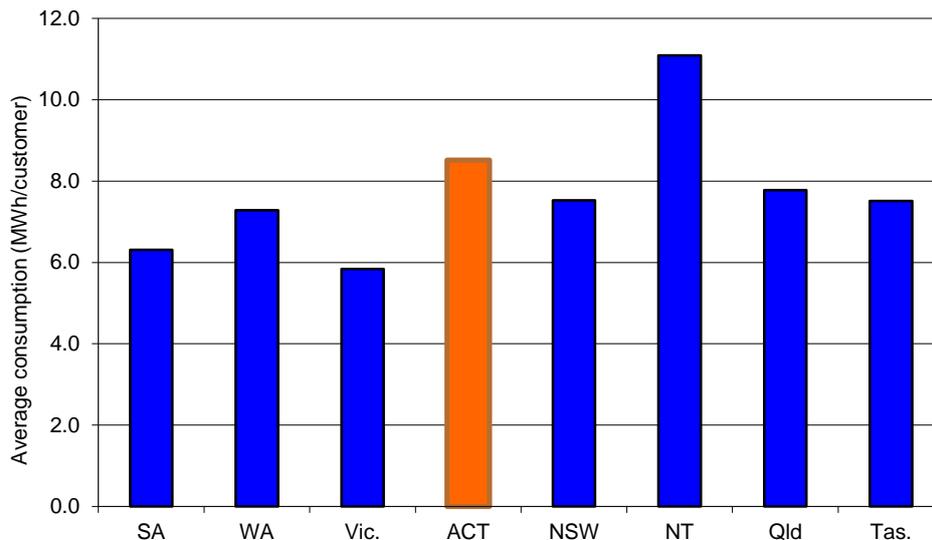
c 'Large' customers use >160 MWh/year.

Source: Licensed electricity utilities' annual reports to ICRC.

Figures 2.4 and 2.5 show residential and non-residential electricity consumption trends over the past six reporting periods, from 2003–04 to 2008–09. Despite the slight rise in residential consumption in 2008–09, there was a distinct downward trend over the six years to 2008–09. The trend to lower power consumption by residential users is likely to be due in part to price rises and in part to efforts to encourage lower power usage, as well as smaller residential units.

Figure 2.6 compares ACT electricity consumption per customer with consumption in other states and territories in 2008–09.

Figure 2.6 Average electricity consumption, residential customers, states and territories, 2008–09



Source: Electricity Supply Association of Australia, *Electricity Gas Australia 2010*.

2.4.2 Competition in the retail electricity market

Allowing customers to choose their preferred electricity retailer commenced in 1998 for customers using more than 160 MWh/year. From 1 July 2003, all customers were able to choose their preferred retailer. Table 2.10 and Figure 2.7 show customer and supplier numbers from 2004–05 through to 2008–09.

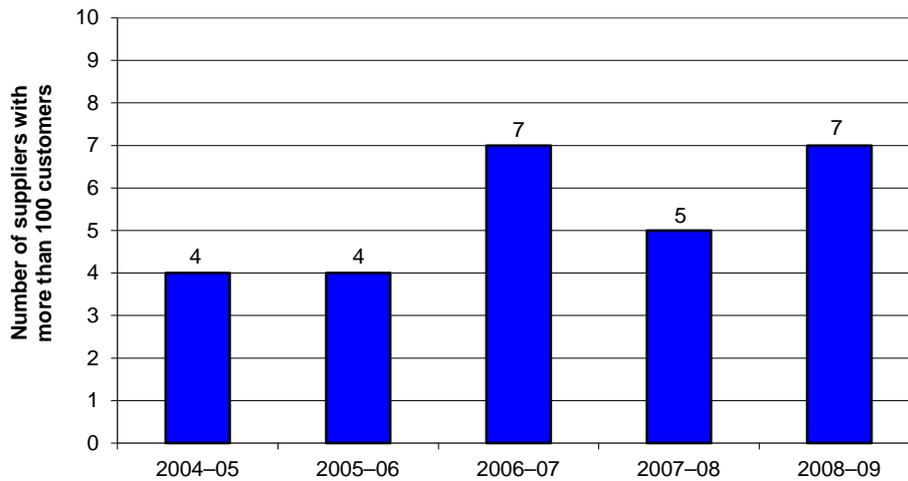
In 2008–09, 12 electricity suppliers were active in the ACT market (see Appendix 3). Of those, seven suppliers had more than 100 customers, compared with five suppliers in 2007–08.

Table 2.10 Number of suppliers by customer number categories, electricity supply, ACT, 2004–05 to 2008–09

Customer number category	2004–05	2005–06	2006–07	2007–08	2008–09
Fewer than 10	6	8	3	5	3
10 to 50	2	2	2	2	2
51 to 100	0	1	0	0	0
More than 100	4	4	7	5	7

Source: Licensed electricity utilities' annual reports to ICRC.

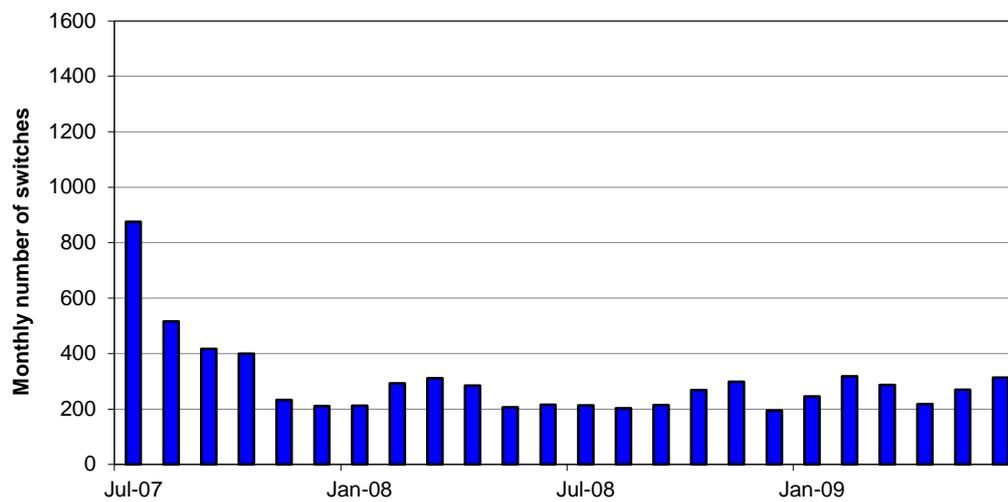
Figure 2.7 Number of suppliers with more than 100 customers, electricity supply, ACT, 2004–05 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

Figure 2.8 sets out, for the period from July 2007 to June 2009, the number of electricity customers who transferred to a different supplier in each month. Following a period of strong switching behaviour in 2006–07, there was a noticeable reduction in switching: only 3,143 customers changed retailers in 2008–09, compared to 4,175 in 2007–08.

Figure 2.8 ACT electricity customers transferring to new retailers, July 2007 to June 2009



Source: Reports from Australian Energy Market Operator (AEMO).

The numbers of customers switching retailers in the ACT, New South Wales, South Australia and Victoria are shown in Table 2.11. The numbers shown for the ACT are sourced from material provided monthly to the Commission.⁶

Table 2.11 Customers switching electricity retailers, 2007–08 and 2008–09

Jurisdiction	Switches		Change (%)
	2007–08	2008–09	
Australian Capital Territory	4,175	3,143	-24.7
New South Wales	327,706	388,309	18.5
South Australia	148,439	96,251	-35.2
Victoria	625,464	559,303	-10.6

Source: AEMO.

2.5 Sources of natural gas

Natural gas accounts for about 9.1% of total energy consumption in New South Wales and the ACT.⁷ Natural gas is supplied to gas distribution networks via high-pressure transmission pipelines from two sources:

- The Dalton to Watson⁸ lateral transmission pipeline, owned by the Australian Pipeline Trust, branches off the Moomba to Sydney transmission pipeline, which transports natural gas from Moomba, in South Australia, across regional New South Wales to Sydney.
- The ActewAGL Hoskinstown to Fyshwick transmission pipeline interconnects with the Eastern Gas Pipeline, which transports gas from Longford in Victoria, at Hoskinstown custody transfer station.

2.6 Gas transmission

The Moomba to Sydney gas pipeline is owned by the Australian Pipeline Trust and operated by East Australian Pipeline Limited (EAPL). The transmission pipeline in the ACT is a 6 km section of that pipeline, and EAPL is licensed under the Utilities Act to carry out that transmission operation.

2.7 Gas distribution

The ACT has one licensed gas distributor: ActewAGL Distribution. ActewAGL Distribution's licence authorises it to provide gas distribution and gas connection services. ActewAGL's high-pressure gas network in the ACT includes all primary and secondary pressure pipelines. A primary pipeline connects the Gungahlin primary regulating station (PRS), Watson PRS, Jerrabomberra packaged off-take station (POTS) and the Phillip PRS.

A pipeline continuing from ActewAGL's Hoskinstown custody transfer station to the ACT border pipeline (licensed in New South Wales and covered by another safety and operating plan) interconnects with the primary pipeline at the Fyshwick trunk receiving station.

⁶ Details supplied by AEMO.

⁷ Australian Bureau of Agricultural and Resource Economics, *Energy Update 2008*, Table C2.

⁸ The lateral transmission pipeline is conventionally described as the Dalton to Watson pipeline although it, in fact, terminates in Kenny.

A primary pipeline connects the Gungahlin PRS to the intersection of Gundaroo Drive and Gungahlin Drive, Ngunnawal. A secondary main at the intersection of Owen Dixon Drive and William Slim Drive, McKellar, will operate as part of the secondary network (1,050 kPa) until it is upgraded to full primary pressure to meet network capacity requirements.

Secondary mains are fed from the Watson trunk receiving station, Jerrabomberra POTS, Phillip PRS and Gungahlin PRS. These mains supply natural gas to the medium-pressure distribution network, as well as directly to many contract and tariff end users. The maximum and minimum allowable operating pressures are set out in Table 2.12.

Table 2.12 Schedule of standard operating and metering pressures (kPa)

Mains	Maximum allowable operating pressure	Minimum operating pressure	Emergency pressure	Standard metering pressure
Primary mains				
ACT border to Fyshwick trunk receiving station	14,900	8,000	2,400	n.a
Mains connecting Gungahlin PRS, Canberra PRS, Jerrabomberra POTS and Phillip PRS	6,895	1,750 to 2,200	1,750	n.a.
Mains connecting Gungahlin PRS to the intersection of Gundaroo Drive and Gungahlin Drive, Ngunnawal	6,895	525	400	n.a.
Secondary mains	1,050	525	400	100
Medium	210	70	40	2.75, 5, 35

n.a. = not applicable.

Source: ACT Network Safety and Operating Plan, revision 9, section 2, Table 1.

At 30 June 2009, ActewAGL Distribution's network comprised 3,718 km of medium-pressure and 249 km of high-pressure mains. In 2008–09, ActewAGL distributed 7,965 TJ of gas to just over 100,000 delivery point identifiers (see Table 2.13).⁹

⁹ The number of distribution customers (supply points) is not the same as the number of customers with contracts for gas supply.

Table 2.13 Gas distribution, pipeline details, gas delivered and customers connected, 2007–08 and 2008–09

Item	2007–08	2008–09	Change (%)
Pipeline length at 30 June (km)			
Medium pressure ^a	3,510	3,718	+5.9
High pressure ^b	249	249	0.0
Total pipeline length	3,758	3,966	+5.6
Number of customers connected to network at 30 June	94,590	n.a.	n.a.
Number of supply points at 30 June	98,059	100,254	+2.2
Quantity of gas entering the distribution network (TJ) ^c	6,925	7,965	15.0
Quantity of gas billed (TJ)^d			
Tariff customers (<10 TJ/year)	5,832	6,798	+16.6
Non-tariff customers (>10 TJ/year)	1,017	1,030	+1.3
Total quantity of gas billed	6,849	7,828	+14.3

n.a. = not available.

a ActewAGL mains operating at <1,050 kPa in ACT only.

b ActewAGL mains operating at 1,050 kPa and above in ACT only.

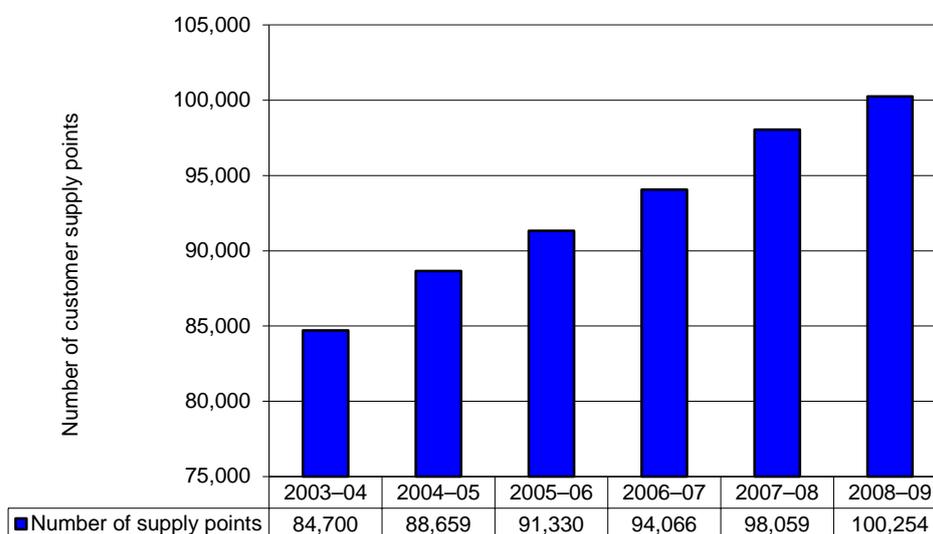
c ACT only.

d ACT only.

Source: ActewAGL Distribution's annual reports to ICRC. Note some data as reported to the ICRC may differ from that published in other sources.

ActewAGL Distribution's customer base for gas is smaller than for electricity, but, as Figure 2.9 shows, continues to grow.

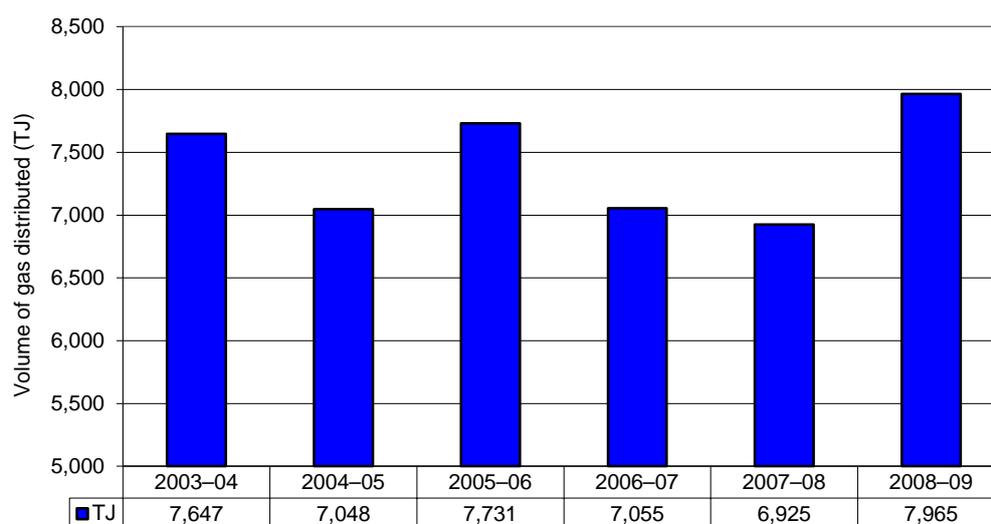
Figure 2.9 Customer supply point numbers, gas distribution, ACT, 2003–04 to 2008–09



Source: ActewAGL Distribution's annual reports to ICRC.

Figure 2.10 shows that the volume of gas distributed in the ACT has fluctuated over the past six reporting periods; the volume in 2008–09 (7,695 TJ) approached the record high of 7,731 TJ in 2005–06. The volume of gas distributed in Queanbeyan and Bungendore, both in New South Wales, is included in the figures for the ACT.

Figure 2.10 Volume of gas distributed, gas distribution, ACT, 2003–04 to 2008–09



Source: ActewAGL Distribution's annual reports to ICRC.

2.8 Gas supply

During 2008–09, eight utilities were licensed to supply gas in the ACT: ActewAGL Retail, Australian Power and Gas Pty Ltd, Country Energy, Dodo Power & Gas Pty Ltd, EnergyAustralia, Jackgreen (International) Pty Ltd, Sun Retail and TRUenergy Pty Ltd.

Only four of the eight licensed companies—ActewAGL Retail, Country Energy, EnergyAustralia, and TRUenergy Pty Ltd—supplied gas to customers during the year.

2.8.1 Gas sales and consumption

Table 2.14 compares gas consumption and sales data for residential and non-residential customers from 2003–04 to 2008–09. There were 94,019 gas supply customers in the ACT on 30 June 2009, a slight decrease from 2007–08. Total gas sales fell slightly, from 7,216 TJ in 2007–08 to 7,107 TJ in 2008–09; the fall is attributable to a decrease in non-residential sales for the year. Gas supply data shown in this table may not reconcile with the data for gas distribution, because the gas distribution data include quantities supplied to Queanbeyan and Bungendore, in New South Wales, while the gas supply sales data include sales to customers in the ACT only. Average gas sales in 2008–09 for residential customers rose to 50 GJ, but fell to 76 GJ for non-residential customers.

Table 2.14 Customer numbers and sales, gas supply, ACT, 2004–05 to 2008–09

	2004–05	2005–06	2006–07	2007–08	2008–09
Customer numbers					
Residential	84,864	87,010	91,177	92,107	91,944
Non-residential	1,888	1,956	1,977	2,106	2,075
Total numbers	86,752	88,966	93,154	94,213	94,019
Customer sales (TJ)					
Residential	4,187	4,335	4,196	4,432	4,553
Non-residential	2,338	2,522	2,307	2,784	2,554
Total sales	6,525	6,857	6,503	7,216	7,107
Consumption (GJ/customer)					
Residential	49	50	46	48	50
Non-residential	1,238	1,289	1,167	1,322	1,231
Overall consumption per customer	75	77	70	77	76

Source: Licensed gas supply utilities' annual reports to ICRC.

Table 2.15 shows gas customer numbers during 2008–09 by contract type and size of supply. Of the 94,019 customers during the year, only 58 were supplied with more than 1 TJ, and they were all on negotiated contracts.

Table 2.15 Customer numbers by category, gas supply, ACT, 2008–09

Contract category	Small (<1 TJ/year)	Large (>1 TJ/year)	Total
Customers on standard contract			
Residential	66,002	0	66,002
Non-residential	1,628	0	1,628
Subtotal	67,630	0	67,630
Customers on negotiated contracts			
Residential	25,942	0	25,942
Non-residential	389	58	447
Subtotal	26,331	58	26,389
Total customer numbers			
Residential	91,944	0	91,944
Non-residential	2,017	58	2,075
Total numbers	93,961	58	94,019

Source: Licensed gas supply utilities' annual reports to ICRC.

Table 2.16 shows gas sales by contract type and scale of supply. Of the 7,101 TJ of gas supplied during the year, 4,419 TJ was supplied to customers on standard contracts, all of whom consumed less than 1 TJ. Of the customers on negotiated contracts, small consumers accounted for 1,537 TJ and larger commercial operators accounted for the remaining 1,150 TJ.

Table 2.16 Customer sales by category, gas supply, ACT, 2008–09 (TJ)

Contract category	Sales to small customers ^a	Sales to large customers ^b	Total
Customers on standard contracts			
Residential	3,218.10	0	3,218.10
Non-residential	1,201.36	0	1,201.36
Subtotal	4,419.46	0	4,419.46
Customers on negotiated contracts			
Residential	1,335.21	0	1,335.21
Non-residential	202.08	1,150.47	1,352.55
Subtotal	1,537.28	1,150.47	2,687.76
Total sales			
Residential	4,553.31	0	4,553.31
Non-residential	1,403.44	1,150.47	2,553.91
Total numbers	5,956.74	1,150.47	7,107.22

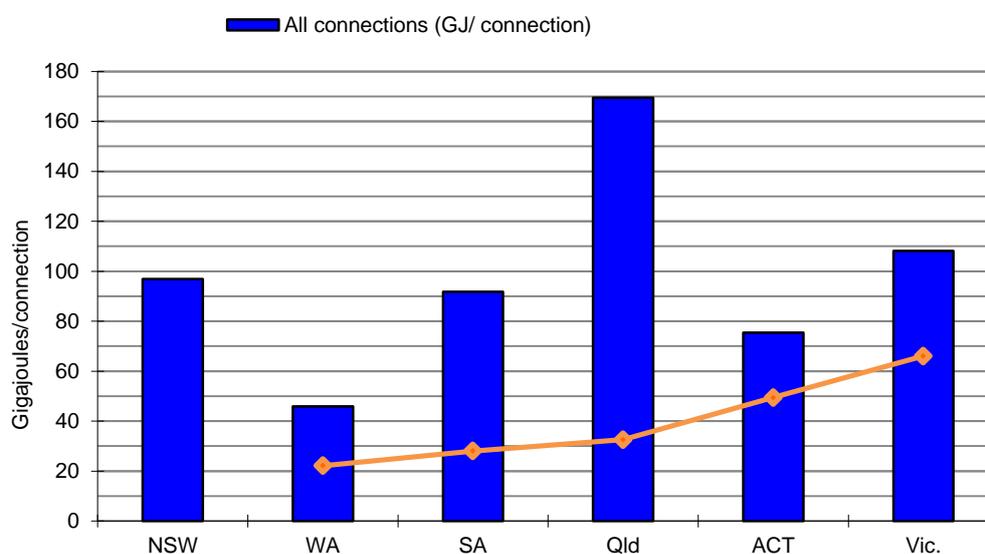
a 'Small' customers use <1 TJ/year.

b 'Large' customers use >1 TJ/year.

Source: Licensed gas supply utilities' annual reports to ICRC.

Figure 2.11 shows average gas consumption per connection in the ACT and other jurisdictions in 2007–08; figures for 2008–09 were not available at the time of publication.

Figure 2.11 Average consumption per connection, gas, selected states and territories, 2008–09



Source: Energy Supply Association of Australia, *Electricity Gas Australia 2010*.

2.8.2 Competition in the retail gas market

The right of all gas customers to choose their preferred supplier was introduced on 1 January 2002. A measure of the level of competition since that time can be seen in Figure 2.12, which shows fortnightly customer switches over the two years to 30 June 2009. Switches per fortnight declined from just over 400 in July 2007 to under 100 in 2008–09. The decline is around the same as the decline in the number of electricity customer switches. All gas suppliers in the ACT are also electricity suppliers, and gas is often offered as a 'bundled' product with electricity.

use of recycled water has continued to rise, doubling over the four-year period; recycled water currently makes up about 8.5% of the total water supplied to the territory.

Table 2.17 Sources and volumes of water supply, 2005–06 to 2008–09, ACT (ML)

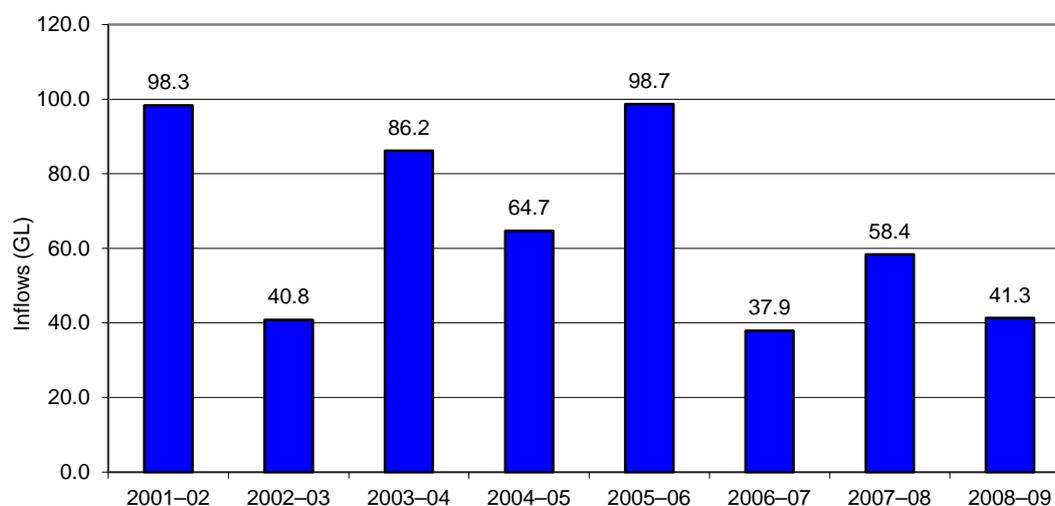
Sources of water	2005–06	2006–07	2007–08	2008–09
Surface water	54,340	51,060	43,694	44,950
Recycling	2,141	2,104	3,789	4,207
Total supply	56,481	53,164	47,483	49,157

Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*, National Water Commission, Canberra, April 2010.

2.9.2 Water storages and consumption

Drought conditions continued during the year, resulting in low inflows into the ACT’s reservoirs. At the beginning of 2008–09, total water storages were at 45.5% of capacity, before rising to a peak of 52.1% in October 2008 and then falling to 43.1% by the end of June 2009. Inflows over 2008–09 totalled 43.8 GL, well below the long-term annual average of 188.4 GL. ACTEW continued to draw water from the Murrumbidgee River when conditions allowed, helping to supplement water from the four reservoirs. Inflows into Corin, Bendora and Googong reservoirs since 2001–02 are shown in Figure 2.13.

Figure 2.13 Combined inflows into Corin, Bendora and Googong reservoirs, 2001–02 to 2008–09



Source: ACTEW Corporation, *2008–09 Annual report to the ACT Government*, p. 12.

2.9.3 Water security measures in the ACT

ACTEW has continued its development of water security for the ACT and, with the approval of the ACT Government, has moved to implement a number of measures designed to increase the level of security. The three main measures are:

- **Enlarged Cotter Dam.** Government approval was given for continuation of work to enlarge the Cotter Reservoir from 4 GL to 78 GL. Extensive planning, design and geotechnical and

environment studies were undertaken during the year. The expected completion date is December 2011. Estimated cost: \$363 million.

- **Murrumbidgee to Googong Water Transfer.** Approval was given during the year for the project and, subject to further approvals, construction is expected to commence in early 2010 and to be completed by early 2011. Estimated cost: \$140 million.
- **Tantangara Transfer.** ACTEW has purchased 12.5 GL of general security water entitlements for the Tantangara Transfer project and is continuing to investigate the purchase of high-security water entitlements. Estimated cost for general security water licences: \$26 million. Annual operating costs: about \$6 million.

During the year, ACTEW continued to implement a number of drought contingency projects, including the following:

- **Use of water from the Murrumbidgee River.** Over 15 GL of water was sourced from the river, accounting for 33% of water supplied to the ACT and Queanbeyan.
- **North Canberra recycled water treatment facility upgrade.** Capacity was increased, allowing for a greater supply of recycled water to north Canberra.
- **Provision of recycled water from Lower Molonglo water treatment plant.** A new pump, pipeline and filling station allow convenient and practical access to recycled water from the Lower Molonglo Water Quality Control Centre.
- **District and large customer metering.** ACTEW continued to monitor and reduce water leakage from large customers, reducing leakage by 450 ML during the year.

2.9.4 Water restrictions in the ACT

Stage 3 restrictions aim to reduce water consumption by 35% compared to consumption under unrestricted demand. Stage 3 water restrictions remained in place in the ACT during the year.

Details of the restrictions are shown in Table 2.18.

Table 2.18 Stage 3 water restrictions

Private gardens and lawns; commercial nurseries, market gardens and turf-growing businesses	<ul style="list-style-type: none"> • No sprinkler or other irrigation system may be used. • Watering of lawns is not permitted. • A hand-held hose fitted with a trigger nozzle, a bucket or a watering can may be used to water plants between 7 am and 10 am and between 7 pm and 10 pm on alternate days as per the 'odds and evens' system. • At all times gardens may only be watered without causing pooling or runoff.
Lawns and plants at parks, sports amenities, golf courses and public gardens	<ul style="list-style-type: none"> • Target of a 35% reduction in water use should be met. • At all times lawns and plants may only be watered without causing pooling or runoff.
Paved areas	<ul style="list-style-type: none"> • Water must not be used to clean paved areas unless necessary as a result of accident, fire, health hazard or other emergency.
Private ponds and fountains	<ul style="list-style-type: none"> • Fountains must be switched off. • Only ponds that support fish may be topped up, and then only using a hand-held hose fitted with a trigger nozzle, a bucket or a watering can.
Public ponds and fountains	<ul style="list-style-type: none"> • Existing ponds must not be filled or topped up other than with non-potable water. • New ponds may not be filled with any water. • No fountains may be operated or filled or topped up with any water.

2.9.5 Other water and sewerage operation measures

Ownership of Googong Dam

In September 2008, the ACT Government and ACTEW completed negotiations with the federal and New South Wales governments to resolve the ownership of Googong Dam. ACTEW, through the ACT Government, was granted a 150-year lease of the dam and associated facilities.

ACT Water Cap

During the year, ACTEW operated within the ACT Water Cap, an agreement between the ACT Government and the Murray–Darling Basin Authority. The cap allows the ACT to take up to a net 40 GL of water per year from the Murray–Darling Basin.

Capital works

During the year, approximately \$100 million was invested in general water and sewerage projects; \$63 million of expenditure was related to water assets and the remainder to sewerage. See chapter 4 for additional financial data.

Increasing use of non-potable water

The recycled water strategy resulted in an effluent reuse volume of 3.82 GL, equating to a total reuse of 15.8% of total effluent volumes. The target is 20% recycled water use by 2013.

2.9.6 Uses of water supplied

Table 2.19 shows that ACTEW Corporation delivered 44,955 ML of water to 144,785 ACT premises and properties and 3,639 ML to Queanbeyan (bulk water) in 2008–09. In addition, under the environmental flow requirements, ACTEW Corporation released 5,262 ML as environmental flows.

Residential properties accounted for around 95% of all properties supplied by ACTEW Corporation, but for only 61% of the water supplied to ACT properties. Average water consumption in residential premises rose from 194 kL in 2007–08 to 200 kL in 2008–09. For non-residential premises, the average volume supplied rose from 1,520 kL to 2,355 kL over the same period.

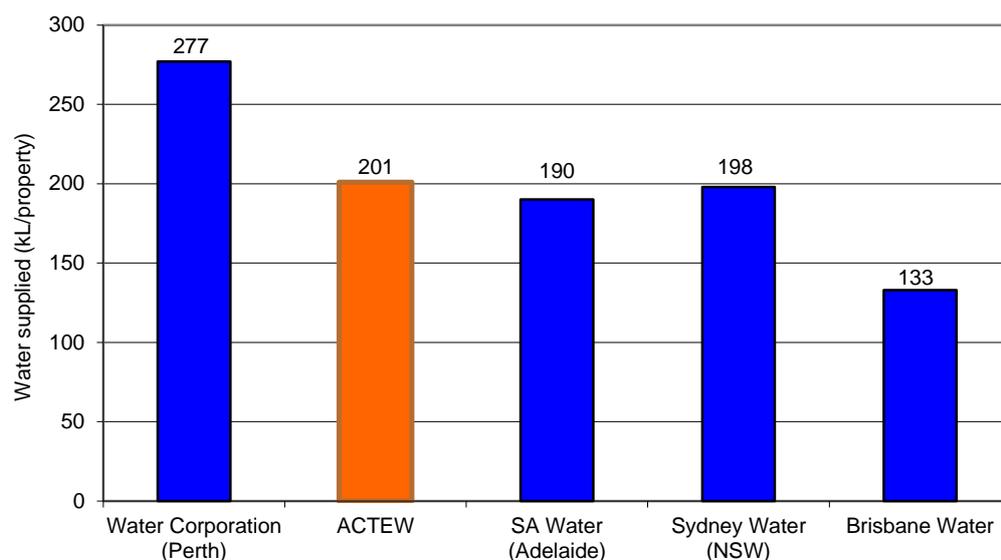
Table 2.19 Premises supplied and uses of water supplied, ACT, ACTEW Corporation, 2004–05 to 2008–09

Category	2004–05	2005–06	2006–07	2007–08	2008–09
Premises supplied (no.)					
Residential	129,000	132,011	133,474	134,107	137,362
Non-residential	7,000	6,421	7,107	7,352	7,423
Total premises^a	136,000	138,432	140,581	141,459	144,785
Volume of water supplied (ML)					
Residential	30,989	34,436	31,954	26,079	27,477
Non-residential ^a	17,279	18,034	15,745	14,670	17,478
Total ACT urban water supplied	48,268	52,470	47,699	40,749	44,955
Environmental flows	30,200	59,500	10,170	6,666	5,262
Bulk water exports to Queanbeyan	4,007	4,353	4,110	3,437	3,639
Total water supplies	82,475	116,323	58,406	47,334	53,856
Average supply/premises (kL)					
Residential	240	261	239	194	200
Non-residential	2,468	2,809	2,215	1,995	2,355
All premises	355	379	339	288	310

a Includes commercial and industrial water and estimated non-metered water supplied to other uses, such as firefighting and mains flushing.
Sources: ACTEW Corporation's annual reports to ICRC.

Figure 2.14 shows average volumes of water supplied to residential customers by selected utilities during 2008–09.

Figure 2.14 Average annual residential water supplied, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

2.9.7 Sewerage services

Sewage is collected by ACTEW Corporation through the sewerage network and treated at the Lower Molonglo Water Quality Control Centre. Table 2.20 shows customer numbers and properties serviced by ACTEW Corporation for sewerage services over the three-year period to 2008–09.

Table 2.20 Customer numbers and properties serviced, sewerage services, 2006–07 to 2008–09

Indicator	2006–07	2007–08	2008–09
Number of customers at 30 June	135,241	137,262	139,794
Residential	128,830	130,628	133,066
Non-residential customers	6,411	6,634	6,698
Number of properties receiving sewerage services at 30 June	139,774	140,641	143,865
Residential	133,474	134,107	137,261
Non-residential customers	6,300	6,534	6,604
Number of new properties connected to network	1,931	2,021	2,532

Source: ACTEW Corporation's 2008–09 annual report to ICRC.

Key data on sewerage services over the five-year period from 2004–05 to 2008–09 are shown in Table 2.21. In 2008–09, ACTEW Corporation operated 3,059 km of sewerage mains and treated a reduced volume of 25,307 ML of sewage, while the average volume of sewage collected per person fell to 73 kL.

Table 2.21 Sewerage service statistics, ACT, ACTEW Corporation, 2004–05 to 2008–09

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Number of customers	130,355	135,561	135,241	137,262	139,794
Quantity of sewage treated (ML)	27,293	29,019	26,437	25,707	25,307
Sewage treated per customer (kL)	84	88	79	75	73
Length of mains (km)	2,985	2,991	2,993	3,014	3,059

Source: ACTEW Corporation's annual reports to ICRC.

3 Utility compliance

This chapter documents licensed utilities' compliance during 2008–09 with a broad range of obligations imposed on them by ACT regulatory instruments: the Utilities Act, utility licences, industry codes and, where applicable, ring fencing guidelines.

The chapter has been prepared following consideration of reports required from utilities in relation to their compliance, consultation with other ACT regulators, and reports of non-compliance provided by utilities under the terms of their licences.

The chapter reports on compliance issues detailed in previous Commission reports and those that arose during 2008–09. In addition, it provides a summary of compliance against the minimum service standards set out in schedules to the Consumer Protection Code.

Having considered the reports submitted and the advice of other regulators, the Commission is of the view that utility licensees were generally compliant with the requirements of the Utilities Act, licence conditions and industry codes. However, there are some issues of concern, in particular issues raised by the ACT Civil and Administrative Tribunal (ACAT) with the Commission, and implementation issues associated with the ACT Electricity Feed-in Scheme. Those matters are discussed below.

3.1 Statutory compliance framework

3.1.1 Utilities Act conditions

Section 25 of the Utilities Act provides, among other things, that a utility licence is subject to the condition that the utility comply with any requirement of the Utilities Act or a related law, a requirement under any other law in force in the territory that applies to the utility in relation to the provision of a utility service, relevant industry and technical codes, and directions given to it by the Commission or the Technical Regulator. Section 25 also provides that the utility must give the Commission, in accordance with any written requirements by the ICRC, an annual report for each financial year in relation to its compliance with the conditions of the licence.

3.1.2 Licence provisions

There are specific provisions in all utility licences relating to compliance with applicable laws and reporting of breaches to the Commission. Relevant provisions include clauses 6.2, 7.2 and 7.3:

Clause 6.2. Without limiting the generality of clause 6.1 [licensee to comply with all laws], ... the Licensee must comply with: (1) any requirement of the Act; (2) relevant Industry Codes including the performance standards (if any) prescribed under those codes; (3) relevant Technical Codes including the performance standards (if any) prescribed under those codes; (4) any direction given to the Licensee by ICRC or the Chief Executive under the Act; and (5) any applicable ring fencing requirements.

Clause 7.2. If the Licensee becomes aware of a material breach of this licence and any Law or such other code of practice, directions and guidelines applicable to the Licensee and to any of the other services to be rendered by the Licensee that it is required to comply with under clause 6.2, the Licensee must notify ICRC of the breach as soon as practicable.

Clause 7.3. If the Licensee has not complied with any of its obligations under clause 6.2, the Licensee must identify those obligations and provide a brief statement to ICRC that explains the

circumstances of, and reasons for the non-compliance, consequences of the non-compliance (including any penalties imposed) and outlines measures that the Licensee will put in place to rectify that non-compliance.

3.2 Approach taken to compliance assessment

As part of the annual reporting requirements, the Commission required all utilities to provide:

- specific information in relation to the requirement under clause 7.2 of utility licences for reporting of material breaches to the Commission
- specific information in relation to the requirement under clause 7.3 of utility licences for reporting of other breaches to the Commission
- specific information on compliance with certain additional regulatory requirements introduced during 2008–09 (the GreenPower Scheme and Electricity Feed-in Scheme)
- assurances relating to compliance with other key obligations contained in the Utilities Act, the utility licence and industry codes and, where applicable, ring fencing guidelines.

In addition, the Commission sought advice on utilities' performance and compliance from other regulators and considered reports from utilities that were received in other contexts, an example being the quarterly progress reports that all electricity supply utilities are required to submit under the Electricity Feed-in Code.

3.3 Material breaches

Licence condition 7.2 concerns material breaches. In previous compliance reports, the Commission has defined a material breach as anything that:

- affects a licensee's ability to provide utility services
- adversely affects a significant number of consumers, financially and in terms of service provision
- threatens public health or safety, or the environment.

The Commission's guidance note issued in March 2009, *Utility reporting of material breaches and non-compliance*¹¹, sets out the Commission's position on what constitutes utility compliance under the terms of clauses 7.2 and 7.3 and so provides a fuller account of materiality. The guidance note will be most relevant to compliance reporting in 2009–10 and later years.

As in 2007–08, licensees did not report any material breaches of their regulatory requirements in 2008–09. None of the compliance issues outlined in section 3.5 can be classed as material, although the implementation issues associated with the Electricity Feed-in Scheme, if not rectified, will affect the ability of the utilities concerned to provide the relevant utility service.

Since the introduction of the Utilities Act in 2000, no material breaches have been notified.

¹¹ Available on the Commission's website (www.icrc.act.gov.au).

3.4 Assessment of licensee compliance by other regulators

As part of its assessment of licensee compliance, the Commission sought the advice of the Office of Fair Trading, the ACT Civil and Administrative Tribunal (ACAT)¹², ACT Health, the Environment Protection Authority, and the Office of the Commissioner for Sustainability and the Environment.

3.4.1 Office of Fair Trading

The Office of Fair Trading reported that its records did not show any complaints relating to marketing by utilities in 2008–09.

3.4.2 ACT Civil and Administrative Tribunal

ACAT provided a response for 2008–09 that includes the period of operation of the Energy and Water Consumer Council between 1 July 2008 and 1 February 2009.

ACAT reported that there were no industry-wide compliance issues in 2008–09. Its comments were made in relation to each utility and each service provided by that utility.

The principal issues that ACAT identified related to ActewAGL Distribution’s gas supply. The tribunal reported that 2008–09 overall ‘was a very troubled period for ActewAGL gas customers and the AGL gas call centre in Melbourne did not take a proactive approach to identify problems and advise customers and energy industry ombudsman schemes about the problems’.

ACAT noted that AGL’s change to its national gas billing computer system in September 2008 had adversely affected consumers in the ACT, New South Wales and Victoria. There were ongoing problems with incorrect deductions in direct debit arrangements; delays in refunding amounts from gas accounts; continuing lack of access to historical data; problems associated with smooth retailer transfers; and problems with the timely issue of customer accounts. The tribunal added that, as at February 2010, AGL was taking a more proactive approach to the problems, but that they were still not resolved.

ACAT noted that many gas customers had reported a poor level of service from ActewAGL. The most common complaint was about staff failing to deliver on promises to investigate a matter and to get back to the customer. Customers reported that it was common for this to happen many times during the resolution of a problem. Other problems arose from staff giving incomplete explanations or incorrect information, and failing to refer more difficult problems and complaints to more senior staff.

The tribunal noted ongoing issues relating to the ability of customers to close an account and avoid incurring supply charges when gas was not being used, but noted that the issue is now resolved.

The tribunal identified confusion about customers’ entitlements to rebates (under item 2 of Schedule 1 to the Consumer Protection Code) if providers fail to comply with minimum service standards for complaints handling; that is, there was confusion about the goodwill payments that utilities may make to inconvenienced customers. The tribunal reported that ActewAGL rarely told inconvenienced customers about the \$20 rebate payable on request. The tribunal considered that

¹² Under the *Justice and Community Safety Legislation (Amendment) Act 2008 (No. 2)*, the Essential Services Consumer Council was renamed the Energy and Water Consumer Council from 29 July 2008. In February 2009, the functions of the council were subsumed into the ACT Civil and Administrative Tribunal (ACAT).

the \$20 goodwill payment offered by ActewAGL to customers who had been inconvenienced is too low and that a more suitable amount would be the \$50 offered by other utilities.

The Commission has noted ACAT's comments. It will consider reviewing the interaction of the minimum services standards regime with goodwill payments and the level of payments potentially available to customers as part of its next periodic review of the Consumer Protection Code.

The tribunal noted that ActewAGL Retail had not established a hardship program equivalent to that offered by almost all other energy utilities in Australia. Given that such programs will be a requirement in foreshadowed national energy customer arrangements, ActewAGL's lack of progress was of concern to the tribunal.

The Commission notes that the Consumer Protection Code was amended, with effect from 1 July 2009, to require a utility to provide information about and referral to any hardship program it operates to a customer who is experiencing difficulty in paying utility bills or who requires payment assistance.

ACAT continued to be impressed by the high standard of EnergyAustralia's non-hardship complaint-handling processes and what it considered to be the best practice approach that EnergyAustralia took to energy hardship cases.

ACAT received reports from TRUenergy during 2008–09 that there were problems with incorrect product rates in a large number of accounts throughout Australia, including those of more than 400 customers in the ACT. TRUenergy wrote to all affected customers and kept the tribunal and energy industry ombudsman schemes informed about the problem and its approach to resolving it. ACAT understood that by the start of 2010 the problem had been largely resolved, but that approximately 12 customer accounts in the ACT were still not finalised. ACAT noted that it had not received any complaints in relation to the problem.

The tribunal identified no issues of substance relating to water or sewerage supply.

3.4.3 ACT Health

ACT Health advised that it recorded no complaints in 2008–09 about the operation of licensed utilities.

3.4.4 Environment Protection Authority

The Environment Protection Authority advised the Commission that utilities holding environmental authorisations under the *Environment Protection Act 1997* had complied, to the satisfaction of the authority, with the conditions of their authorisations. The authority advised the Commission that two incidents were reported during 2008–09.

3.4.5 Commissioner for Sustainability and the Environment

The Office of the Commissioner for Sustainability and the Environment advised that it registered only one complaint about utility performance in 2008–09. The matter, part of a broader query on constraints to water reuse innovation, was successfully addressed.

3.5 Compliance issues

3.5.1 Follow-up on issues reported in previous reports

Energy One licence suspension

A condition of the licences of all energy supply utilities is that the licensee must directly, or through an agent, hold and comply with the conditions of any Australian Energy Market Operator (AEMO)¹³ registration required under National Electricity Market (NEM) arrangements. A further condition is that the licensee must continue to satisfy the same technical and prudential criteria that it was required to meet as a condition of the grant of the licence. Such criteria include assessments of the applicant's technical and financial capacity to comply with licence conditions and operate a viable business.

As noted in the compliance and performance reports for 2006–07¹⁴ and for 2007–08,¹⁵ the AEMO advised the Commission on 22 June 2007 that Energy One was suspended from the NEM, with effect from midnight on that day.

The Commission came to the view that Energy One was not compliant with certain of its obligations under its licence and therefore was in breach of the licence. In October 2007, the Commission suspended Energy One's licence to supply electricity in the ACT until such time as Energy One was able to meet the Commission's technical and prudential criteria for the grant of a licence.

While Energy One's suspension from the NEM had a critical impact on its ability to provide utility services, the company's non-compliance with licence conditions affected no customers in the ACT in 2008–09 and was no threat to public health or safety.

During 2008–09, the Commission accepted the surrender of Energy One's electricity supply licence. The surrender of licence took effect on 19 December 2008.¹⁶

This compliance issue is now resolved.

Energy One benchmark statement under the ACT Greenhouse Gas Abatement Scheme

The ACT GGAS is mandatory for all licensed electricity suppliers. As discussed above, in 2007–08, Energy One's licence was suspended following its suspension from operating in the NEM in 2007. An entity whose licence is suspended is still required to meet all of its statutory and other regulatory obligations, including, in the case of electricity suppliers, participation in the GGAS.

As noted in the Commission's report on compliance and operation of the GGAS for the 2007 calendar year¹⁷, Energy One failed to meet all benchmark statement and surrender requirements. The Commission consulted Energy One on its outstanding compliance obligations. Subsequently, in June 2008, the company submitted benchmark statements, but they were unaudited.

¹³ On 1 July 2009, the AEMO took over the functions of the former National Electricity Market Management Company (NEMMCO).

¹⁴ ICRC, *Licensed electricity, gas and water and sewerage utilities: compliance and performance report for 2006–07*, Report 5 of 2009.

¹⁵ ICRC, *Licensed electricity, gas and water and sewerage utilities: compliance and performance report for 2007–08*, Report 6 of 2009.

¹⁶ Utilities (Surrender of Licence) Notice 2008, NI 2008-600.

¹⁷ See ICRC Report 3 of 2008, *ACT Greenhouse Gas Abatement Scheme compliance and operation of the scheme for the 2007 compliance year*, June 2008.

The surrender of Energy One's electricity supply licence means that this issue is now resolved.

ActewAGL Distribution provision of notice for planned outages

Section 3.5 of the Commission's compliance and performance report for 2007–08 reported concerns about an apparent diminution in the extent to which ActewAGL Distribution provided two days notice of planned interruptions to electricity network services.

ActewAGL has since clarified that the basis for the compliance rate given in the 2007–08 report was a comparison of instances in which the required notice was not given with the number of planned interruptions. Given that one interruption may involve many customers, a better approach would have been to compare instances in which the notice was not given with the number of premises affected by planned interruptions. The Commission agrees that such an approach provides more meaningful figures. The revised approach indicates a non-compliance rate of only 1.6% in both 2007–08 and 2008–09.

The Commission notes that, while complaints about provision of notice made up about one-third of all electricity distribution complaints in 2008–09 (a figure broadly consistent with previous years), the number of customer complaints on this matter, as set out in Table 5.3, fell from 285 in 2006–07 to 209 in 2008–09.

Against this background, the issue reported in the 2007–08 report is now considered closed.

3.5.2 New issues

GreenPower scheme

On 25 February 2009, the Minister for the Environment, Climate Change and Water made the Utilities (Electricity Retail) Licence Conditions Direction 2009.¹⁸ The direction required the Commission to give effect to a GreenPower scheme that requires, among other things, that electricity suppliers offer a GreenPower product to each potential new or reconnecting customer, make each potential new or reconnecting customer of the supplier aware that other products are available to them at the same time as the GreenPower offer, and offer and make a GreenPower product available to all existing customers on request. Consistent with the requirements of the Minister's direction, the Commission varied all electricity supply licences by Utilities (Variation of Licence) Notice 2009 (No. 1)¹⁹ with effect from 1 April 2009.

Because the GreenPower scheme had been in operation for only three months at 30 June 2009, information on its operation and on any compliance issues that might have emerged is limited for 2008–09. Utility returns for 2008–09 indicated that utilities were, in almost all cases, aware of the requirements of the scheme and had given appropriate thought to the means by which compliance with the scheme may be monitored, principally by staff member training and call centre monitoring. In this context, EnergyAustralia reported very high levels of compliance in the early months of the scheme, and Powerdirect reported that early problems had been identified and remedial action taken. Where utility returns indicated confusion as to the intent of the scheme, the Commission contacted the utilities concerned and clarified the position.

While no complaints relating to the operation of the scheme have come to the attention of the Commission, compliance with the scheme may warrant closer attention in future years.

¹⁸ DI2009-21.

¹⁹ DI2009-174.

Electricity Feed-in Scheme

The *Electricity Feed-in (Renewable Energy Premium) Act 2008* commenced on 1 March 2009. The Act sets up a scheme for feed-in from renewable energy generators to the electricity network. It provides for new licence conditions for electricity suppliers and distributors. Suppliers must, on application by the occupier of premises at which a renewable energy generator is connected to the electricity network, pay the occupier at the rate required by the Act for the total amount of electricity generated by the generator. Among other things, the distributor must connect the generator to the distributor's network to enable electricity generated by the generator to be supplied to the network and must reimburse the electricity supplier to the premises the difference between the amount payable to the occupier and the 'normal cost' of electricity.

As part of the Commission's role in implementing the Electricity Feed-in Act, the Commission amended the licences of ActewAGL Distribution in relation to its electricity distribution and connection services, and of all electricity suppliers to reflect the requirements of the Act.²⁰ In addition, on 27 February 2009 the Commission determined a new industry code under the Utilities Act: the Electricity Feed-in Code.²¹ The code sets out practices and standards for the operation of the feed-in scheme established under the Electricity Feed-in Act. Electricity distributors and suppliers must comply with the code. Matters covered include information that must be provided by electricity suppliers to occupiers of premises, dispute resolution, a regime for quarterly reporting of certain information to the Commission and the applicability of provisions of the Consumer Protection Code to the feed-in scheme.

The Electricity Feed-in Scheme had been in operation for only four months at 30 June 2009. The information presented here on the operation of the scheme and compliance issues that emerged should be viewed in that context.

It was almost inevitable that implementation of the scheme would present challenges to affected utilities and that implementation issues would emerge. Relevant to this were the limited time available to develop systems and contracts to support the operation of the scheme and the requirements of the Electricity Feed-in Code, the limited time available to train customer contact staff, and the differences between the ACT scheme and schemes in operation or proposed in other jurisdictions.

In the early months of the scheme's operation, there were a small number of reports, brought to the attention of the Commission, that potential applicants had been informed that a particular utility did not provide the feed-in tariff; that there had been circumstances in which the premium payments had not been provided to eligible occupiers within a reasonable timeframe; and that there had been circumstances in which premium payments other than the statutory requirements (including premium rates applicable in other jurisdictions) had been offered to prospective applicants. Against this background, the Commission wrote to all licensed electricity supply utilities in June 2009 to remind them of their obligations under the Electricity Feed-in Act and their licences.

A more general issue was reports that related to the transitioning of customers from earlier feed-in schemes operating in the ACT to the scheme set out in the Electricity Feed-in Act. This is not a matter relevant to the Electricity Feed-in Code; there was no question of any licence non-compliance. Nevertheless, it was encouraging that the utility concerned, ActewAGL Retail, moved quickly to address customer concerns about the matter.

²⁰ NI2009-174.

²¹ DI2009-23.

The implementation issues reported here have to be viewed against the considerable progress made by utilities in implementing the Electricity Feed-in Scheme in the early months of its operation and, from a customer perspective, the considerable number (541) of ACT electricity customers who were receiving the premium payments at 30 June 2009.

While many implementation issues had been solved by 30 June 2009, TRUenergy stated in its 2008–09 report to the Commission:

Unfortunately we cannot bill and therefore credit the feed-in tariff to eligible customers. We have contacted these customers and informed them of our billing issue. We have also informed affected customers that once this issue is resolved, we will send a back-dated bill that will credit the customer for all solar energy they generated and supplied back into the network for the entire period they have been TRUenergy customers and eligible under the feed-in scheme.

The Commission has continued to engage with TRUenergy on the company's ongoing compliance with the requirements of the Electricity Feed-in Scheme. While billing issues remained unresolved for some time, by mid-2010 assurances were received that all customers had been paid premiums owed to them.

While TRUenergy's progress in achieving compliance with the requirements of the Electricity Feed-in scheme was disappointingly slow, it should be noted that the number of customers who have been inconvenienced remained low.

Lower Molonglo Water Quality Control Centre

In October 2008, ACTEW Corporation brought to the Commission's attention issues relating to compliance during the winter of 2008 with the final effluent ammonia concentration allowed in the environmental authorisation granted by the Environment Protection Authority.

The Commission notes that the water quality issues reported by ACTEW were primarily matters for environmental regulators. ACTEW Corporation, however, provided reporting to the Commission consistent with its licence obligations, and kept the Commission informed of its proposed rectification actions.

ActewAGL gas issues

Matters relating to service provided to ActewAGL's natural gas customers that have been brought to the Commission's attention by ACAT are of considerable concern.

While the issues are not clear cut, ACAT's report raises doubts about ActewAGL's compliance with its obligations under the Consumer Protection Code to, among other things, keep its complaints handling compliant with the relevant Australian Standard and provide timely customer accounts. More broadly, ACAT's report raises the possibility that ActewAGL, in this instance, may have failed to 'act ethically, fairly and honestly in all its dealings with a customer or consumer', as is required under clause 5(1) of the Consumer Protection Code.

It is unclear whether the principal concerns, which the parties acknowledge have been associated with the introduction of new computer systems, are one-off or systemic issues. In any event, they were not brought to the attention of the Commission in accordance with the licence provisions set out in section 3.1.2 of this report. The Commission has reminded ActewAGL of its obligations under the reporting framework.

The Commission is aware that ACAT's concerns reflect a wider increase in complaints over the same period relating to billing systems in other jurisdictions, particularly Victoria, New South

Wales and Queensland. The Victorian regulator has audited AGL's complaints and call centre processes and has identified significant noncompliance with certain regulatory obligations.²²

The Commission will continue to monitor the issues raised by ACAT with a view to deciding whether compliance auditing may be appropriate and whether relevant provisions of the Consumer Protection Code need to be revisited.

3.6 Part 7 of the Utilities Act—network operations

Part 7 of the Utilities Act places obligations on network operators to take reasonable steps to minimise inconvenience to landowners and damage to property. The Act specifies minimum notice requirements and also requires network operators to restore property affected by their work.

To gain an appreciation of issues that may indicate a utility's compliance with the requirements, the Commission considers the number of complaints made against the utility about its performance of network operations. Information on network operation complaints received by each network licensee is set out in chapter 5. As in previous reporting periods, the network operator that received the most complaints during the year was ActewAGL Distribution (electricity), with a total of 295 complaints (364 in 2007–08). Complaints against ActewAGL Distribution (gas) totalled six, an increase on the 2007–08 level of four, while complaints against ACTEW Corporation about water and sewerage totalled 89, compared with 82 in the previous year.²³

3.7 Consumer Protection Code—minimum service standards

The Consumer Protection Code specifies a number of minimum service standards. Most apply only to network operators, but some also apply to suppliers. In some instances, failure to meet a standard may attract a rebate.

Table 3.1 summarises licensees' performance against the specified minimum service standards set out in Schedule 1 to the Consumer Protection Code. Most met performance standards to a high level. Comments by the Commission are also provided.

²² Essential Services Commission, *Summary audit report: AGL Energy*, accessible at <http://www.esc.vic.gov.au/public/Energy/Regulation+and+Compliance/Audit+Reports/Summary+audit+report+-+AGL+Energy+Limited/Summary+audit+report+-+AGL+Energy+Limited.htm>.

²³ The figures are based on the categories 'failure to provide, or insufficient, notice' and 'property damage' in tables 5.16 (water), 5.17 (sewerage), 5.9 (gas distribution) and 5.3 (electricity distribution).

Table 3.1 Compliance with performance standards, all licensees, summary details, 2008–09

Performance standard	Licensees' compliance performance	Commission comments
Customer connection times (standard 1)	Proportion of services provided in accordance with prescribed connection times (i.e. on the same day as the request is made if before 2.00 pm, or by the end of the next business day if the request is made after 2.00 pm, or as otherwise agreed) (2007–08 in parentheses): ActewAGL Distribution (electricity): 100% (100%) ActewAGL Distribution (gas): 98.6% (99.8%) ACTEW Corporation (water): 100% (100%)	Very high to full compliance.
Responding to complaints (standard 3)	Proportion of complaints acknowledged within 10 business days (2007–08 in parentheses): ActewAGL Distribution (electricity): 99% (99%) ActewAGL Distribution (gas): 100% (92%) ACTEW Corporation (water ^a) 95% (99%); (sewerage) 100% (100%) ActewAGL Retail (electricity): 97% (82%) ActewAGL Retail (gas): 100% (88%) Aurora (electricity): no complaints (no complaints) Country Energy (electricity): 100% (100%) Country Energy (gas): no complaints (no complaints) EnergyAustralia (electricity and gas) advised that it does not capture this information but that 'the vast majority of complaints [in total, 26 for electricity and 2 for gas] were resolved at the first point of contact at the contact centre.' Integral (electricity): no complaints (no complaints) Origin (electricity): no complaints (no complaints) Powerdirect (electricity): 100% (100%) Red Energy: no complaints (no complaints) Sun Retail (electricity and gas): no complaints (no complaints) TRUenergy (gas): 100% (100%) TRUenergy (electricity): 58%, (89%) TRUenergy Yallourn (electricity): no complaints, (no complaints)	Very high to full compliance by all network operators. A lower rate of compliance by most electricity and gas suppliers; ActewAGL Retail (electricity and gas) displayed a significant diminution in performance in 2008–09 and TRUenergy an improvement. One supplier, EnergyAustralia, did not supply information.
	Proportion of complaints responded ^b to within 20 business days (2007–08 in parentheses): ActewAGL Distribution (electricity): 94% (94%) ActewAGL Distribution (gas): 93% (100%) ACTEW Corporation (water) 100% (100%) ACTEW Corporation (sewerage) 94% (99%) ActewAGL Retail (electricity): 89% (68%) ActewAGL Retail (gas): 100% (83%) Country Energy (electricity): 100% (100%) EnergyAustralia (electricity and gas) advised that it could not report against this standard. Powerdirect (electricity): 100% (100%) TRUenergy (electricity and gas): 100% (100%)	High to full compliance by network operators. Variable levels of compliance by suppliers; Country Energy, Powerdirect and TRUenergy reported full compliance, but ActewAGL (electricity and gas) reported lower levels of compliance and a significantly diminished performance compared with 2007–08. EnergyAustralia did not provide information.

Performance standard	Licensees' compliance performance	Commission comments
Response time to notification of problem or concern (standard 4) (applies only to gas and electricity distributors, and water and sewerage utilities)	<p>a) Notification about a problem or concern that may affect public health, or is causing, or has the potential to cause, substantial damage or harm to people or property</p> <p>Number and percentage of notifications where the licensee failed to respond within 6 hours (2007–08 in parentheses):</p> <p>ActewAGL Distribution (electricity): 13 and 6.5% (7 and 7.0%) ActewAGL Distribution (gas): 0 and 0.0% (0 and 0.0%) ACTEW Corporation—water: 0 and 0.0% (0 and 0.0%) ACTEW Corporation—sewerage: 0 and 0.0% (0 and 0.0%)</p>	Full compliance by ActewAGL Distribution (gas) and ACTEW Corporation for water and sewerage. Compliance of ActewAGL Distribution (electricity) was lower.
	<p>b) Notification about other problems or concerns</p> <p>Number and percentage of other notifications^c where the licensee <i>failed</i> to respond within 48 hours (2007–08 in parentheses):</p> <p>ActewAGL Distribution (electricity): 13 and 0.4% (10 and 0.2%) ActewAGL Distribution (gas): 168 and 12.7% (113 and 6.0%) ACTEW Corporation (water): 859 and 24.0% (840 and 19.0%) ACTEW Corporation (sewerage): 980 and 26.0% (859 and 24.0%)</p>	High compliance by ActewAGL Distribution (electricity and gas); the level of compliance by ACTEW for both water and sewerage was considerably lower.
	<p>c) Number and percentage of other notifications^c where the licensee failed to respond within the timeframe specified in their response (2007–08 in parentheses):</p> <p>ActewAGL Distribution (electricity): n.a. (n.a.) ActewAGL Distribution (gas): n.a. (n.a.) ACTEW Corporation (water): 126 and 3.3% (116 and 3.2%) ACTEW Corporation (sewerage): 74 and 1.3% (63 and 1.2%)</p>	ActewAGL notes that no timeframes are specified for reactive work. High compliance by ACTEW Corporation.
Planned interruptions to utility services (standard 5) (applies only to gas and electricity distributors and water and sewerage utilities)	<p>(1) Provision of two days notice</p> <p>Number and percentage of instances where the customer received insufficient or no notice (2007–08 in parentheses):</p> <p>ActewAGL Distribution (electricity): 74 and 1.6% (63 and 1.6%) ACTEW Corporation (water): 0 and 0.0% (0 and 0.0%)</p> <p>There were no planned interruptions to ActewAGL Distribution's gas network (planned meter replacements excepted) or ACTEW Corporation's sewerage network.</p> <p>(2) Restoration of supply</p> <p>There were 14 (7) instances in which ActewAGL Distribution (electricity) did not restore electricity within 12 hours.</p> <p>For the water distributor, there was no instance (0) in which supply was not restored within 12 hours of the initial disruption.</p>	Full compliance by ACTEW Corporation (water); not an issue for ActewAGL distribution (gas) and ACTEW Corporation (sewerage) in 2008–09; high level of compliance by ActewAGL Distribution (electricity).
Unplanned interruptions to utility services (standard 6) (applies only to gas and electricity distributors, and water and sewerage utilities)	<p>Number of instances in which supply was not restored within 12 hours and total number of unplanned interruptions (2007–08 in parentheses):</p> <p>ActewAGL Distribution (electricity): 10 out of 953 (4 out of 700) ActewAGL Distribution (gas): 0 out of 139 (0 out of 129) ACTEW Corporation (water): 2 out of 692 (0 out of 594) ACTEW Corporation (sewerage): 2 out of 2,229 (1 out of 2,059)</p>	High to full compliance. ActewAGL Distribution (electricity) reported a lower level of compliance than other utility sectors and a lower level than it reported in 2007–08.

a Excludes complaints about water quality.

b A response is taken to mean the resolution of a problem or confirmation of the cause of the issue, if known; advice about what corrective action is being taken to rectify the issue; and an indication of the likely time by which the issue will be resolved.

c 'Other notifications' refers to notifications of problems that are not likely to affect public health, or cause or potentially cause substantial damage or harm to a person or property.

Source: Licensed utilities' 2007–08 and 2008–09 annual reports to ICRC.

3.8 Rebates payable for failure to meet minimum service standards

Table 3.2 summarises the payment of rebates payable for failure to meet minimum service standards in 2008–09. The amount of rebates paid in 2008–09 (\$5,000) was just above the \$4,960 paid in the previous year. The Commission notes that the number of rebates is more than the number of complaints made. As in previous years, most rebate payments were made without the customer submitting a claim.

Table 3.2 Payment of performance rebates, selected utilities, 2007–08 and 2008–09

Utility	2007–08			2008–09		
	Claims made (no.)	Rebates paid (no.)	Value of rebates (\$)	Claims made (no.)	Rebates paid (no.)	Value of rebates (\$)
ACTEW Corporation (water)	0	2	40	0	0	0
ACTEW Corporation (sewerage)	0	0	0	0	0	0
ActewAGL Distribution (electricity)	1	59	4,700	0	49	4,950
ActewAGL Distribution (gas)	0	0	0	0	0	0
ActewAGL Retail (electricity)	3	11	220	1	1	50
ActewAGL Retail (gas)	0	0	0	0	0	0
Total	4	72	4,960	1	50	5,000

Source: Licensed utilities' annual reports to ICRC.

The Commission notes ACAT's comments, reported elsewhere in this chapter, on the level of rebates prescribed under the Consumer Protection Code, customers' knowledge of their possible entitlement to rebate payments, and the interaction of rebate payments with goodwill payments made voluntarily by utilities.

Under clause 11 of the Consumer Protection Code, utilities are required to inform customers of the minimum service standards and of their entitlement to a rebate if the standards are not met. The code provides that this information must be provided in the customer contract or, for franchise customers, in the statement of rights and responsibilities provided to customers under the code. The figures above suggest that, despite this provision, many complainants may remain unaware of their rights.

The continuing efficacy of the rebates regime is a matter of concern that is scheduled for examination in the context of the periodic review of the Consumer Protection Code.

3.9 Ring fencing guidelines and compliance

The Commission's ring fencing guidelines²⁴ are binding on ActewAGL Distribution under its utility licence obligations. The guidelines also reflect policies and obligations on distribution networks under national regulatory instruments.

The guidelines place a number of obligations on the electricity and gas distributors for the legal, operational, physical and accounting separation of the monopoly distribution businesses from contestable retail activities. ActewAGL Distribution (electricity) and ActewAGL Distribution

²⁴ ICRC, *Ring fencing guidelines for gas and electricity network service operators in the ACT*, November 2002.

(gas) reported compliance with their ring fencing obligations and a high level of understanding among staff about those obligations.

ActewAGL Distribution advised the Commission of the specific measures carried out to ensure ring fencing compliance during 2008–09. The measures included:

- the implementation of appropriate procedures and policies
- staff training
- maintenance of a ring fencing issues register
- regular reporting of breaches, including of ring fencing obligations
- legal advice on potential ring fencing issues.

The Australian Energy Regulator has been responsible for the economic regulation of ActewAGL Distribution since 2008. It has developed a ring fencing reporting regime under its compliance framework that takes account of the ring fencing obligations that exist under the National Electricity Rules and the National Gas Rules. The Commission and the Australian Energy Regulator have sought to ensure that no duplicate reporting is required.

4 Financial outcomes

This chapter provides financial performance information for all licensed energy suppliers, covering capital expenditure, revenues, operating costs, user charges and average bills. For the ACT's sole electricity distributor (ActewAGL Distribution), revenue, operating costs and earnings are provided.²⁵ For the ACT's supplier of water and wastewater services (ACTEW Corporation), revenue, consumption, operating costs and earnings are provided.

4.1 Electricity distribution

ActewAGL Distribution is the regulated distributor of electricity to all customers in the ACT. Up to and during 2008–09, the Commission was responsible for determining regulated revenue; from 2009–10, the Australian Energy Regulator is responsible.

Table 4.1 shows levels of capital expenditure on system assets from 2003–04 to 2008–09, as well as the variations from capital expenditure determined by the Commission. In 2008–09, ActewAGL Distribution reported capital expenditure of \$39.2 million, down slightly from \$40.0 million the previous year but well above the Commission-determined level of \$24.5 million for 2008–09. This continues a trend of capital expenditure being greater than the benchmark.

Table 4.1 Capital expenditure, electricity distribution, ActewAGL Distribution, 2004–05 to 2008–09

	2004–05	2005–06	2006–07	2007–08	2008–09
Capital expenditure on system assets (\$m, nominal)	21.0	28.6	33.1	40.0	39.2
ICRC-determined allowable capital expenditure (\$m, nominal)	22.6	22.7	26.1	23.1	24.5
Variation from determination (\$m)	-1.6	5.9	7.0	16.9	14.7
Variation from determination (%)	-7.1	+25.8	+26.9	+73.1	+60.4

Sources: ActewAGL Distribution's annual reports to ICRC; ICRC, *Final decision: Investigation into prices for electricity distribution services in the ACT*, March 2004.

Table 4.2 summarises ActewAGL Distribution's revenues and operating costs from 2004–05 to 2008–09. Total revenue in 2008–09 was \$139.1 million, up 5.5% from the previous year, while operating costs rose by 26% to \$49.2 million over the same period. This resulted in a decrease in earnings before interest and tax from \$70.5 million in 2007–08 to \$67.3 million in 2008–09.

²⁵ Comparable information is limited for gas distribution; hence, ActewAGL Distribution's gas business is not included in this report.

Table 4.2 Revenues, costs and earnings, electricity distribution, ActewAGL Distribution, 2004–05 to 2008–09

	2004–05	2005–06	2006–07	2007–08	2008–09
Revenue (\$m)					
Network charges	103.6	109.6	114.4	124.3	124.7
Customer contributions	5.6	3.4	4.1	5.4	8.4
Other revenue	1.9	1.9	2.1	2.2	6.1
Total revenue	111.1	114.9	120.6	131.9	139.1
Operating costs (\$m)					
Network operating costs	11.9	13.8	14.6	18.7	15.1
Network maintenance costs	9.5	11.2	12.0	13.6	14.1
Other costs ^a	19.6	20.2	17.9	6.7	20.0
Total operating costs	41.0	45.2	44.5	39.0	49.2
Earnings and depreciation (\$m)					
Earnings before interest, tax, depreciation and amortisation	70.1	69.7	76.1	92.9	90.0
Depreciation	22.1	21.6	22.0	22.4	22.6
Earnings before interest and tax (EBIT)	48.0	48.1	54.1	70.5	67.3
Average regulatory asset base ^b	514.8	523.4	535.3	549.7	562.2
Pre-tax nominal return on assets ^c (%)	9.3	9.2	10.1	12.8	12.0

a Includes costs such as operating the emergency call centre; system control; the apprentice training program; regulatory overheads; financial and executive management; and general network operations.

b Average regulatory asset base determined by the Commission as part of the 2004 price review determination.

c Return on assets = EBIT ÷ average regulatory asset base × 100.

Source: ActewAGL Distribution's annual reports to ICRC.

Table 4.3 provides details of network charges and energy deliveries by ActewAGL Distribution for the residential and non-residential sectors from 2004–05 to 2008–09. The main points that emerge are as follows:

- For the residential sector, revenue from charges increased to \$49.6 million in 2008–09, continuing the trend of rising charges, energy deliveries and average charges for the sector.
- For the non-residential sector, revenue from charges fell slightly in 2008–09. Although energy deliveries increased to just over 1,703 GWh, the average charge for power fell from 4.56c/kWh in 2007–08 to 4.41c/kWh in 2008–09.

Table 4.3 Network charges and energy deliveries, electricity distribution, ActewAGL Distribution, 2004–05 to 2008–09

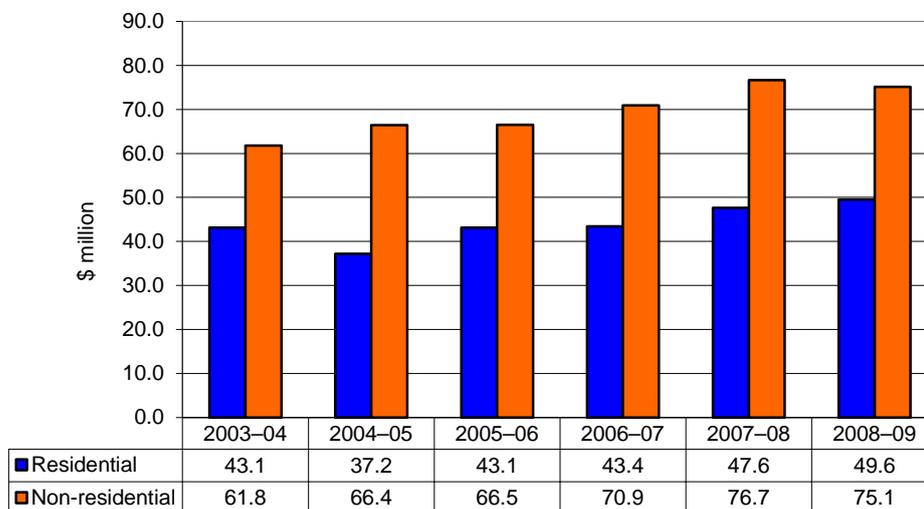
	2004–05	2005–06	2006–07	2007–08	2008–09
Residential					
Residential (\$m)	37.2	43.1	43.4	47.6	49.6
Energy delivered (GWh)	1,119	1,180	1,148	1,150	1,176
Average charge (c/kWh)	3.32	3.65	3.78	4.14	4.21
Non-residential					
Non-residential (\$m)	66.4	66.5	70.9	76.7	75.1
Energy delivered (GWh)	1,510	1,593	1,651	1,681	1,703
Average charge (c/kWh)	4.40	4.18	4.30	4.56	4.41
Network charges—total (\$m)	103.6	109.6	114.4	124.3	124.7
Energy delivered—total (GWh)	2,629	2,773	2,799	2,831	2,879
Average network charge (c/kWh)	3.94	3.95	4.09	4.39	4.33

Note: The average charges provide a high-level basis for comparison only and do not represent actual tariff structures.

Source: ActewAGL Distribution's annual reports to ICRC.

Figure 4.1 shows network revenues for the residential and non-residential sectors from 2003–04 to 2008–09. While revenue from the residential sector was fairly flat at around \$43 million over the four years to 2006–07, it rose by nearly 10% to over \$47 million in 2007–08 and to just under \$50 million in 2008–09. Over the same period, non-residential revenue continued to rise, from just under \$62 million in 2003–04 to just over \$75 million in 2008–09.

Figure 4.1 Network revenue, residential and non-residential, electricity distribution, ActewAGL Distribution, 2003–04 to 2008–09



Source: ActewAGL Distribution's annual reports to ICRC.

In 2008–09, the annual compliance and performance reporting process was also used to collect data on the regulatory accounts for ActewAGL Distribution's electricity business. That information is provided in Table 4.4.

Table 4.4 Regulatory accounts, electricity distribution, ActewAGL Distribution, 2008–09

Item	Value	Notes
Revenue (\$'000)^a		
Network charges		
Residential	43,625	Regulated
Non-residential low-voltage	63,452	Regulated
Non-residential high-voltage	11,672	Regulated
Non-residential subtransmission	n.a.	
Total network charges	118,750	Regulated
Public lighting ^b	n.a.	
Customer contributions	8,363	
Other distribution services	n.a.	
Profit from sale of assets		
Gross sale proceeds	3,366	Regulated
Book value of assets sold	n.a.	
Other revenue (excludes community service obligations)	2,723	
Capital expenditure and additions to fixed assets (\$'000)		
System assets		
Subtransmission lines	787	Financial accounting value—includes zone substation assets (additions less write-offs)
Distribution lines	22,397	Financial accounting value (additions less write-offs)
Low-voltage supply ^c	n.a.	
Substations	8,964	Financial accounting value for distribution substations (additions less write-offs)
Distribution transformers ^d	n.a.	
Meters	5,817	Financial accounting value (additions less write-offs). Note: Meters are deemed 'excluded services' and do not form part of the regulated asset base.
Communications	0	
Land and easements	0	
Buildings	0	
Other system assets	1,272	Financial accounting value (additions less write-offs)
Total system assets	39,236	Financial accounting value (additions less write-offs)
Public lighting	0	Financial accounting value (additions less write-offs)
Non-system assets	4,905	Financial accounting value (additions less write-offs) ^e
Capital expenditure on system assets, by purpose (\$'000)		
Asset replacement	15,315	Financial accounting value (capex)
Demand related	23,073	Financial accounting value (capex)
Reliability and quality improvements	2,090	Financial accounting value for augmentation (capex) ^f
Environmental, safety and legal obligations		
Full retail contestability	0	
Other	2,971	Financial accounting value (capex)

Item	Value	Notes
Depreciation (\$'000)		
Current year depreciation charge		Financial accounting value (not regulatory)
Depreciation methodology used	Straight line	
Weighted average remaining lives (years)		
System assets	n.a. ⁹	
Non-system assets	n.a.	
Operating costs (\$'000)		
Network operating costs	15,146	Regulated
Network maintenance costs		
Inspection	2,546	Regulated
Maintenance and repair	5,733	Regulated
Vegetation management	2,180	Regulated
Emergency response	3,608	Regulated
Other network maintenance	746	
Total network maintenance	14,813	Regulated
Other costs		
Meter reading	1,011	Regulated
Customer service	5,120	
Advertising and marketing	1,047	Regulated
Full retail contestability	9457	
Other operating costs	1,409	Regulated
Total other costs	1,020	
Public lighting	1,910	
Total corporate overheads included in cost categories above	20,975	Regulated
Related party transactions (\$'000)		
Total value of related party transactions	2,456 ^h	

a Includes estimated unread meter sales.

b Public lighting charges are included in network charges.

c Included in 'Distribution lines' category.

d Included in 'Substations' category.

e Does not include electricity networks' share of corporate assets.

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

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

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

Source: ActewAGL Distribution's 2008–09 annual report to ICRC.

4.2 Electricity supply, revenue and prices

Table 4.5 provides information about revenues, customer numbers, supply and electricity prices for the period from 2005–06 to 2008–09. Some of the key points are as follows:

- Total revenue from all customers rose by 7.1% in 2008–09, from \$361.4 million to \$386.9 million; revenue from the non-residential sector rose by 3.4%, and revenue from the residential sector rose by 12.1%.
- Total customer numbers rose by 1.6% to 153,819 during 2008–09. Residential customers numbered 139,793, or 91% of the total.

- The average cost of power to all customers fell by 4.1% during the year. The decrease for non-residential customers more than offset the increase for residential customers.

Table 4.5 Revenue, customer numbers, consumption and charges, electricity supply, ACT, 2005–06 to 2008–09

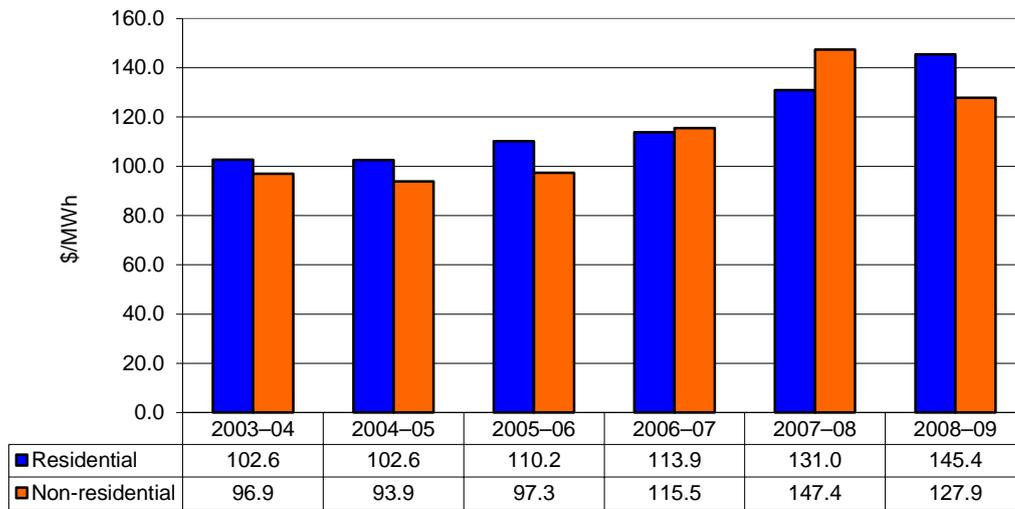
	2005–06	2006–07	2007–08	2008–09	Change (%) ^a
Revenue (\$m, nominal)					
Residential	128.0	131.6	151.4	169.7	12.1
Non-residential	161.5	192.7	210.0	217.2	3.4
Total revenue	289.5	324.3	361.4	386.9	7.1
Customers (no.)					
Residential	134,979	137,016	137,582	139,793	1.6
Non-residential	11,618	11,656	13,772	14,026	1.8
Total customers	146,597	148,672	151,354	153,819	1.6
Consumption (GWh)					
Residential	1,162	1,148	1,142	1,167	2.2
Non-residential	1,659	1,651	1,676	1,699	1.4
Total consumption	2,821	2,799	2,818	2,866	1.7
Average consumption/customer (MWh)					
Residential	8.6	8.4	8.3	8.3	0.6
Non-residential	142.8	141.6	121.7	121.1	-0.5
Average consumption, all customers	19.2	18.8	18.6	18.6	0.1
Average total charge (\$, nominal)					
Residential	948	961	1,100	1,213	10.3
Non-residential	13,901	16,530	15,248	15,488	1.6
Average total charge, all customers	1,975	2,181	2,387	2,515	5.3
Average charge per unit (\$/MWh)					
Residential	110.2	114.7	132.6	145.4	9.7
Non-residential	97.3	116.7	125.3	127.9	2.0
Average charge per unit, all customers	102.6	115.9	128.3	135.0	5.3

a Change between 2007–08 and 2008–09.

Source: Licensed electricity utilities' annual reports to ICRC.

Average costs of power for residential and non-residential customers are also shown in Figure 4.2.

Figure 4.2 Average electricity charges for residential and non-residential customers, electricity distribution, ActewAGL Distribution, 2003–04 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

In the ACT, the retailing of electricity to customers consuming more than 160 MWh/year (predominantly large businesses) was made contestable from 1998. The electricity supply industry in the ACT was opened for retail competition to customers consuming more than 100 MWh/year (mainly medium-sized businesses) from 1 July 2001.²⁶

Following the Commission's recommendation that full retail contestability be introduced for all customers in the ACT²⁷, the ACT Government opened the market for customers using less than 100 MWh/year (those customers with an annual electricity bill of less than about \$13,000) to competition from 1 July 2003.²⁸ This allowed small businesses and households to select the electricity retailer of their choice.

While the government opened the market to all customers, certain transitional arrangements were maintained. The arrangements were intended to ensure that customers consuming less than 100 MWh/year were able to remain on non-negotiated contracts with the incumbent retailer, ActewAGL Retail, if they did not wish to enter into a negotiated contract with one of the electricity retailers licensed in the ACT.

In December 2002, the Commission received a reference from the Treasurer instructing it to provide a price direction for the supply of electricity to franchise customers (that is, those on non-negotiated contracts) for a transitional period from 1 July 2003 to 30 June 2006. The Commission's first price direction was made at the time of the initial opening of the retail electricity market to competition for small customers (those consuming less than 100 MWh/year). Thus, at the beginning of that price direction, all small customers were on the regulated retail tariff.

The Commission termed the tariff resulting from that price direction the 'transitional franchise tariff' (TFT). Customers who chose to remain on the regulated tariff are called 'franchise customers', and

²⁶ Utilities (Non-Franchise Electricity Customers) Declaration 2001 (Disallowable instrument 2001-93).

²⁷ ICRC, *Final report: Full retail contestability in electricity in the ACT*, July 2002.

²⁸ Utilities (Non-Franchise Electricity Customers) Declaration 2003 (No. 1) (Disallowable instrument 2003-20).

customers who opted for a negotiated tariff with an alternative retailer or with the incumbent retailer are called ‘non-franchise customers’.

The TFT does not apply to all electricity customers in the ACT, but only to those small customers (residential and non-residential customers who consume less than 100 MWh/year) who have not elected to enter into a negotiated contract with either the incumbent retailer, ActewAGL Retail, or an alternative electricity retailer.

A further reference was received by the Commission on 7 February 2008, instructing it to determine any change to the TFT for the period from 1 July 2008 to 30 June 2009. In response, the Commission undertook another detailed build-up of the costs incurred by ActewAGL Retail in providing electricity to franchise customers. The final report was released in June 2008 and allowed for a real increase in the TFT of 4.67%.

Table 4.6 summarises the changes (in real terms) to the TFT since its introduction in 2003–04.

Table 4.6 Real price changes to the ACT transitional franchise tariff, 2003–04 to 2008–09

Year	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Real price change (%)	4.5	0.5	0.5	0.0	12.9	4.7
CPI increases (%; June to June quarters)	2.5	2.5	4.0	2.1	4.5	1.5

Source: ICRC, internal report.

Table 4.7 shows revenues from various customer categories during 2008–09. Of the total revenue of \$387 million raised by electricity suppliers during the year, non-residential customers accounted for \$217 million, or 56%.

Table 4.7 Customer revenues by category, electricity supply, ACT, 2008–09 (\$m)

Contract	Revenue from small customers ^a	Revenue from medium customers ^b	Revenue from large customers ^c	Total
Standard				
Residential	134.82	0	0	134.82
Non-residential	48.41	0	0	48.41
Subtotal	183.23	0	0	183.23
Negotiated				
Residential	34.85	0	0	34.85
Non-residential	4.75	129.41	34.68	168.83
Subtotal	39.60	129.41	34.68	203.69
Standard and negotiated				
Residential	169.67	0	0	169.67
Non-residential	53.15	129.41	34.68	217.24
Totals	222.83	129.41	34.68	386.92

a ‘Small’ customers use <100 MWh/year.

b ‘Medium’ customers use 100–160MWh/year.

c ‘Large’ customers use >160 MWh/year.

Source: Licensed electricity utilities’ annual reports to ICRC.

4.3 Gas supply, revenue and prices

The ACT's gas supply market was opened to competition in January 2002, thereby giving customers the freedom to choose their gas suppliers. Before contestability was introduced, ActewAGL Retail supplied all gas consumers within the ACT. During 2008–09, there were five licensed gas suppliers in the territory.

Table 4.8 shows revenues raised by those companies in various customer categories during 2008–09. Of total revenue of \$121.8 million, customers consuming less than 1 TJ per year accounted for just over \$112 million, or 92.3%; large customers accounted for the remaining \$9.4 million (7.3%).

Revenue from customers on standard contracts accounted for \$83 million (68.5% of the total), compared with \$38.4 million (31.5%) from customers on negotiated contracts.

Table 4.8 Customer revenues by contract category, gas supply, ACT, 2008–09 (\$m)

Contract type	Revenue from small customers ^a	Revenue from large customers ^b	Total revenue
Standard			
Residential	64.8	0.0	64.8
Non-residential	18.6	0.0	18.6
Subtotal	83.4	0.0	83.4
Negotiated			
Residential	26.0	0.0	26.0
Non-residential	3.1	9.4	12.4
Subtotal	29.1	9.4	38.4
Standard and negotiated			
Residential	90.8	0.0	90.8
Non-residential	21.6	9.4	31.0
Totals	112.4	9.4	121.8

a 'Small' customers use <1 TJ/year.

b 'Large' customers use >1 TJ/year.

Source: Licensed gas utilities' annual reports to ICRC.

Table 4.9 provides details on revenue, customer numbers, consumption levels and prices for gas for residential and non-residential customers from 2005–06 to 2008–09.

Table 4.9 Revenue, customer numbers, consumption and average charges, gas supply, ACT, 2005–06 to 2008–09

	2005–06	2006–07	2007–08	2008–09	Change (%) ^a
Revenue (\$m)					
Residential	65.3	67.4	76.7	90.8	18.4
Non-residential	20.9	22.8	25.8	31.0	20.1
Total revenue	86.2	90.2	102.5	121.8	18.8
Customers (no.)					
Residential	87,010	91,177	92,107	91,944	-0.2
Non-residential	1,956	1,977	2,106	2,075	-1.5
Total customer numbers	88,966	93,154	94,213	94,019	-0.2
Consumption (TJ)					
Residential	4,335	4,196	4,432	4,553	2.7
Non-residential	2,522	2,307	2,784	2,554	-8.3
Total consumption	6,857	6,503	7,216	7,107	-1.5
Average consumption per customer (GJ)					
Residential	49.8	46.0	48.1	49.5	2.9
Non-residential	1,289.4	1,166.9	1,321.8	1,230.8	-6.9
Average consumption, all customers	77.1	69.8	76.6	75.6	-1.3
Average total charge per customer (\$)					
Residential	750	739	832.6	987.7	18.6
Non-residential	10,685	11,526	12,257	14,931	21.8
Average total charge, all customers	968.9	967.9	1,087.9	1,295.5	19.1
Average unit charge per customer (\$/GJ)					
Residential	15.1	16.1	17.3	19.9	15.3
Non-residential	8.3	9.9	9.3	12.1	30.9
Average unit charge, all customers	12.6	13.9	14.2	17.1	20.6

a Change from 2007–08 to 2008–09.

Source: Licensed gas utilities' annual reports to ICRC.

Retail pricing for gas supply in the ACT has been fully contestable since the regulation of gas retail prices ceased from 1 January 2002. There are no arrangements such as the transitional franchise tariff that applies in the electricity industry. However, network prices are regulated in the access arrangement for the ACT, Queanbeyan and Yarrowlumla; they are determined by the Commission and included in retail prices. Table 4.10 shows the prices being charged by ActewAGL Retail for gas from 1 July 2009.

Table 4.10 Residential and non-residential gas prices, ActewAGL, ACT, from 1 July 2009

	Units	Price level ^a
Residential^b		
Supply fee	cents/day	56.859
Usage fee	cents/MJ	1.9866
Industrial and commercial		
Supply fee	cents/day	113.058
Usage rate	cents/MJ	
First 1,643.8356 MJ/day		1.9096
Thereafter		1.6863

a Prices are inclusive of GST.

b The Always Home@ActewAGL plan and the Always Home@ActewAGL Saver plan.

Source: ActewAGL website.

4.4 Water and wastewater services

Water and wastewater services in the ACT continue to be provided by ACTEW Corporation (ACTEW) and managed by the ActewAGL joint venture.

The Commission is responsible for determining the tariffs that ACTEW applies for the provision of water and wastewater services in the ACT. To determine those charges, the Commission undertakes a comprehensive inquiry into ACTEW's water and wastewater business on a regular basis. Each inquiry results in the determination of a price path to apply for the length of the subsequent review period. The most recent review determined a price path to apply for the five years from 1 July 2008 to 30 June 2013.

4.4.1 Water supply

Table 4.11 shows the components of ACTEW's water supply revenues, average charges and capital expenditure from 2004–05 to 2008–09.

Table 4.11 Property numbers, revenue and capital expenditure, water services, ACTEW Corporation, 2004–05 to 2008–09

	2004–05	2005–06	2006–07	2007–08	2008–09
Number of connected properties ('000)	136	139	140	141	144
Total urban water supplied (ML) ^a	48,268	52,470	47,699	40,749	41,797
Total revenue—water (\$'000)	63,264	74,468	72,044	78,419	96,643
Average charge (\$/customer)	465	536	515	556	671
Capital expenditure (\$'000, nominal)	51,363	25,690	20,962	49,172	90,207

a. Figures may vary from earlier data supplied by ACTEW due to different definitions used.

Source: Water Services Association Australia, *National performance report 2008–2009: urban water utilities*.

4.4.2 Sewerage services

Table 4.12 shows that in 2008–09 ACTEW's sewerage services revenue increased to over \$95 million. Revenues have increased each year since 2004–05, reflecting growth in the customer base and an increase in the supply and fixture charges. The number of connected properties rose by 3,000 in 2008–09.

Table 4.12 Property numbers, revenue and capital expenditure, sewerage services, ACTEW Corporation, 2004–05 to 2008–09

Item	2004–05	2005–06	2006–07	2007–08	2008–09
Number of connected properties ('000)	135	138	139	141	144
Total revenue (\$'000)	77,740	80,155	89,678	92,275	95,156
Average revenue per property	576	581	645	654	661
Capital expenditure (\$'000, nominal)	13,504	5,690	11,499	20,966	51,871

Source: Water Services Association Australia, *National performance report 2008–2009: urban water utilities*.

4.4.3 Residential tariff structure—water and sewerage

The residential tariff structure for 2008–09 is shown in Table 4.13.

Table 4.13 Residential tariff structure for water and sewerage, 2008–09

Category	Description	Amount (\$)
Fixed charge—water (\$/property)		85.00
User charge—water: first step (\$/kL)	Up to 548 litres per day	1.85
User charge—water: second step (\$/kL)	Above 548 litres	3.70
Fixed charge—sewerage (\$/property)		443.82

Source: ICRC, *Water and wastewater price review: final report and price determination*, Report 1 of 2008.

5 Customer complaints handling

This chapter presents information on licensees' customer complaints handling.

5.1 All utilities

The ACT's Consumer Protection Code establishes a range of minimum service standards which apply to suppliers of utility services in the ACT. Customer service indicators cover the timely provision of service, call centre performance and complaints. A complaint is defined as any expression of dissatisfaction with an action, a proposed action or failure to act, or about a product or service offered or provided by the licensee, where a response by the service provider is explicitly or implicitly expected. Complaints do not include general enquiries or requests for advice.²⁹

Material relating to compliance with the Consumer Protection Code's minimum service standard 3 (acknowledging and responding to complaints within the timeframes set out in the minimum service standard) appears in Chapter 3 of this report.

Table 5.1 shows the number of complaints per 1,000 customers for all licensed utilities in 2008–09, and categorises the most common complaints made during the year in the ACT. In the electricity distribution sector, complaints about customer service were the most common, at 30% (33% in 2007–08). In the gas distribution sector, complaints about connection issues were the most common, at 29% of all complaints (33% in 2007–08). For electricity suppliers, complaints relating to disconnections and service requests not being met were by far the most common (68%), while for gas suppliers complaints about marketing were the most common (30%).

Table 5.1 Complaints, ACT utility groups, 2008–09

Licensee	Complaints per 1,000 customers	Most common complaints	Proportion of total (%)
ActewAGL Distribution (electricity)	3.8	Customer service	30
ActewAGL Distribution (gas)	0.1	Connections	29
ACT electricity suppliers	8.5	Other ^a	68
ACT gas suppliers	10.2	Marketing	3
ACTEW Corporation (water and sewerage)	3.4	Water quality	30

a 'Other' complaints relate to service requests not being met, products and services, and disconnections.

Source: Licensed utilities' 2008–09 annual reports to ICRC.

Table 5.2 shows the number of complaints per 1,000 customers over the five-year period to 2008–09. The main points are as follows:

- Complaints about both electricity and gas distributors decreased over the five years.
- Complaints about electricity and gas suppliers increased.
- Complaints about water and sewerage services fluctuated over the five years, but a general downward trend is evident. However, there are no clear-cut explanations for the fluctuations.

²⁹ From 1 July 2005, service standard 3 (on responding to complaints) was extended to include verbal as well as written complaints not previously captured. This resulted in the recording of a larger number of complaints than previously. The figures and trends in this report must be viewed against the background of the 2005 change.

Table 5.2 Complaints per 1,000 customers, ACT utilities, 2004–05 to 2008–09

Licensee	2004–05	2005–06	2006–07	2007–08	2008–09
ActewAGL Distribution (electricity)	5.8	5.8	5.2	4.8	3.8
ActewAGL Distribution (gas)	1.0	1.4	0.2	0.3	0.1
ACT electricity suppliers	1.2	3.5	4.6	9.4	8.5
ACT gas suppliers	2.3	1.2	3.1	7.4	10.2
ACTEW Corporation (water and sewerage)	5.0	8.4	3.0	2.9	3.4

Source: Licensed utilities' annual reports to ICRC.

5.2 Electricity distribution

Table 5.3 includes details of customer complaints about electricity distribution for the three years from 2006–07 to 2008–09. The number of complaints received trended down significantly over the period, falling from 817 in 2006–07 to 611 in 2008–09. The main sources of complaints related to failure to provide sufficient notice and also administrative processes of customer service; those categories accounted for nearly two-thirds of all complaints in 2008–09.

Table 5.3 Customer complaints, electricity distribution, ActewAGL Distribution, 2006–07 to 2008–09

Category	2006–07	2007–08	2008–09
Reliability of supply	17	7	26
Technical quality of supply	21	7	5
Administrative process or customer service	232	253	181
Property damage / restoration of property	123	139	86
Connections	4	17	12
Metering / meter reading	9	14	15
Failure to provide notice or provision of insufficient notice	285	225	209
Other network operations	n.a.	n.a.	26
Other	126	98	51
Total	817	760	611

n.a. = not available.

Source: ActewAGL Distribution's annual reports to ICRC.

Table 5.4 details the numbers per 1,000 customers from 2005–06 to 2008–09 and their nature. The following key points emerge from the data:

- Complaints about notices accounted for 34% of all complaints in 2008–09, followed closely by complaints about customer service, at just under 30%.
- Complaints about property damage accounted for 14% of all complaints, the next largest category for the year.

Table 5.4 Customer complaints, per 1,000 customers, electricity distribution, ActewAGL Distribution, 2005–06 to 2008–09

Category	2005–06		2006–07		2007–08		2008–09	
	No.	%	No.	%	No.	%	No.	%
Customer service	1.85	31.8	1.48	28.4	1.60	33.3	1.12	29.6
Notices	1.53	26.4	1.82	34.9	1.42	29.6	1.30	34.2
Property damage or restoration	0.74	12.8	0.79	15.1	0.88	18.3	0.53	14.1
Reliability of supply	0.49	8.5	0.11	2.1	0.04	0.9	0.16	4.3
Other network operations	0.41	8.4	0.55	10.5	0.24	5.0	0.25	6.7
Technical quality of supply	0.06	1.0	0.13	2.6	0.04	0.9	0.03	0.8
Other	0.72	11.1	0.34	6.5	0.57	12.0	0.39	10.3
Total	5.81	100.0	5.23	100.0	4.80	100.0	3.79	100

Source: ActewAGL Distribution's annual reports to ICRC.

Table 5.5 compares responses to complaints and notifications for electricity distribution for 2007–08 and 2008–09.

Table 5.5 Response to complaints and notifications, electricity distribution, ActewAGL Distribution, 2007–08 and 2008–09

	2007–08	2008–09
Complaints received	760	611
Complaints acknowledged within 10 business days	752	607
Complaints responded to within 20 business days	718	575
Notifications of network problems or concerns about licensee's network received	6,891	8,636
Notifications of network problems likely to affect public health or cause damage to people or property	105	199
Responses not made within 6 hours	7	13
Notifications of network problems not likely to affect public health or cause damage to people or property	6,786	8,439
Responses not made within 48 hours	10	33
Planned interruptions to services	1,468	1,705
Times licensee did not provide at least 2 days notice	589	646
Times supply not restored within 12 hours of the initial interruption	7	14
Unplanned interruptions to services	700	953
Times supply not restored within 12 hours of the initial interruption	4	10

Source: ActewAGL Distribution's annual reports to ICRC.

5.3 Electricity supply

During 2008–09, ACT electricity suppliers received a total of 1,309 complaints about billing and affordability (297, or 22.7% of the total); marketing (116; 9%); 'other retail matters' (900; 68%).

Table 5.6 provides a detailed breakdown of the complaints received by individual retailers during 2008–09. Care must be exercised in interpreting the information because a retailer with a large number of customers, such as ActewAGL Retail, would be expected to receive more complaints than a retailer with a limited number of customers, such as TRUenergy.

Table 5.6 Complaints received by electricity suppliers, by type, 2008–09

Supplier	Billing and affordability ^a	Marketing	Other retail	Total
ActewAGL Retail	275	111	883	1,269
AGL Sales	0	0	0	0
AGL Sales (Queensland Electricity)	0	0	0	0
Aurora Energy	0	0	0	0
Country Energy	2	0	0	2
EnergyAustralia	13	5	8	26
Integral Energy	0	0	0	0
Origin Energy	0	0	0	0
Powerdirect	0	0	0	0
Red Energy	0	0	0	0
TRUenergy	7	0	5	12
TRUenergy Yallourn	0	0	0	0
Total	297	116	896	1,309

a Billing and affordability complaints include complaints directly relating to the amount of a bill, as well as 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.

Source: Licensed electricity utilities' annual reports to ICRC.

A more useful indicator of complaints, shown in Table 5.7, is the number of electricity supply complaints per 1,000 customers and the percentage of complaints in the main categories over the four years to 2008–09. Over that period, the number of complaints per 1,000 customers nearly trebled compared to 2005–06 levels, before falling back to 8.5 per 1,000 in 2008–09.

Table 5.7 Complaints per 1,000 customers, electricity supply, ACT suppliers 2005–06 to 2008–09

Category	2005–06		2006–07		2007–08		2008–09	
	No.	%	No.	%	No.	%	No.	%
Marketing	1.78	51.0	1.24	26.8	1.05	11.2	0.75	8.9
Billing	0.57	16.0	0.98	21.0	1.57	16.7	1.93	22.7
Other ^a	1.12	33.0	2.43	52.2	6.77	72.1	5.83	68.4
Total	3.47	100.0	4.65	100.0	9.39	100.0	8.51	100.0

a Complaints in the 'Other' category are about service requests not being met, products and services, and disconnections.

Source: Licensed electricity utilities' annual reports to ICRC.

While the number of complaints levelled against utilities is a useful indicator, it is perhaps more important to gauge the utilities' responses to those complaints. Table 5.8 shows the numbers acknowledged within 10 days and responded to within 20 business days during 2008–09. Of the 1,309 complaints received during the year, 94% were acknowledged within 10 business days; 87% were responded to within 20 business days.

Table 5.8 Response to complaints, ACT electricity suppliers, 2008–09

Supplier	Complaints received	Complaints acknowledged within 10 business days	Complaints responded to within 20 business days
ActewAGL Retail	1,269	1,228	1,124
AGL Sales	n.a.	n.a.	n.a.
AGL Sales (Queensland Electricity)	n.a.	n.a.	n.a.
Aurora Energy	n.a.	n.a.	n.a.
Country Energy	2	2	2
EnergyAustralia	26	n.a.	n.a.
Integral Energy	0	n.a.	n.a.
Origin Energy	0	n.a.	n.a.
Powerdirect	0	n.a.	n.a.
Red Energy	0	n.a.	n.a.
TRUenergy	12	7	12
TRUenergy Yallourn	n.a.	n.a.	n.a.
Total	1,309	1,237	1,138

n.a = not available

Source: Licensed electricity utilities' annual reports to ICRC.

5.4 Gas distribution

Table 5.9 shows the main categories of complaints and the numbers of complaints about gas distribution in 2007–08 and 2008–09. During 2008–09, ActewAGL Distribution received 14 complaints, up from 12 in 2007–08, but down from the 16 complaints in 2006–07. This figure is less than 0.1% of the total number of customers in the year.

Table 5.9 Complaints, type and number, gas distribution, ActewAGL Distribution, 2007–08 and 2008–09

Category	2007–08	2008–09
Property damage/restoration of property	3	6
Administrative process or customer service	3	3
Quality and reliability of supply	0	1
Connections	4	4
Metering / meter reading	1	0
Failure to provide, or insufficient, notice	1	0
Unplanned interruptions	0	0
Other	0	0
Total	12	14

Source: ActewAGL Distribution's annual reports to ICRC.

Table 5.10 shows the main categories of complaints and the number of complaints per 1,000 customers since 2005–06. It is significant that the number of complaints has fallen over recent years, from 1.36 per 1,000 customers in 2005–06 to 0.14 in 2008–09. Complaints regarding connections, property damage and site restoration remained the main areas of concern, comprising about 43% of total complaints in 2008–09.

Table 5.10 Complaints per 1,000 customers, gas distribution, ActewAGL Distribution, 2005–06 to 2008–09

Category	2005–06		2006–07		2007–08		2008–09	
	No.	%	No.	%	No.	%	No.	%
Metering and meter reading	0.83	60.8	0.00	0.0	0.01	8.3	0.00	0.0
Connections	0.21	15.2	0.05	31.3	0.04	33.3	0.04	28.6
Property damage and site restoration	0.16	12.0	0.00	0.0	0.03	25.0	0.06	42.9
Other	0.16	12.0	0.12	68.8	0.04	33.3	0.04	28.6
Total	1.36	100.0	0.17	100.0	0.13	100.0	0.14	100

Source: ActewAGL Distribution's annual reports to ICRC.

Table 5.11 shows responses made to complaints about gas distribution in 2007–08 and 2008–09. All 14 complaints received during 2008–09 were responded to within 20 business days. Importantly, there was a marked fall in the number of notifications to customers of problems or concerns about the licensee's network—from 2,118 in 2007–08 to 1,549 in 2008–09. In addition, the number of notifications likely to affect public health fell from 238 in 2007–08 to 225 in 2008–09, another improvement in an important indicator of performance by the utility.

Table 5.11 Response to complaints and notifications, gas distribution, ActewAGL Distribution, 2007–08 and 2008–09

	2007–08	2008–09
Total number of complaints	12	14
Complaints acknowledged in 10 business days	11	13
Complaints responded to in 20 business days	12	14
Notifications of network problems or concerns about licensee's network	2,118	1,549
Notifications of problems likely to affect public health or cause damage to people or property	238	225
Number of responses not made within 6 hours	0	0
Notifications not likely to affect public health or cause damage to people or property	1,880	1,324
Number of responses not made within 48 hours	113	168

Source: ActewAGL Distribution's annual reports to ICRC.

5.5 Gas supply

Table 5.12 shows the numbers and types of complaints received by the four gas suppliers in 2008–09. ActewAGL Retail is the main gas retailer in the ACT and, as expected, accounted for the bulk of complaints received. Of the 964 complaints received by the four utilities, billing and affordability accounted for 42%, ‘other retail’ (not separately identified) for 54% and marketing for less than 3%.

Table 5.12 Complaints received by gas suppliers, 2008–09

Category	ActewAGL Retail	Country Energy	EnergyAustralia	TRUenergy	Total
Billing and affordability	403	3	1	4	411
Marketing	26	0	1	0	27
Other retail	524	0	0	2	526
Total	953	3	2	6	964

Table 5.13 provides a comparison of complaints in the gas supply sector in 2007–08 and 2008–09. ACT gas suppliers received 964 complaints, up by 268 or nearly 40% from the 696 complaints received in 2007–08. The main increase was in the ‘other retail’ category.

Table 5.13 Complaints, gas supply, ACT suppliers, 2007–08 and 2008–09

Category	2007–08	2008–09
Billing and affordability	351	411
Marketing	20	27
Other retail	325	526
Total	696	964

Source: Licensed gas utilities’ annual reports to ICRC.

Table 5.14 shows the main categories of complaints and the numbers of complaints per 1,000 gas supply customers over the four years from 2005–06. On an aggregate level, the number of complaints per 1,000 customers rose from 1.2 in 2005–06 to 10.2 in 2008–09. Complaints about billing and affordability rose in 2008–09 after a significant fall the previous year.

Table 5.14 Complaints per 1,000 customers, gas supply, ACT suppliers, 2005–06 to 2008–09

Category	2005–06		2006–07		2007–08		2008–09	
	No.	%	No.	%	No.	%	No.	%
Billing and affordability	0.9	71.3	2.2	70.5	0.2	2.9	4.4	42.6
Marketing	0.0	3.1	0.5	17.0	3.7	50.4	0.3	2.8
Other retail	0.3	25.6	0.4	12.5	3.4	46.7	5.6	54.6
Total	1.2	100.0	3.1	100.0	7.4	100.0	10.2	100.0

Note: ActewAGL Retail only; includes Queanbeyan.

Source: Licensed gas utilities’ annual reports to ICRC.

While the number of complaints is a useful indicator to report, suppliers’ responses to those complaints are a more important indicator of improvement in handling complaints. Table 5.15 shows that during 2008–09 ACT gas suppliers responded to all complaints within 20 business days.

Table 5.15 Response to complaints, ACT gas suppliers, 2008–09

Supplier	Complaints received	Complaints acknowledged within 10 business days	Complaints responded to within 20 business days
ActewAGL Retail	953	953	953
Country Energy	3	3	3
EnergyAustralia	2	n.a.	n.a.
TRUenergy	6	5	6

n.a. = not available.

Source: Licensed gas utilities' annual reports to ICRC.

5.6 Water and sewerage

5.6.1 Water supply complaints

In 2008–09, ACTEW Corporation received a total of 541 complaints about water supply to premises in the ACT, well up from the 401 complaints in 2007–08 and the 363 in 2006–07. Table 5.16 details the types and numbers of complaints received by ACTEW Corporation over the three years to 2008–09. Complaints about water quality featured prominently, with 191 in 2008–09. The main increase during the year was in the general category of 'other network complaints', from 140 to 219.

Table 5.16 Complaints, water supply, 2006–07 to 2008–09

Complaint ^a category	2006–07	2007–08	2008–09
Water quality ^b	141	144	191
Water supply reliability	24	7	3
Property damage / restoration of property	40	49	54
Accounts / billing	62	44	63
Metering / meter reading	40	12	7
Failure to provide, or insufficient, notice	9	4	9
Unplanned interruptions	3	1	3
Other network complaints	44	140	219
Total	363	401	541

a 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 queries or requests for advice.

b A water quality complaint is any complaint about discolouration, taste, odour, stained washing, illness, etc.

Source: ACTEW Corporation's annual reports to ICRC.

5.6.2 Sewerage service complaints

Numbers of complaints about sewerage services over the three years to 2008–09 are provided in Table 5.17. In 2008–09, 100 complaints were received, a slight rise from 97 the previous year but twice the number received in 2006–07. The main categories of complaints continued to be sewerage odour, sewerage services reliability, property damage and unplanned interruptions.

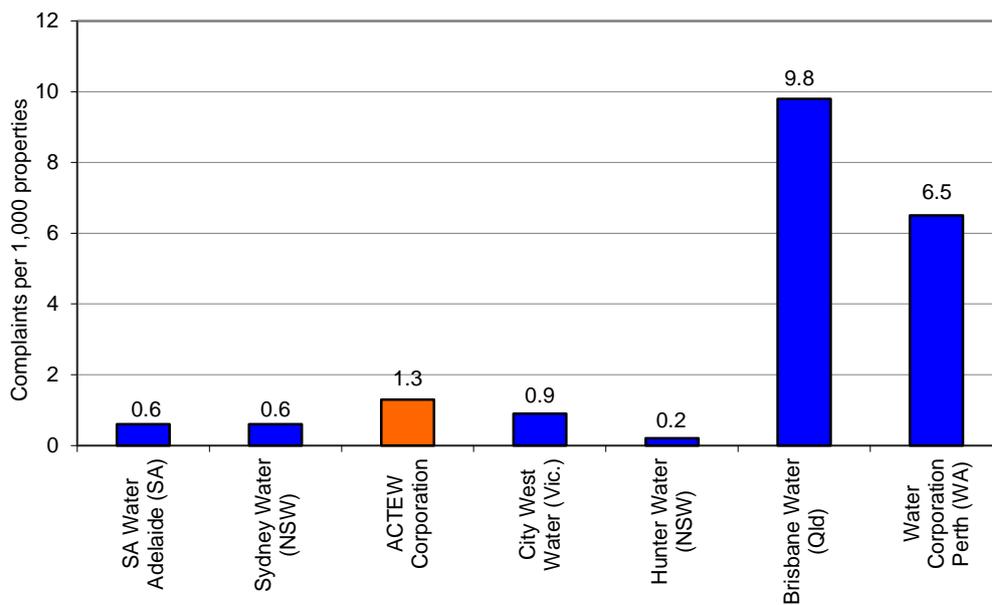
Table 5.17 Complaints, sewerage services, 2006–07 to 2008–09

Category	2006–07	2007–08	2008–09
Sewage odour ^a	10	9	26
Sewerage services reliability and quality	14	27	29
Property damage / restoration of property	19	28	26
Accounts/billing	0	0	0
Failure to provide, or insufficient, notice	0	1	0
Unplanned interruptions	0	18	19
Other networks	7	14	0
Total sewerage services	50	97	100

a This includes all sewage odour complaints, irrespective of whether the business believes the odour was attributable to another, non-business source.
Source: ACTEW Corporation's annual reports to ICRC.

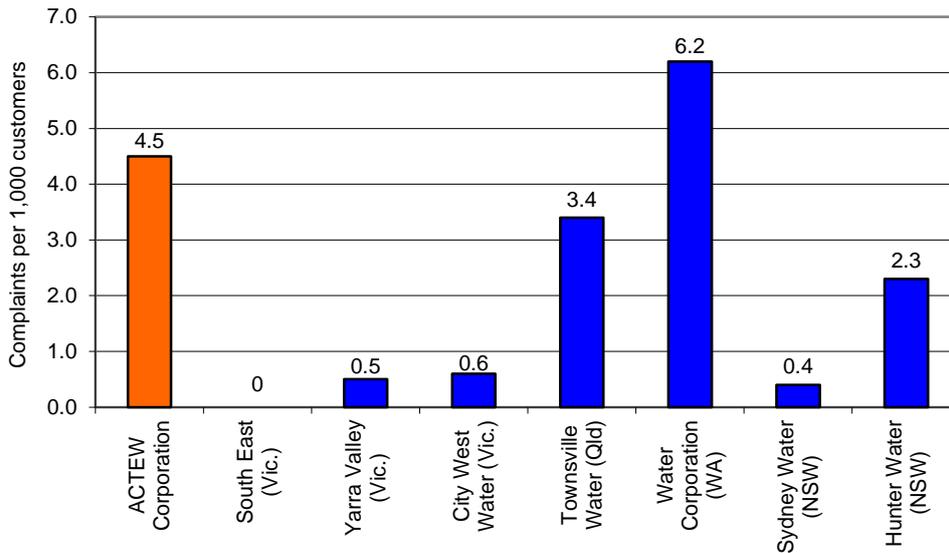
Figures 5.1 and 5.2 compare the numbers of complaints received by ACTEW Corporation in 2008–09 about water quality and about sewerage services with the number of complaints received by other selected utilities. ACTEW Corporation compares reasonably favourably with some other utility operators for water quality but not as favourably for sewerage services.

Figure 5.1 Complaints per 1,000 properties, water quality, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

Figure 5.2 Complaints per 1,000 properties, sewerage services, selected utilities, 2008–09



Source Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

Responses by ACTEW Corporation to complaints about water supply are shown in Table 5.18, which shows that 539 of the 541 complaints received in 2008–09 were responded to within 10 business days. Customers were given at least two days notice of the 4,750 planned interruptions to services during 2008–09.

Table 5.18 Responses to complaints—obligations under Consumer Protection Code, water supply, 2006–07 to 2008–09

Category	2006–07	2007–08	2008–09
Customer connections that failed to meet the performance standard specified in the Consumer Protection Code	0	0	0
Percentage of total connections	0	0	0
Consumer/customer complaints received	363	401	541
Complaints acknowledged within 10 business days	341	382	539
Complaints responded to within 20 business days	343	376	541
Notifications of network problems or concerns about the licensee's network received	4,537	3,673	3,944
Notifications related to damage or harm to, or fault with, the licensee's network that was likely to affect public health, or caused or potentially caused substantial damage or harm to a person or property	82	64	108
Responses not made within 6 hours	0	0	0
Notifications related to other problems or concerns that were not likely to affect public health, or cause or potentially cause substantial damage or harm to a person or property	4,455	3,609	3,836
Responses not made within 48 hours	840	859	980
Problems or concerns not resolved in the time specified in the response	77	116	126
Planned interruptions to services	10,777	1,414	4,750
Instances where licensee did not provide at least 2 days notice of a planned interruption to each premises affected	0	0	0
Instances where supply was not restored within 12 hours of the initial interruption	0	0	0
Unplanned interruptions to services	727	594	692
Instances where supply was not restored within 12 hours of the initial interruption	0	0	2
Claims for a rebate for failing to meet the performance standards specified in Schedule 1 to the Consumer Protection Code	3	0	0
Rebates paid to customers	8	2	0
Total value of rebates paid (\$)	220	40	0

Source: ACTEW Corporation's annual reports to ICRC.

Responses to complaints about sewerage services over the three years to 2008–09 are shown in Table 5.19, which shows the following:

- In all three years, all complaints received were acknowledged within 10 business days.
- The number of notifications likely to affect public health or damage or cause harm to a person or property rose from 17 in 2006–07 to 28 in 2008–09. However, all notifications were acted upon within six hours.
- While the number of unplanned interruptions to sewerage services rose over the three years from 1,985 in 2006–07 to 2,229 in 2008–09, there were only two instances in 2008–09 in which supply was not restored within 12 hours of notification.

Table 5.19 Response to complaints—obligations under Consumer Protection Code, sewerage services, 2006–07 to 2008–09

Category	2006–07	2007–08	2008–09
Customer connections that failed to meet the performance standard specified in the Consumer Protection Code	0	0	0
Percentage of total connections	0	0	0
Complaints received	50	97	100
Complaints acknowledged within 10 business days	50	97	100
Complaints responded to within 20 business days	50	96	100
Notifications of network problems or concerns about the licensee's network received	5,181	5,252	5,593
Notifications related to damage or harm to, or fault with, the licensee's network that was likely to affect public health, or caused or potentially caused substantial damage or harm to a person or property	17	21	28
Responses not made within 6 hours	0	0	0
Notifications related to other problems or concerns that were not likely to affect public health, or cause or potentially cause substantial damage or harm to a person or property	5,164	5,231	5,565
Responses not made within 48 hours	15	15	27
Problems or concerns not resolved in the time specified in the response	61	63	74
Planned interruptions to services	0	0	0
Instances where licensee did not provide at least 2 days notice of a planned interruption to each premises affected	0	0	0
Instances where supply was not restored within 12 hours of the initial interruption	0	0	0
Unplanned interruptions to services	1,985	2,059	2,229
Instances where supply was not restored within 12 hours of the initial interruption	3	1	2
Claims for a rebate for failing to meet the performance standards specified in Schedule 1 to the Consumer Protection Code	1	0	0
Rebates paid to customers	0	0	0
Total value of rebates paid (\$)	0	0	0

Source: ACTEW Corporation's annual reports to ICRC.

6 Technical regulation—network reliability, serviceability and maintenance

This chapter details matters relevant to network reliability and serviceability and several other matters relevant to technical regulation. It differs in content and structure from previous Commission compliance and performance reports in that it integrates information on customer service network performance with information provided by the Technical Regulator focused on network serviceability and maintenance.

6.1 ACT technical regulation framework

Part 5 of the Utilities Act provides for technical regulation of ACT utility services. It is administered by ACTPLA. The functions of the chief executive in relation to technical regulation are set out in section 66 of the Utilities Act.³⁰ The functions include monitoring and enforcing utilities' compliance with technical codes made under the Utilities Act, advising the Commission and the minister, and providing a report to the Commission on the operation of Part 5.

Much of the material in this chapter has been extracted from the Chief Planning Executive's report to the Commission for 2008–09. The chapter does not aim to provide a complete picture of ACTPLA's technical regulation role or the matters associated with the technical codes regime. It focuses on major issues that ACTPLA has identified, including those flowing from the program of compliance audits that the authority has instituted in recent years.

ACTPLA has defined its objective in technical regulation as being to ensure both the serviceability of networks over the long term and the effective deployment by the utility of technical skills and systems to deliver the required performance.

The serviceability of a network means the ability of the physical infrastructure of the network, in terms of its sizing, nature and condition, to provide required performance. Required performance means the delivery of utility services to required technical standards in relation to the health and safety of utility workers and customers; the protection of public and private property; the provision of utility services to customers and for any relevant community service obligations; and environmental performance.

ACTPLA has reported that audit work in the electricity sector continues to identify issues and provides momentum for improvements to the network operator's systems. Audit programs instituted in 2008–09 for the gas industry sector have improved the response by the network operator to technical safety issues. ACTPLA reports that it has continued to scrutinise water and sewerage network systems, with the aim of ensuring that the network operator benchmarks against national data.

³⁰ Part 5 (Technical Regulation), s. 66 of the Utilities Act (Functions of the chief executive) requires the chief executive to provide the Commission with advice about the compliance of utilities with technical codes, and to report to the Commission at least annually about the operation of part 5. In 2008–09, the chief executive was the Chief Planning Executive of ACTPLA (the 'Technical Regulator'), and the minister was the Minister for Planning.

6.2 Electricity distribution

6.2.1 Voltage levels

ActewAGL Distribution reports that that voltage levels within the ACT are supplied in accordance with AS 2926 or within $\pm 6\%$ of the nominal supply voltage of 240 V/415 V. In addition, ActewAGL Distribution aims to maintain voltages within limits for 95% of the time to 95% of customers.

Voltages outside the high limit can cause premature failure of certain domestic appliances, whereas low voltages can cause electric motors to fail.

In the summer of 2009, ACTPLA audited 102 premises to determine the levels at which ActewAGL Distribution was supplying voltage that met the technical requirement to domestic customers and commercial premises. The results showed that eight premises (7% of the total) experienced low voltage, with one at 214.3 volts (10.7% below the limit). In addition, 17 customers (16%) experienced voltage above the limits, the highest being 259 volts supplied to two customers.

ActewAGL Distribution relies on complaints from its customers and some field measurements to monitor voltage levels. However, most customers would not know whether their supply voltage is high or low. During 2008–09, 20 complaints about high voltage were received, of which 14 were substantiated. Complaints about low voltage totalled 11, of which four were substantiated.

ACTPLA has informed ActewAGL Distribution that more proactive voltage monitoring is required. ActewAGL has now started to install smart meters at customers' premises. The meters have a number of attributes, one of which is the ability to constantly measure voltage and transmit the results back to the company.

The Electricity Distribution (Supply Standards) Code requires ActewAGL Distribution to specify a standard system nominal voltage for its network that complies with specified Australian Standards. ActewAGL Distribution adopted an internal rule based on a European rule to meet the Australian Standards. The rule requires adherence to the standard for 95% of the time. However, unlike the European rule, the ActewAGL Distribution rule included a further qualification: 'for 95% of the customers'. ACTPLA queried whether this wording would allow voltages outside the limits prescribed in the specified Australian Standards to be supplied to a large number of customers without breaching compliance requirements. ACTPLA wrote to ActewAGL Distribution requesting the removal of the reference to '95% of the customers', and ActewAGL Distribution agreed to omit that qualification from the internal rule.

6.2.2 Nailed poles

ACTPLA has noted the importance of pole inspection and maintenance, as there are 35,117 timber poles in the network. During 2008–09, 7,721 were inspected by ActewAGL Distribution and 1,493 were condemned. Of those inspected, 908 were 'nailed' (reinforced using metal bracings known as 'nails') and 958 were replaced, including the previous year's backlog.

'Nailing' occurs across the electricity industry in Australia. This method of repair extends the life of power poles and reduces capital replacement costs in the short term. Operational costs, however, are increased because electrical line-workers cannot access the poles by ladder and must instead use special hoists.

ACTPLA expects that an audit of about 1,500 nailed poles to check their strength and suitability for nailing will be carried out in 2010.

6.2.3 Management of Electricity Networks Asset Code

ACTPLA has reported that most maintenance was completed to schedule, the exception being vegetation management. This was mainly due to government trees not being cleared in a timely manner.

In 2007–08, ACTPLA audited low-voltage equipment such as mini-pillars, substation panels and transformer isolators. In 2008–09, most of the equipment was maintained in a satisfactory manner.

Scheduled maintenance has continued on chamber and kiosk substations. Again, this followed the findings of the substation audit.

ACTPLA also reported that maintenance of zone substations (the large substations that transform extra high voltage down to 11 kV for local distribution) was carried out satisfactorily.

6.2.4 Planned and unplanned interruptions to supply

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

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

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

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

Table 6.1 provides annual performance figures (SAIDI, SAIFI and CAIDI) for planned interruptions for ActewAGL Distribution's rural and urban feeders for the past four reporting years. The main features that emerge from the data are as follows:

- Average time without power (SAIDI) for the overall network fell in 2008–09 to 58.6 minutes, after rising over the three previous years.
- The average number of interruptions per customer (SAIFI) remained relatively stable over the four years.
- The average duration per interruption (CAIDI) rose steadily over the three years to 2007–08, from 215 minutes in 2005–06 to nearly 255 minutes in 2007–08, but fell to just under 235 minutes in 2008–09.

Table 6.1 Planned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2005–06 to 2008–09

Index	2005–06	2006–07	2007–08	2008–09
SAIDI (average minutes per customer per year without power)				
Urban	49.8	52.2	64.6	59.4
Rural	49.5	31.6	38.8	35.9
Network total	49.5	51.4	63.6	58.6
SAIFI (average number interruptions per customer per year)				
Urban	0.23	0.21	0.25	0.25
Rural	0.24	0.14	0.16	0.17
Network total	0.23	0.21	0.25	0.25
CAIDI (average duration per interruption in minutes)				
Urban	216.5	243.4	255.0	235.6
Rural	206.1	225.3	247.0	205.8
Network total	215.2	243.0	254.8	234.8

Source: ActewAGL Distribution's annual reports to ICRC.

Table 6.2 provides annual performance figures (SAIDI, SAIFI and CAIDI) for unplanned interruptions for ActewAGL Distribution's rural and urban feeders for the past four reporting years. The main points are as follows:

- During 2008–09, the average duration of unplanned outages (SAIDI) for the overall network rose to 33 minutes, up from the previous year's level of 25.6 minutes and reversing the declining trend over the previous three years.
- The average number of unplanned interruptions per customer per year (SAIFI) for the network remained constant at around 0.6, although for rural customers the number fell in 2008–09.
- The average duration of unplanned interruptions (CAIDI) rose in 2008–09 to 53.5 minutes from just under 46 minutes in 2007–08.

Table 6.2 Unplanned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2005–06 to 2008–09

Index	2005–06	2006–07	2007–08	2008–09
SAIDI (average minutes per customer per year without power)				
Urban	45.5	30.7	26.2	33.7
Rural	42.9	70.7	10.5	17.0
Network total	44.1	32.2	25.6	33.0
SAIFI (average number of interruptions per customer per year)				
Urban	0.8	0.6	0.5	0.63
Rural	2.9	0.6	1.8	0.27
Network total	0.8	0.6	0.6	0.62
CAIDI (average duration per interruption in minutes)				
Urban	59.8	52.3	51.0	53.50
Rural	15.0	113.5	5.9	62.50
Network total	55.1	54.7	45.7	53.50

Source: ActewAGL Distribution's annual reports to ICRC.

ACTPLA's assessment is that reliability of supply has improved marginally since 2007–08. Some customers, however, were still without supply for over 30 minutes more than the minimum supply reliability targets set out in the Electricity Distribution (Supply Standards) Code.

6.3 Gas distribution

6.3.1 Outcome of audit program

During 2008–09, ACTPLA commenced work on auditing the ActewAGL Distribution gas network. A number of audits examined the safety of high-pressure gas meter sets, secondary district regulator sets and the primary pipeline. The full results of the primary pipeline audit will become available during the 2010–11 reporting period.

The audits of the high-pressure meter sets and the secondary district regulator sets revealed a deterioration of the gas network assets over time and a lack of planning to redress the problem. Issues identified included the presence of gas escapes; a lack of required gas detection devices, fire sprinklers and vent lines; compromised fire security; absence of lighting and required signage; and drainage and cleanliness issues.

ActewAGL has raised the level and frequency of maintenance, consistent with ACTPLA's request. ACTPLA reports that many of the issues raised in the audits have been addressed. The completion target of May 2010, set by ActewAGL, will be monitored by ACTPLA.

6.3.2 Proposed service and installation rules

During 2008–09, Jemena, the service provider to ActewAGL for the technical operation of gas networks, continued the practice established by its predecessor companies of issuing gas meters to gasfitters for installation purposes rather than using Jemena personnel or contractors to install the meters. A project initiated by ACTPLA and ActewAGL will draft a new document that will provide clear and concise information to industry, including gasfitters, about the installation requirements for gas meters and the associated enclosures. The document, tentatively entitled 'ActewAGL service and installation rules', will be finalised in 2009–10.

6.3.3 Metering equipment tests

The compliance summary compiled by ActewAGL Distribution states that no metering equipment tests were initiated in response to customer requests during 2008–09. This is an unexpected outcome, given the number of ACT gas customers. ACTPLA is following up the matter with ActewAGL.

In addition, ACTPLA is following up ActewAGL Distribution's report that no metering equipment tests were initiated. This did not reconcile with ACTPLA's records.

6.3.4 Audit of Safety and Operating Plan

ActewAGL provides a third-party independent audit report on the Safety and Operating Plan each year. The most recent report, compiled by Nine Lives Systems Pty Ltd, identified 15 issues, categorised into 'non-conformance' and 'opportunities for improvement'. ACTPLA will track the issues and report on them in the 2009–10 reporting period.

6.3.5 Distribution network pressure

Potential safety problems arise if the gas network operating pressure falls below the normal operating system minimum pressure: for example, domestic gas leaks can occur if the pressure is too low to maintain a pilot flame. ActewAGL Distribution indicated that distribution network pressure did not fall below the minimum standard for high-pressure infrastructure in 2008–09. No events were reported for the medium-pressure system, as was the case in 2007–08.

6.3.6 Gas operation and maintenance

Gas specification

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

ActewAGL Distribution indicated that gas specification reached the maximum or minimum limits 48 times during 2008–09, compared with 41 times in 2007–08 and 48 times in 2006–07. However, there were no health or safety impacts on customers or damage to their equipment.

Gas regulator and meter replacements

Table 6.3 shows that ActewAGL Distribution replaced 717 gas regulators in 2008–09, up by nearly 100 from 622 in 2007–08. During the year the company replaced 235 meters, up slightly from 203 in 2007–08.

Table 6.3 Gas regulator and meter replacements, ActewAGL Distribution, 2003–04 to 2008–09

Category	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Regulators replaced	432	602	621	620	622	717
Meters replaced	252	281	264	278	203	235

Source: ActewAGL Distribution’s annual reports to ICRC.

Table 6.4 shows the numbers of planned and unplanned interruptions for gas distribution in 2007–08 and 2008–09. There were no planned interruptions to services during either year; the number of unplanned interruptions rose from 129 in 2007–08 to 139 in 2008–09.

Table 6.4 Planned and unplanned interruptions, gas distribution, ActewAGL Distribution, 2007–08 and 2008–09

Indicator	2007–08	2008–09
Planned interruptions to services	0	0
Instances where licensee did not provide at least 2 days notice of planned interruption to each premises affected	0	0
Instances where supply was not restored within 12 hours of the initial interruption	0	0
Unplanned interruptions to services	129	139
Instances where supply was not restored within 12 hours of the initial interruption	0	0
Instances of lost supply affecting 5 or more customers	1	3
Customer hours lost in interruptions affecting 5 or more customers	18	42
Burst or leaking pipes that affected public health, or were causing or likely to cause substantial damage or harm to people or property	6	3
Other burst or leaking pipes	238	228

Source: ActewAGL Distribution’s annual reports to ICRC.

6.3.7 Mechanical damage and gas leaks

In 2008–09, there were 224 incidents involving mechanical or third-party damage to ActewAGL Distribution’s medium-pressure system mains and services, down slightly from 229 in the previous year (see Table 6.4). No mechanical damage incident in the high-pressure system was reported.

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

Table 6.5 shows trends in the numbers of publicly reported gas leaks for the five years to the end of June 2009. In 2008–09, members of the public reported 1,185 gas leaks in ActewAGL Distribution’s gas network, reversing the decreasing trend over the previous three years. All reported gas leaks related to the medium-pressure system; none involved the high-pressure system.

Table 6.5 Reported leaks, gas distribution, ActewAGL Distribution, 2003–04 to 2008–09

Indicator	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Pipeline length (km)	3,453	3,604	3,621	3,709	3,758	3,967
Reported leaks	767	1,140	1,060	897	842	1,185
Leaks per 1,000 customers	9.1	12.9	11.6	9.5	8.9	11.8
Leaks per 1,000 km of pipe	241	315	294	242	224	328
Mechanical damage incidents to mains and services	203	201	195	196	229	224
Number of times gas specification reached the maximum or minimum limits	88	62	72	48	41	48

Source: ActewAGL Distribution’s annual reports to ICRC.

6.4 Gas transmission

East Australian Pipeline Limited (EAPL) holds the utility licence for the transmission pipeline entering the ACT from Dalton, New South Wales. The APA Group, the controlling parent entity of EAPL, operates and maintains the Moomba to Sydney pipeline system on behalf of EAPL.

APA reported that seven observations and one corrective action were identified in the annual audit of the Safety and Operating Plan conducted by a third-party auditor, Australian Quality Assurance & Superintendence Pty Ltd. ACTPLA has advised that the APA response to the audit findings for the eight criteria was scheduled to occur in early 2010.

6.5 Water supply

6.5.1 Water Supply and Sewerage Emergency Plan

ACTPLA reported that ACTEW Corporation did not submit a draft Water Supply and Sewerage Emergency Plan for 2008–09 and therefore did not have a contemporary approved plan for that year.

6.5.2 Network serviceability

As in previous years, ACTPLA has expressed concern about gradually declining water supply network serviceability. Although ACTEW reported a slight improvement in the incidence of mains breaks and unplanned interruptions in 2008–09 over the previous year, ACTPLA’s view is that those improvements do not substantially alter the long-term results, which indicate declining network serviceability. The immediate impact of network deterioration on customers is measured by the incidence of unplanned interruptions. ACTEW’s reduced rate of unplanned water supply interruptions is partly due to its work in installing more stop valves in the network to reduce the number of customers affected by any network outage. That solution, however, does not improve the water mains and has implications for the cost of water mains renewals.

In the sewerage system, ACTPLA has highlighted ACTEW’s declining performance on sewer breaks and chokes and sewer overflows to the environment. National benchmarking data on overflows indicate that ACTEW ranked last in performance when compared to utilities of comparable scale.³¹

The same benchmarking for breaks and chokes shows ACTEW’s performance in 2008–09 to be inferior to its performance in the previous year, when ACTEW was also ranked last in performance compared to utilities of comparable scale. This may have been partly due to a change in the benchmark definition of breaks and chokes.³² ACTPLA advises that ACTEW should consider new strategies to address the problem.

The number of burst or leaking pipes in the water supply system is a good indicator of its reliability. Details of instances in 2008–09 and the previous two years are shown in Table 6.6. During 2008–09, there were eight instances of burst or leaking pipes that affected public health or were causing, or were likely to cause, substantial damage or harm to people or property, well up from the one instance the previous year and double the number recorded for 2006–07. However, in 2008–09 and earlier years the licensee was able to respond to the incidents within the required three-hour timeframe. Of the 1,219 instances of burst or leaking pipes not affecting public health or causing, or likely to cause, substantial damage or harm to people or property, over 75% were responded to within 24 hours, broadly in line with the response times recorded for the earlier two years.

Table 6.6 Burst or leaking pipes, water supply, 2007–08 to 2008–09

Indicator	2006–07	2007–08	2008–09
Instances of burst or leaking pipes that affected public health, or were causing or likely to cause substantial damage or harm to people or property	4	1	8
Times licensee responded within 3 hours	4	1	8
Instances of burst or leaking pipes that did not affect public health, or caused or were likely to cause substantial damage or harm to people or property	1,225	1100	1,219
Times licensee responded within 24 hours	1,038	877	937

³¹ National Water Commission, *National performance report 2008–2009: urban water utilities*, April 2010.

³² For 2008–09, the definition of sewer breaks and chokes was changed to include breaks and chokes in sewer connections.

6.5.3 Planned and unplanned interruptions

Planned interruptions to water supply, along with their frequency and duration, are shown in Table 6.7 The average total outage time for customers in 2008–09 (0.57 minutes) compared favourably with 2 minutes in 2006–07 and nearly 3 minutes in 2005–06.

Table 6.7 Planned interruptions, frequency and duration, water supply, ACTEW Corporation, 2004–05 to 2008–09

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Planned interruptions	66	144	170	682	4,750 ^a
Average water supply interruption duration (minutes) ^b	24	71	27	51	17
Average number of planned interruptions per 1,000 properties	51.0	41.0	n.a.	n.a.	32.8
Total interruption faced by an average customer (minutes per property) ^c	1.24	2.90	2.06	0.51	0.57

n.a. = not available.

a Includes upgrading of approximately 3,800 standard meters.

b. Calculated as total time of all planned interruptions ÷ total number of interruptions.

c. Calculated as total time of all planned interruptions ÷ total number of properties supplied.

Source: ACTEW Corporation's annual reports to ICRC.

In 2008–09, ACTEW Corporation experienced 692 unplanned interruptions, up by over 16% from 2007–08. The average duration of outages during the year (127 minutes) also showed an increase from 2007–08. Table 6.8 shows ACTEW's performance for unplanned interruptions since 2004–05.

Table 6.8 Unplanned interruptions, frequency and duration, water supply, ACTEW Corporation, 2004–05 to 2008–09

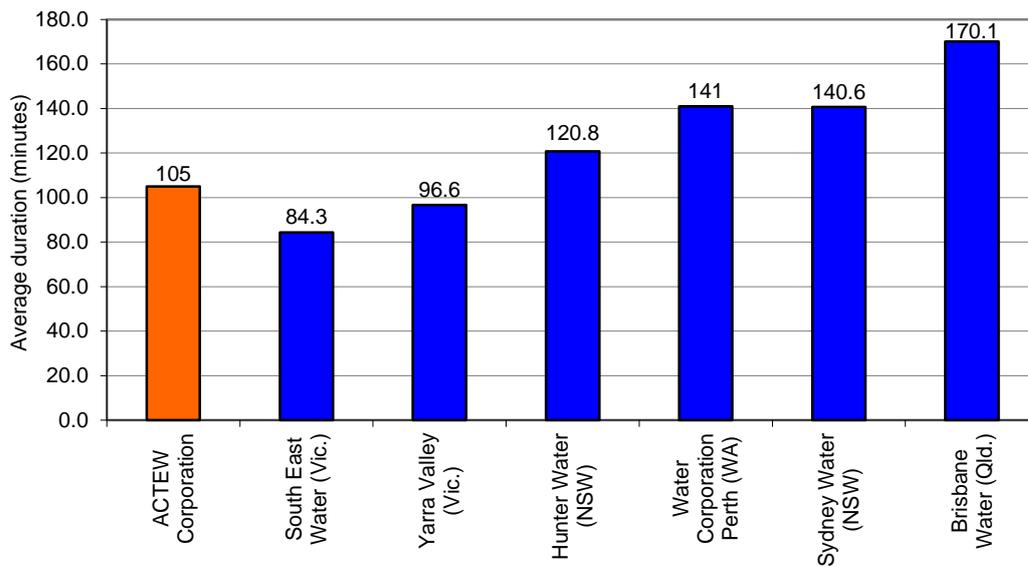
Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Unplanned interruptions to water supply services	713	798	727	594	692
Average water supply interruption duration (minutes) ^a	84	99	108	110	127.6

a Includes mains only, and not connections owned or maintained by the utility.

Source: ACTEW Corporation's annual reports to ICRC.

Figure 6.1 compares the average duration of unplanned interruptions to water supply for selected utilities during 2008–09 with data sourced from the Water Services Association of Australia's 2008–09 national performance report. Of the seven utilities, ACTEW Corporation registered the third-lowest level, at 105 minutes (compared with the 127.6 minutes shown in table 6.8, as supplied by ACTEW); Brisbane Water registered the highest, at just over 170 minutes.

Figure 6.1 Unplanned interruptions, average duration, water supply, selected utilities, 2008–09



Note: The figure for ACTEW Corporation includes connections owned or maintained by the utility.

Source: Water Services Association of Australia, *National performance report 2008–09: urban water utilities*.

6.6 Sewerage services

Planned work on the sewerage system does not usually mean that customers lose the use of facilities such as toilets or sinks. During planned work, it is usually possible to divert flow from the customer’s premises so that there is minimal inconvenience to the customer. Customers are asked to reduce water use on the day that the work is carried out, and the work is usually completed by close of business.

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

The number of unplanned interruptions to sewerage services increased from 2,059 in 2007–08 to 2,229 in 2008–09, but remained well down from the 2,777 recorded in 2004–05. Table 6.9 shows that the 2008–09 level was equivalent to 15.5 unplanned interruptions per 1,000 properties, a slight increase compared to 2006–07. The average outage time, 2.1 minutes, was virtually unchanged from the 2007–08 average.

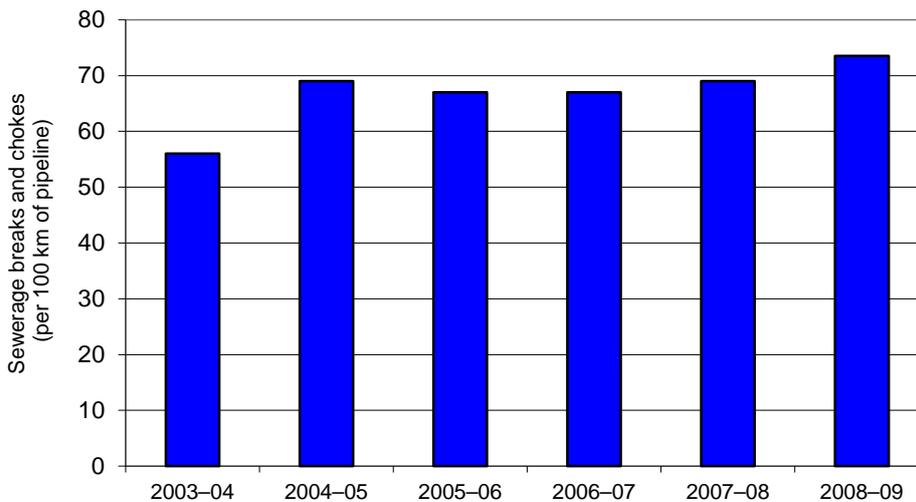
Table 6.9 Unplanned interruptions, frequency and duration, sewerage services, ACTEW Corporation, 2004–05 to 2008–09

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Interruptions	2,777	1,847	1,985	2,059	2,229
Average interruption time (minutes)	31.8	137.4	150.0	135.2	136.1
Average number of outages per 1,000 properties	21.6	13.9	14.2	14.6	15.5
Average outage time experienced by an average customer (minutes)	0.6	1.8	2.1	2.0	2.1
Sewer main breaks and chokes	3,163	3,863	3,203	3,363	3,344
Sewer main breaks and chokes caused by tree roots	3,055	3,670	2,915	3,035	3,034
Property connection sewer main breaks and chokes	1,648	2,033	1,849	2,004	2,077
Property connection sewer main breaks and chokes caused by tree roots	1,495	1,830	1,590	1,708	1,794

Source: ACTEW Corporation's annual reports to ICRC.

Figure 6.2 compares ACTEW Corporation's sewer overflows per 100 km of mains for 2008–09 with overflows in the previous five reporting periods. ACTEW attributes the high incidence of sewer overflows to problems with tree roots.

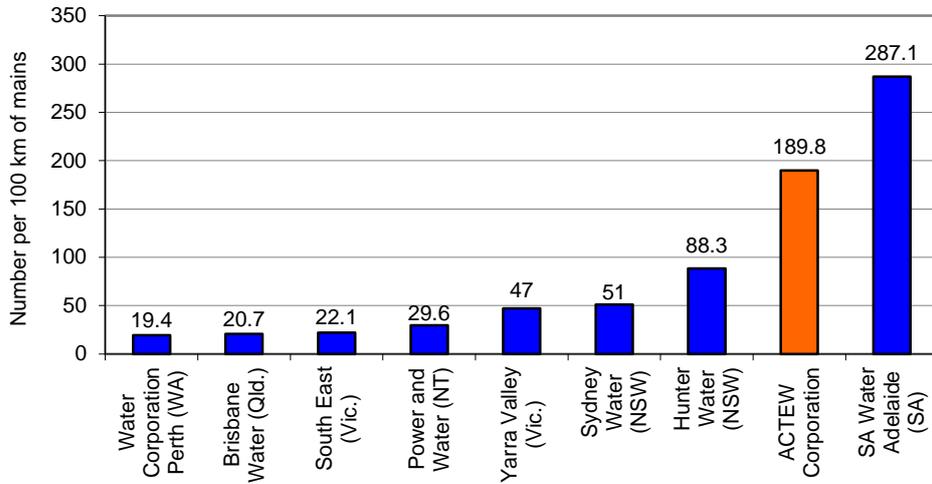
Figure 6.2 Sewer overflows, ACTEW Corporation, 2003–04 to 2008–09



Source: ACTEW Corporation's annual reports to ICRC.

Figure 6.3 compares the number of sewer main breaks and chokes per 100 km of sewer mains for the ACT utility with figures for a selection of utilities in other jurisdictions. During 2008–09, only SA Water Adelaide (287.1) recorded a higher level than ACTEW Corporation (189.8); all other utilities had levels well below 100. ACTEW Corporation has estimated that 3,040 (91%) of the 3,344 sewer main breaks and chokes in 2008–09 were caused by tree roots.

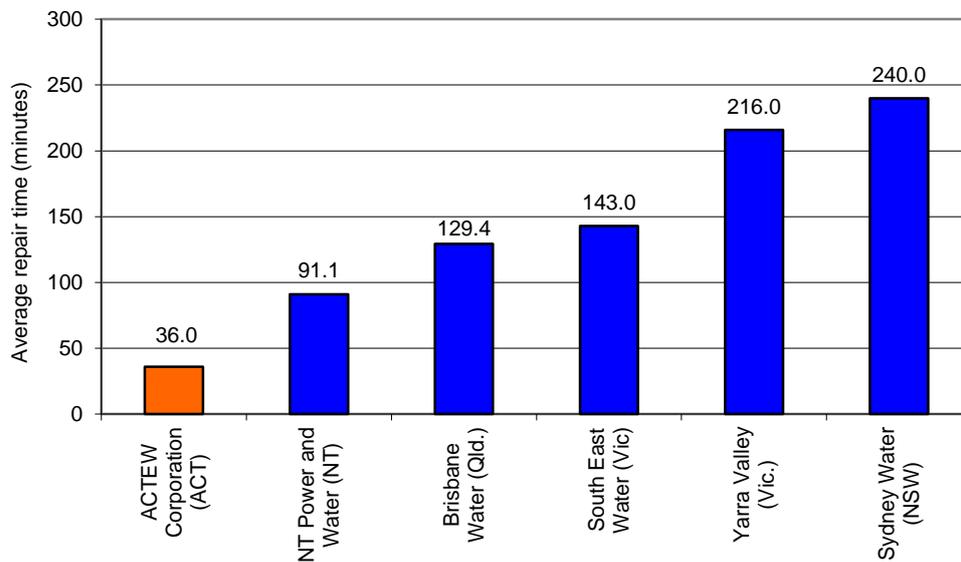
Figure 6.3 Sewer main breaks and chokes, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

Figure 6.4 shows the average break/choke repair times for randomly selected utilities during 2008–09. Despite the high number of sewer main breaks and chokes per 100 km of mains, the average repair time for the ACT was the lowest of the utilities in the group.

Figure 6.4 Average sewer break/choke repair time, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

7 Call centre performance

This chapter covers utilities' call centre performance, including numbers of calls made, calls answered within specific timeframes, waiting times for responses and calls abandoned.

7.1 All utilities

The ACT's Consumer Protection Code establishes a range of minimum service standards which apply to suppliers of utility services in the ACT. Customer service indicators cover the timely provision of service and call centre performance.

Feedback from call centres is a useful guide to the performance of utilities and their interactions with customers. Details on call centre performance also provide a useful tool for utilities to obtain feedback on their customers' needs.

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

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

Table 7.1 summarises call centre performance for all ACT utilities in 2007–08 and 2008–09. Improvements are noticeable in the performance of ActewAGL Distribution (electricity), ActewAGL Retail (electricity and gas), Country Energy, EnergyAustralia and TRUenergy. For ACTEW Corporation, there was a significant reduction in the number of calls abandoned before being answered, although there was an increase in average waiting time.

For ActewAGL Retail (electricity), 70% of calls were answered within 30 seconds, which was unchanged from the 2007–08 level, while the average waiting time was reduced slightly from 28 seconds to 26 seconds. For ACTEW Corporation, 5% of non-emergency calls were abandoned in 2008–09, up slightly from 3.6% the previous year.

Table 7.1 Call centre performance, all ACT utilities, 2007–08 and 2008–09

Licensee	2007–08			2008–09		
	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)	70.5	28.2	14.0	70.2	26.0	18.0
ActewAGL Retail (electricity)	77.8	77.0	4.2	85.0	50.0	5.1
Country Energy (gas and electricity)	82.5	18.0	3.1	70.9	36.0	5.0
TRUenergy (electricity)	85.9	25.0	1.8	84.2	29.0	2.2
ActewAGL Retail (gas)	79.9	53.0	3.9	81.9	22.0	3.5
ACTEW Corporation						
Non-emergency call centre	77.8	75.3	3.6	84.5	50.0	5.1
Emergency call centre	80.3	23.3	3.1	84.8	20.0	0.9

Source: Licensed utilities' annual reports to ICRC.

7.2 Electricity distribution

In 2008–09, ActewAGL Distribution's call centre answered 70% of all calls within 30 seconds, which was unchanged from the previous year and an increase on the 2006–07 level (Table 7.2). During the year, 18% of all calls were classed as 'abandoned', up slightly from 14% in 2007–08. However, these figures may include calls from customers whose queries were answered by a recorded message and that therefore were not really 'abandoned'.

Table 7.2 Customer service call centre performance, electricity distribution, ActewAGL Distribution, 2006–07 to 2008–09

Indicator	2006–07	2007–08	2008–09
Calls to licensee's call centre	66,065	52,939	48,844
Calls answered within 30 seconds	41,304	37,332	34,271
Calls answered within 30 seconds as proportion of total calls (%)	62.5	70.5	70.2
Average waiting time before call answered by a person (seconds)	32	28.2	26.0
Calls abandoned before being answered by a person	13,960	7,412	8,771
Calls abandoned within 30 seconds (%)	21	14	18
Overload events	23	18	17

Source: ActewAGL Distribution reports to ICRC.

7.3 Electricity supply

Table 7.3 shows response times at the various call centres of the four main ACT electricity suppliers during 2008–09. The percentage of calls answered within 30 seconds, which is a good indicator of responses to customers' calls, ranged from a low of 71% for Country Energy to 85% for ActewAGL Retail during the year. The percentage of calls abandoned within 30 seconds ranged from 1% for Red Energy to 5% for both Country Energy and ActewAGL Retail.

Table 7.3 Call centre performance, response times and calls abandoned, electricity supply, selected ACT suppliers, 2008–09

Indicator	ActewAGL Retail	Country Energy	Red Energy	TRUenergy
Calls made by customers to the licensee's call centre in	213,626	27,644	90	5,276
Calls answered within 30 seconds	181,582	19,610	67	4,445
Percentage of calls answered within 30 seconds	85	71	74	84
Average waiting time before call answered by a person (seconds)	50	36	65	29
Number of overload events that occurred	0	0	0	n.a.
Calls abandoned before being answered	10,989	1,381	1	117
Percentage of calls abandoned within 30 seconds	5	5	1	2

n.a. = not available.

Source: Licensed utilities' annual reports to ICRC.

Table 7.4 shows call centre performance data over the five years from 2004–05 to 2008–09 for the ACT electricity suppliers for which call centre data are available. Details are not shown for Red Energy, as data were available only for 2008–09. EnergyAustralia was not able to provide data for 2008–09, as it was not able to separate data for the ACT from its aggregated database. The key points are as follows:

- The performance of the three utilities that reported calls responded to in 30 seconds was similar, ranging from 71% for Country Energy to 85% for ActewAGL.
- Average waiting time ranged from a low of 29 seconds for TRUenergy to 50 seconds for ActewAGL Retail.
- The proportion of calls abandoned was low for all utilities, ranging from 2% for TRUenergy to 5% for ActewAGL Retail.

Table 7.4 Call centre performance, response times and calls abandoned, electricity supply, ACT suppliers, 2004–05 to 2008–09

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Calls answered within 30 seconds (%)					
ActewAGL Retail	84	82	69	78	85
EnergyAustralia	57	66	60	77	n.a.
Country Energy	76	77	76	83	71
TRUenergy	98	99	81	86	84
Average waiting time (seconds)					
ActewAGL Retail	60	57	91	77	50
EnergyAustralia	85	63	63	35	n.a.
Country Energy	28	22	28	18	36
TRUenergy	n.a.	n.a.	35	25	29
Calls abandoned (%)					
ActewAGL Retail	2	2	7	4	5.1
EnergyAustralia	n.a.	4	4	3	n.a.
Country Energy	3	4	5	3	5.0
TRUenergy	2	1	3	2	2.2

n.a.= not available.

Source: Licensed utilities' annual reports to ICRC.

7.4 Gas distribution

ActewAGL Distribution (gas) was unable to provide the Commission with comprehensive data for 2008–09. It stated, however, that additional reporting capability would be available on completion of its telecommunications upgrade. The company was only able to report that during the year 3,630 calls were made to the call centre number, significantly fewer than in 2007–08 (Table 7.5).

Table 7.5 Call centre performance, response times and calls abandoned, gas distribution, ActewAGL Distribution, 2005–06 to 2008–09

Indicator	2005–06	2006–07	2007–08	2008–09
Calls received	1,000	1,093	8,372	3,630
Calls responded to in 30 seconds (%)	100	100	n.a.	n.a.
Average waiting time (seconds)	5	5	n.a.	n.a.
Calls abandoned (%)	0.0	0.0	1.6	n.a.

n.a. = not available.

Source: ActewAGL Distribution's annual reports to ICRC.

7.5 Gas supply

Gas suppliers' call centres, like their electricity counterparts, tend to serve a number of jurisdictions and industries. The call centres of Country Energy and EnergyAustralia, for example, serve electricity and gas customers in both the ACT and New South Wales. Table 7.6 shows that call centre waiting times varied significantly among the three active ACT gas suppliers that reported in 2008–09. EnergyAustralia did not provide details on call centre performance for the year.

Some of the key features of call centre performance during the year were as follows:

- The percentage of calls answered within 30 seconds was similar for ActewAGL Retail (82%), TRUenergy (83%), and Country Energy (71%).
- Average waiting times varied considerably, ranging from a low of 22 seconds for ActewAGL Retail to 38 seconds for Country Energy.
- The proportion of total calls that were abandoned was low for all three utilities, ranging from 3% for TRUenergy to 7% for Country Energy.

Table 7.6 Call centre performance, response times and calls abandoned, gas supply, ACT suppliers, 2004–05 to 2008–09

Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Calls answered within 30 seconds (%)					
ActewAGL Retail	91	77	64	80	82
EnergyAustralia	57	66	60	77	n.a.
Country Energy	76	77	76	83	71
TRUenergy	n.a.	n.a.	n.a.	85	83
Average waiting time (seconds)					
ActewAGL Retail	17	45	107	53	22
EnergyAustralia	38	57	63	38	n.a.
Country Energy	38	22	28	18	38
TRUenergy	n.a.	n.a.	n.a.	28	30
Calls abandoned (%)					
ActewAGL Retail	1	3	7	4	4
EnergyAustralia	5	2	4	3	n.a.
Country Energy	3	4	5	3	7
TRUenergy	n.a.	n.a.	n.a.	2	3

n.a. = not available.

Source: Licensed gas utilities' annual reports to ICRC.

7.6 Water and sewerage

Table 7.7 summarises ACTEW Corporation's call centre performance from 2004–05 to 2008–09. In 2008–09, ACTEW Corporation received 43,370 water and sewerage calls on its non-emergency numbers and 27,510 calls on its emergency number, with average waiting times of 50 and 20 seconds, respectively. Over the five-year period, emergency call centre performance improved on a number of indicators and remained steady on others. For example, in the emergency call centre, the proportion of calls answered within 30 seconds rose from 77% in 2004–05 to just under 85% in 2008–09, while the average waiting time fell from 30 seconds to 20 seconds over the same period.

Table 7.7 Call centre performance, call numbers, response times and calls abandoned, water and sewerage services, ACTEW Corporation, 2004–05 to 2008–09

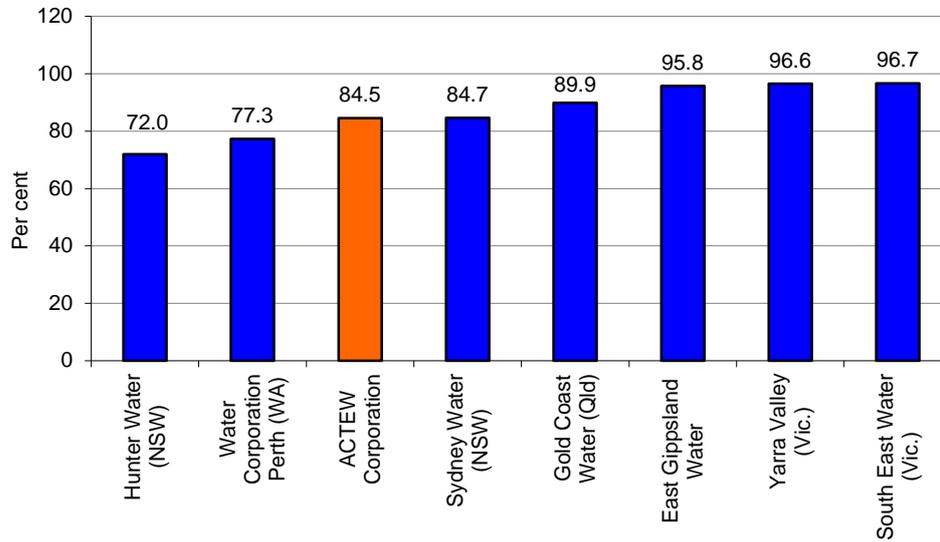
Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
Non-emergency call centre					
Calls received	51,930	28,666	48,541	49,094	43,370
Proportion answered within 30 seconds (%)	85	85	n.a.	78	85
Proportion abandoned by caller (%)	2.0	3.0	2.8	3.6	5.1
Average waiting time (seconds) ^a	30	45	49	75	50
Emergency call centre					
Calls received	32,436	29,098	30,843	26,832	27,510
Proportion answered within 30 seconds (%)	77.0	77.0	76.7	80.3	84.8
Proportion abandoned by caller (%)	4.0	4.0	4.5	3.1	0.9
Average waiting time (seconds) ^a	30	29	23	23	20
Number of overload events	15	2	0	0	0

a Time spent waiting before being answered by a person.

Source: ACTEW Corporation's annual reports to ICRC.

Figure 7.1 shows that ACTEW did not compare favourably with other utilities during 2008–09 in relation to the proportion of calls answered within 30 seconds. It had the third-highest response time, comparable with Sydney Water.

Figure 7.1 Call centre performance, proportion of calls answered by operator within 30 seconds, water/sewerage, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

8 Customer safety net arrangements

This chapter reports on various safety net arrangements for customers, and covers items such as the availability of instalment plans, flexibility in payment arrangements, credit management strategies and the use of security deposits.

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

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

8.1 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; therefore, it is a fair indicator of affordability.

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

8.1.1 Electricity customers

Table 8.1 shows that between 2004–05 and 2008–09 the rate of disconnections of electricity customers for non-payment of accounts fell from 4.0 per 1,000 customers in 2004–05 to a low of 2.7 per 1,000 in 2008–09. Over the same period, the proportion of customers reconnected within seven days of disconnection tended to remain constant at just over 60%, with the exception of 53% in 2007–08.

Table 8.1 Disconnections for non-payment of an account, electricity supply, 2004–05 to 2008–09

Item	2004–05	2005–06	2006–07	2007–08	2008–09
Customers disconnected for non-payment of an account (per 1,000 customers)	4.0	4.0	3.0	3.0	2.7
Proportion in which the premises was reconnected in the same name within seven days (%)	64	64	60	53	63

Source: Licensed electricity utilities' annual reports to ICRC.

8.1.2 Gas customers

The reported incidence of disconnections of gas supply customers for non-payment of an account in the ACT, shown in Table 8.2, was 13 per 1,000 customers in 2008–09, up slightly from the previous year but well down from 39 per 1,000 in 2005–06. However, the proportion reconnected within seven days fell from 44% to 21%. The table does not include disconnections by EnergyAustralia, which was unable to provide relevant details.

Table 8.2 Disconnections for non-payment of an account, numbers disconnected and proportion subsequently reconnected, gas supply, 2004–05 to 2008–09

Item	2004–05	2005–06	2006–07	2007–08	2008–09
Customers disconnected for non-payment of an account (per 1,000 customers)	37	39	35	12	13
Proportion in which the premises was reconnected in the same name within seven days (%)	80	40	34	44	21

Source: Licensed gas utilities' annual reports to ICRC.

The disconnection rate for gas supply customers (13 per 1,000 customers in 2008–09) is significantly higher than the rate for electricity customers (2.7 per 1,000 customers in 2008–09). The reason is that customers often choose to be disconnected after winter and then pay their outstanding account at the start of the following winter. This also helps explain why, in general, the percentage of disconnected gas customers reconnecting within seven days of the disconnection is lower than the percentage of electricity customers reconnecting.

8.1.3 Water and sewerage customers

Under the Consumer Protection Code, a utility is not permitted to disconnect water supply or withdraw sewerage services for failure to pay an account. However, it may restrict the water flow to a level that allows for essential uses only. As in previous years, ACTEW Corporation did not restrict the water flow to any customer for failure to pay an account in 2008–09.

8.2 Direct debit defaults

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

Of electricity and gas suppliers, only ActewAGL Retail was able to provide information about direct debit defaults in 2008–09. As Table 8.3 shows, the percentage of ActewAGL Retail's electricity and gas customers defaulting on direct debit payments declined through to 2007–08, but increased in 2008–09, reversing the earlier trend. This indicates that some additional customers had difficulty making their payments within the timeframes allowed during that year. The pattern of payment defaults by water and sewerage service customers was similar to the pattern of defaults by electricity and gas customers; the number of defaults rose in 2008–09 but remained well below the high of 3.5% in 2005–06.

Table 8.3 Direct debit payment defaults, ActewAGL Retail and ACTEW Corporation, 2004–05 to 2008–09 (%)

Utility service	Licensee	2004–05	2005–06	2006–07	2007–08	2008–09
Electricity	ActewAGL Retail	6.1	3.2	1.0	0.8	1.5
Natural gas	ActewAGL Retail	9.5	0.2	2.9	0.1	0.5
Water and sewerage	ACTEW Corporation	2.0	3.5	0.5	0.8	1.3

Source: ActewAGL Retail's and ACTEW Corporation's annual reports to ICRC.

8.3 Instalment plans

Utilities can assist customers experiencing financial hardship in a number of ways. Two options are instalment plans and deferred payments. Although the number of customers on instalment plans is used as a measure of customer hardship, customers who are not in difficulty may choose to pay by instalment for reasons of budgeting or convenience.

8.3.1 Electricity supply

As indicated in Table 8.4, 7.4% of ActewAGL Retail's residential customers were on instalment plans in 2008–09, a slight rise on the 7.3% the previous year but continuing a general upward trend since 2004–05. EnergyAustralia, the only other company with customers on instalment plans, also recorded a rise, from 1.0% in 2007–08 to 1.9% in 2008–09.

Table 8.4 Proportion of customers using instalment plans, electricity supply, ACT suppliers, 2004–05 to 2008–09 (%)

Electricity supplier	2004–05	2005–06	2006–07	2007–08	2008–09
ActewAGL Retail	3.8	6.1	7.6	7.3	7.4
EnergyAustralia	3.0	1.0	1.7	1.0	1.9

Sources: ActewAGL Retail's and EnergyAustralia's annual reports to ICRC.

8.3.2 Gas supply

Table 8.5 shows the proportion of retail gas customers on instalment plans since 2005–06. During 2008–09, just 0.3% of all gas customers paid their accounts through an instalment plan, a marked reduction on the 2006–07 level of 13.7%.

Table 8.5 Proportion of customers on instalment plans, gas supply, ACT suppliers, 2005–06 to 2008–09 (%)

Gas supplier	2005–06	2006–07	2007–08	2008–09
ActewAGL Retail	11.9	14.8	0.6	0.1
Country Energy	1.3	0.0	5.6	2.6
EnergyAustralia	1.0	1.5	1.4	1.8
TRUenergy	n.a.	1.7	5.3	7.2
Total	11.4	13.7	0.8	0.3

n.a. = not available.

Source: Licensed gas utilities' annual reports to ICRC.

8.3.3 Water and sewerage

Table 8.6 provides details of water and sewerage customers on instalment plans in 2007–08 and 2008–09. The percentage of all customers on instalment plans remained at 0.6%, with minor changes for both residential and non-residential customers over the two-year period.

Table 8.6 Customers on instalment plans, water/sewerage customers, ACTEW Corporation, 2007–08 and 2008–09

Category	2007–08			2008–09		
	No. of customers	No. on instalment plans	Percentage on instalment plans	No. of customers	No. on instalment plans	Percentage on instalment plans
Residential	133,318	835	0.6	135,918	834	0.6
Non-residential	7,728	23	0.3	7,823	76	1.0
Total	141,046	858	0.6	143,741	910	0.6

Source: ACTEW Corporation's 2007–08 and 2008–09 annual reports provided to ICRC.

8.4 Security deposits

8.4.1 Electricity supply

EnergyAustralia was the only ACT electricity supplier to hold any security deposits in 2008–09. During the year, four residential security deposits valued at \$292 were held. This compares with 45 residential security deposits valued at \$5,000 the previous year.

8.4.2 Gas supply

EnergyAustralia held 13 deposits from its customers in 2008–09 and was the only ACT gas retailer that held security deposits for either residential or non-residential gas customers during the year.

8.4.3 Water and sewerage

In 2008–09, as in the previous year, ACTEW Corporation held no security deposits for water and sewerage services.

9 Environmental performance

This chapter covers the environmental performance of utilities. Recognition of environmental externalities has placed greater emphasis on this indicator. Only those environmental issues that are direct responsibilities of the Commission, such as water losses, greenhouse gas emissions and consumption efficiency, are considered here. The chapter also refers to a number of safety issues related to natural gas.

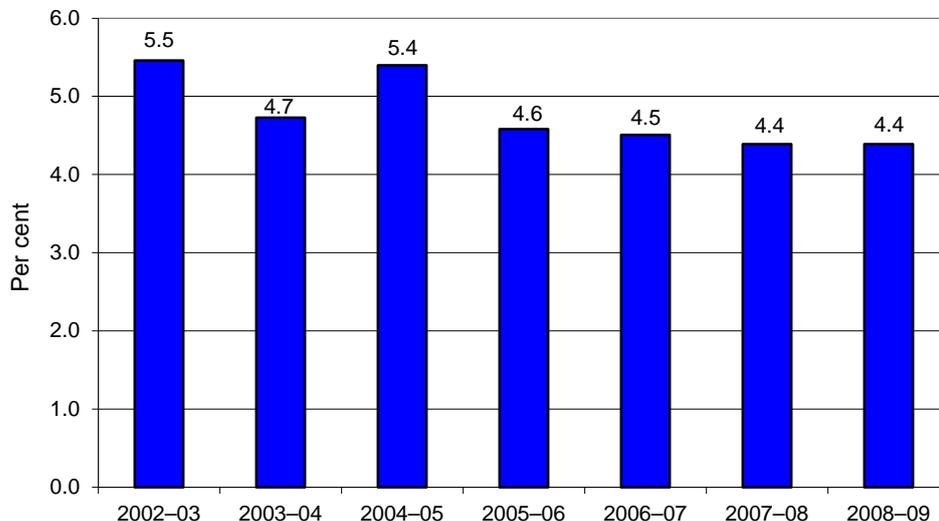
9.1 Electricity distribution

9.1.1 Electricity network losses

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

Figure 9.1 summarises ActewAGL Distribution's electricity network losses for the years from 2002–03 to 2008–09. Over the seven years, network losses ranged from 4.4% to 5.5%. In 2008–09, ActewAGL Distribution's electricity network losses were 4.4% of total network inputs, unchanged from 2007–08 and the lowest over the seven-year period.

Figure 9.1 Network losses, electricity distribution, ActewAGL Distribution, 2002–03 to 2008–09



Source: ActewAGL Distribution's annual reports to ICRC.

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

- network planning, design and project assessments, which must demonstrate consideration of network losses
- audits of zone substation transformer losses

- consideration of the cost of losses when purchasing transformers (electrical losses over the life of a transformer are a criterion in tender assessments)
- the use of various network tariff initiatives to manage network demand and, as a result, network losses
- the provision of appropriate price signals, including demand tariffs designed to improve the system's load profile (resulting indirectly in reduced losses) and time-of-use residential network tariffs.

ActewAGL Distribution also noted that demand tariffs, which are designed to improve the 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.

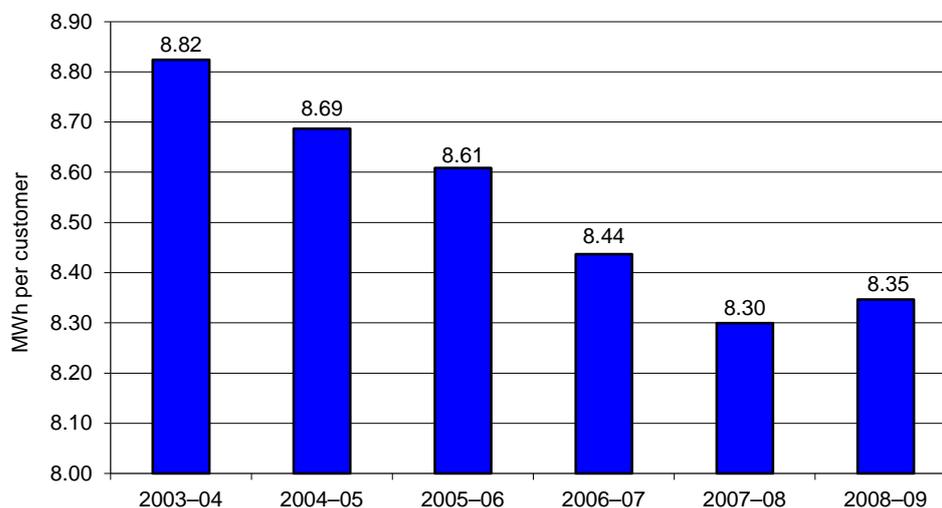
9.2 Electricity supply

9.2.1 Energy consumption efficiency

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

To examine the efficiency of residential energy consumption over time, it is necessary to look at consumption per customer, rather than consumption in total; otherwise, changes in consumption efficiency can be hidden by population growth. As Figure 9.2 shows, consumption per customer in the ACT fell from 8.82 MWh in 2003–04 to 8.30 MWh in 2007–08, before rising slightly in 2008–09 to 8.35 MWh.

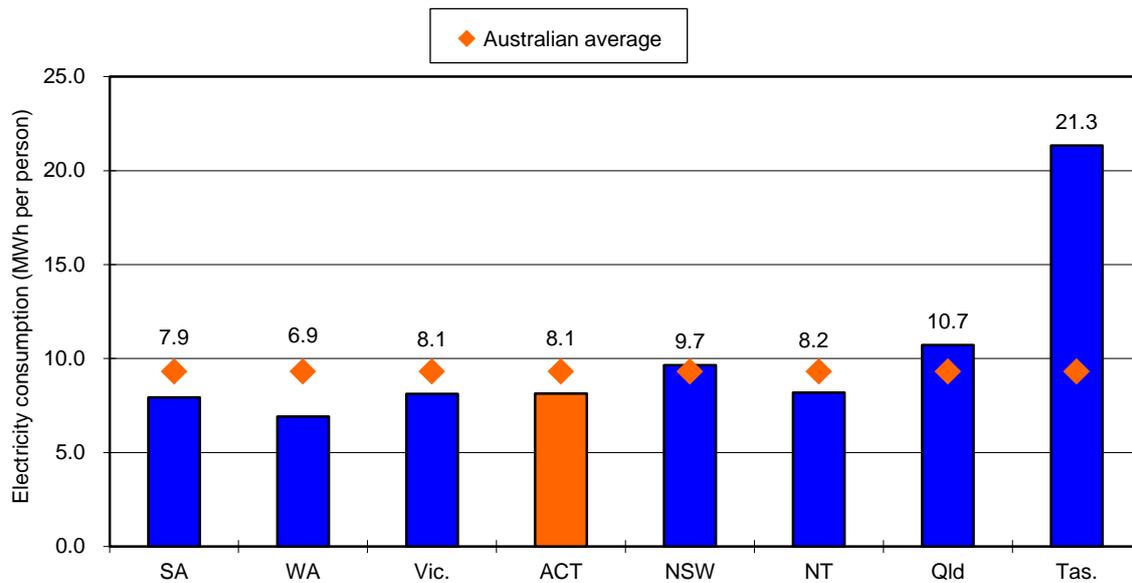
Figure 9.2 Electricity, residential consumption per customer, ACT, 2003–04 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

Figure 9.3 compares the average total consumption per person in 2008–09 across all states and territories with the Australian average in that year. The comparison shows that the ACT level of consumption per person of 8.1 MWh was below the Australian average of 9.3 MWh per person.

Figure 9.3 Electricity, total consumption per person, states and territories, 2008–09



Sources: Derived from Energy Supply Association of Australia, *Electricity Gas Australia 2010* and ABS population statistics.

9.2.2 ACT Electricity Feed-in Scheme

The ACT's Electricity Feed-in Scheme, established under the *Electricity Feed-in (Renewable Energy Premium) Act 2008*, encourages the take-up of renewable energy electricity generation by:

- promoting the generation of electricity from renewable energy sources
- reducing the ACT's contribution to human-induced climate change
- diversifying the ACT's energy supply
- reducing the ACT's vulnerability to long-term volatility in fossil fuel prices.

The Act provides a framework that enables capital investment in renewable energy electricity generation to be recouped; 'occupiers' are paid a 'premium rate' for the gross amount of electricity they generate.

The scheme requires electricity distributors (in the ACT, ActewAGL Distribution) to connect generators of renewable energy to the electricity network and to reimburse those generators' electricity suppliers (retailers) for the difference between the premium rate determined for renewable electricity and the normal cost of electricity. The retailer is then required to pay the generator the premium rate.

The Electricity Feed-in Code, which supports the Act, was determined by the Commission in February 2009 under the Utilities Act. The code applies to electricity distributors and retailers, and sets out practices and standards for the operation of the renewable energy feed-in scheme. It details the obligations of electricity distributors and retailers to each other and to generators of renewable electricity under the scheme.

The code also requires distributors and retailers to report quarterly to the Commission. Distributors are required to report the numbers of connection applications, new connections and total connections, as well as the total installed capacity and total metered output. Retailers are required to report the number of customers receiving the feed-in tariff and the total premium tariff paid out.

Between 2000 and 2007, prior to the introduction of the scheme, 136 renewable energy generators were installed in the ACT. However, following the initial announcement of a feed-in tariff for the ACT and the Australian Government’s Solar Homes and Communities Plan, an additional 432 new generators were installed before the scheme began on 1 March 2009.

Details from ActewAGL Distribution (electricity) show that an additional 163 sites were connected in the June quarter of 2009, with a capacity of 1.56 GW. Further statistics to June 2009 are shown in Table 9.1.

Table 9.1 ACT Electricity Feed-in Scheme to end June 2009

Quarter	Total no. of sites connected	Total capacity installed (W)	Total metered output to date (KWh)
Pre-scheme (to 28 Feb 2009)	568	n.a.	n.a.
At end June 2009	731	1,559,042	221,446

kWh = kilowatt hours; n.a. = not available; W = watts.

Source: ActewAGL Distribution (electricity).

9.3 Gas distribution

9.3.1 Codes of practice compliance

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

9.4 Greenhouse Gas Emissions

Very little electricity is generated and no natural gas is produced in the ACT. However, more than two-thirds of the greenhouse gas emissions attributable to the ACT derive from energy consumption.³³ This section covers the environmental impacts of greenhouse gas emissions associated with the use of gas and electricity.

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

Electricity consumption

The Commission estimates the greenhouse gas emissions that can be attributed to electricity consumption in the ACT by subtracting the volume of GreenPower (accredited 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. That figure is then multiplied by an emissions intensity coefficient for New South Wales and ACT electricity consumption as supplied by the Department of Climate Change.³⁴ Note that the coefficients are not consistent with those published by the Independent Pricing and Regulatory Tribunal (IPART) and notified by the

³³ ACT Government, *Avoid, abate, adapt: a discussion paper for an ACT climate change strategy*, 2006, p. 15.

³⁴ Department of Climate Change, *National greenhouse accounts (NGA) factors*, January 2009.

Commission, as the regulator of the ACT Greenhouse Gas Abatement Scheme, as key factors for the scheme.³⁵

This method of estimating greenhouse gas emissions is useful for an indicator. However, the methodology makes a number of assumptions that, while appropriate in this context, might not be appropriate for other purposes. For example, it excludes emissions for energy lost through network losses. Readers seeking more robust greenhouse gas emissions data as inputs for other work should contact the Commission.

The estimated volume of greenhouse gases emitted as a result of electricity consumption ranged from a low of 2.84 million tonnes of carbon dioxide equivalent (tCO₂-e) in 2004–05 to 2.92 tCO₂-e in 2008–09.

Table 9.2 and Figure 9.4 show a continuing increase in the volume of GreenPower sold in the ACT, from 32,444 MWh in 2004–05 to 107,493 MWh in 2008–09. However, the volume sold in 2008–09 was just 3.8% of total electricity sold.

Table 9.2 GreenPower and estimated greenhouse gas emissions, ACT electricity consumption, 2004–05 to 2008–09

Item	2004–05	2005–06	2006–07	2007–08	2008–09
Electricity sold in the ACT (MWh)	2,716,628	2,816,479	2,823,995	2,817,869	2,865,755
GreenPower sold in the ACT (MWh) ^a	32,444	43,463	61,377	103,637	107,493
Greenhouse gas producing electricity sold in the ACT (MWh)	2,684,184	2,773,015	2,762,618	2,714,232	2,758,262
Electricity pool coefficient for greenhouse gas emissions (tCO ₂ -e) ^b	1.060	1.060	1.060	1.060	1.060
Estimated greenhouse gas emissions arising from ACT electricity consumption (tCO ₂ -e)	2,845,235	2,939,396	2,928,375	2,877,086	2,923,758
Estimated ACT population (end June)	330,164	334,119	341,054	345,551	351,118
Estimated greenhouse gas emissions per head of population (tCO ₂ -e)	8.6	8.8	8.6	8.3	8.3

MWh = megawatt hours; tCO₂-e = tonnes of carbon dioxide equivalent.

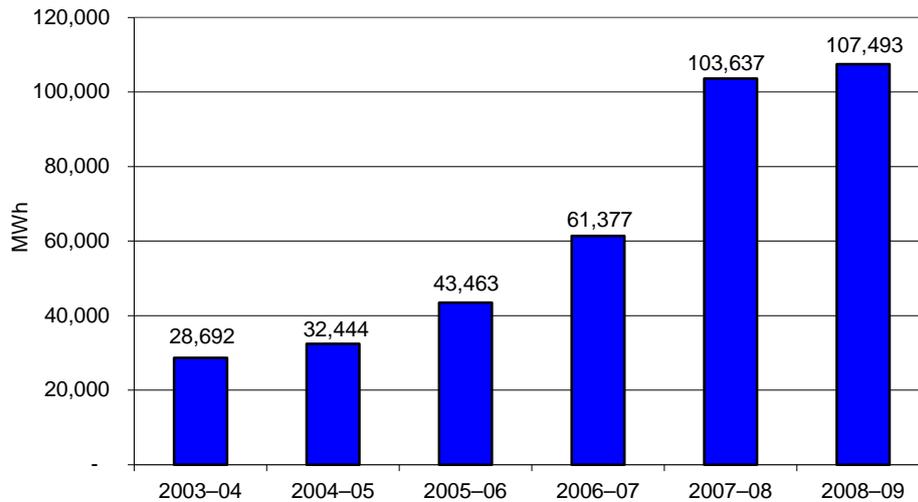
a Government-accredited GreenPower products.

b Data from Department of Climate Change.

Source: Licensed electricity utilities' annual reports to ICRC.

³⁵ The ACT Greenhouse Gas Abatement Scheme, established through the *Electricity (Greenhouse Gas Emissions) Act 2004*, mirrors the NSW Greenhouse Gas Reduction Scheme administered by IPART. The Commission is the regulator of the scheme in the ACT. Further details are available on the Commission's website (www.icrc.act.gov.au).

Figure 9.4 GreenPower sold in the ACT, 2003–04 to 2008–09



Source: Licensed electricity utilities' annual reports to ICRC.

Gas consumption

To estimate greenhouse gas emissions caused by ACT gas consumption, the Commission multiplies the volume of gas sold in the ACT by an emissions factor for New South Wales and ACT consumption of natural gas provided by the Australian Greenhouse Office and subsequently by the Department of Climate Change.³⁶ Two emissions factors are provided: one for large customers and one for small customers.

As shown in Table 9.3, the estimated volume of greenhouse gases emitted as a result of natural gas consumption in the ACT in 2008–09 was 469,310 tCO₂-e, a decrease of 1.4% from the 2007–08 level.

Table 9.3 Estimated greenhouse gas emissions, ACT natural gas sales, 2004–05 to 2008–09

Item	2004–05	2005–06	2006–07	2007–08	2008–09
Natural gas sold in the ACT (TJ)	6,525	6,857	6,503	7,216	7,107
Sales to large customers (TJ)	1,893	1,490	1,041	1,826	1,150
Sales to small customers (TJ)	4,632	5,368	5,462	5,389	5,957
Emissions factors—large customers (tCO ₂ -e/TJ) ^a	68.0	68.0	65.5	65.5	65.5
Emissions factors—small customers (tCO ₂ -e/TJ) ^a	71.3	71.3	66.1	66.1	66.1
Estimated greenhouse gas emissions arising from ACT total natural gas consumption (tCO ₂ -e)	458,986	484,037	429,232	476,077	469,310

a Emission factors for 2004–05 and 2005–06 are NSW and ACT figures from Australian Greenhouse Office, *Factors and methods workbook*, December 2006, Table 2. Emissions factors for 2006–07 to 2008–09 are from Department of Climate Change, *National greenhouse accounts (NGA) factors*, January 2008, tables 2 and 37.

Source: Licensed gas utilities' annual reports to ICRC; Australian Greenhouse Office / Department of Climate Change emissions factors.

Table 9.4 shows the combined effect of both electricity and gas on greenhouse gas emissions in the ACT over the six years from 2003–04 to 2008–09. Total emissions remained relatively constant over that period at about 3.3 million tCO₂-e a year. However, total emissions per head of

³⁶ Australian Greenhouse Office, National Greenhouse Office, *Factors and methods workbook*, December 2006, and Department of Climate Change, *National greenhouse accounts (NGA) factors*, January 2009.

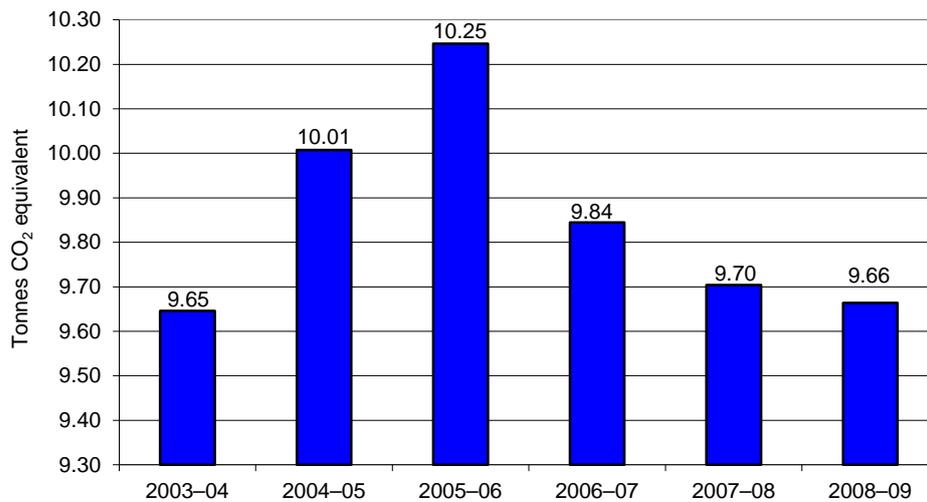
population have tended to fall since 2005–06, declining from 10.2 tCO₂-e in that year to 9.7 tCO₂-e in 2008–09. This is also shown in Figure 9.5.

Table 9.4 Estimated total greenhouse gas emissions, ACT electricity and natural gas consumption, 2003–04 to 2008–09 (tCO₂-e)

Item	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Total ACT emissions	3,158,714	3,304,221	3,423,433	3,357,607	3,353,184	3,393,068
Emissions per head of population	9.6	10.0	10.2	9.8	9.7	9.7

Source: Licensed gas utilities' annual reports to ICRC; Australian Greenhouse Office / Department of Climate Change.

Figure 9.5 Total greenhouse gas emissions per head of population, ACT, 2003–04 to 2008–09



Source: Licensed electricity utilities, annual reports to ICRC. Australian Greenhouse Office / Department of Climate Change.

9.5 Water distribution and supply

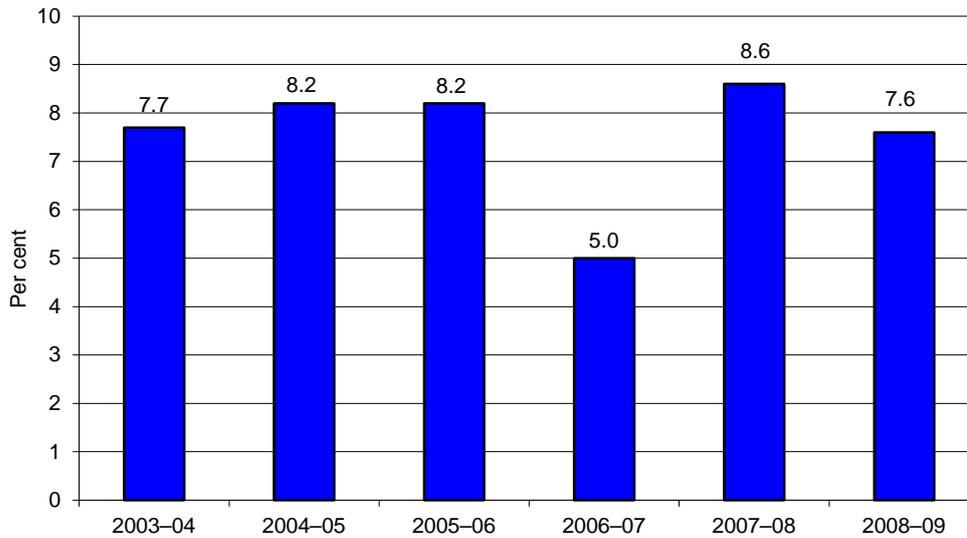
9.5.1 Water losses

‘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 water consumption not billed for, unauthorised consumption and water lost through metering inaccuracies or errors. The volume of unaccounted-for water is the difference between the volume of water extracted and the amount of water for which the utility bills its customers.

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

Figure 9.6 shows that the annual quantity of unaccounted-for water in the ACT, as a proportion of total water volume of water supplied, has ranged from 5.0% to 8.6% since 2003–04, falling to 7.6% during 2008–09.

Figure 9.6 Unaccounted-for water, proportion of total volume supplied, ACTEW Corporation, 2003–04 to 2008–09

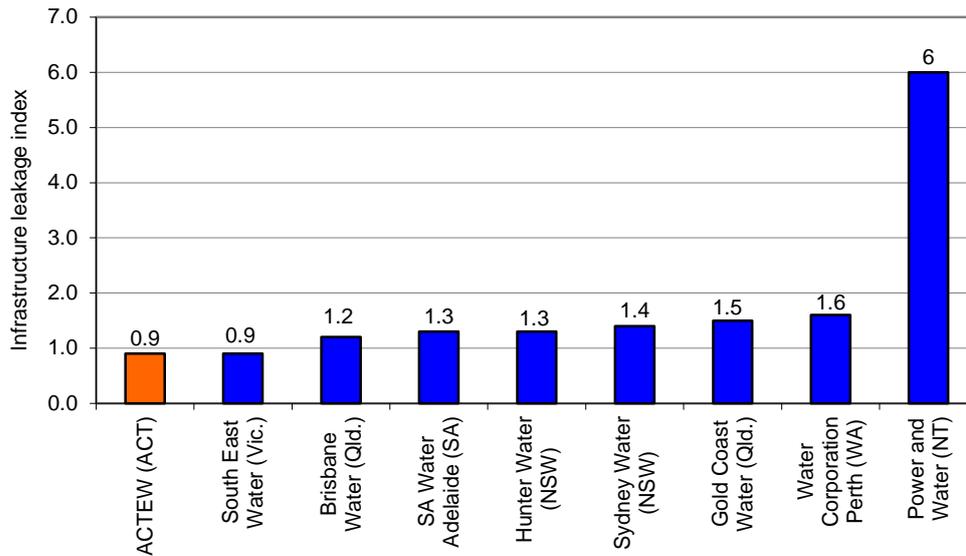


Source: ACTEW Corporation's annual reports to ICRC.

Figure 9.7 compares ACTEW Corporation's performance on network losses to the performance of interstate water utilities, using the Water Services Association of Australia's infrastructure leakage index—that is, the ratio of current annual real losses to unavoidable real losses. Real losses are leakage and overflows from mains, service reservoirs and service connections before the customer meter. The indicator does not include metering errors, unauthorised consumption or water used for firefighting (which are referred to as 'apparent losses'). Performance on this indicator can be influenced by the condition of mains and other infrastructure, water pressure and water consumption. Because lower water supplied is generally correlated with lower leakage, utilities with higher average water supplied tend to have higher 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 that technically optimal leakage management is in place. Levels above 1.0 indicate that avoidable losses are occurring. From Figure 9.7, it can be seen that ACTEW, with an index of 0.9, performed better than seven of the eight other selected utilities in 2008–09.

Figure 9.7 Infrastructure leakage indices, selected water utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

In 2008–09, ACTEW Corporation reported that it had continued its meter replacement and service upgrade programs, which are designed to reduce losses of water through leaks and to improve measurement by meters. The intention is to identify any otherwise unaccounted-for flows that are other than minimal. Such flows would be investigated to pinpoint and reduce water losses.

9.5.2 Environmental flows

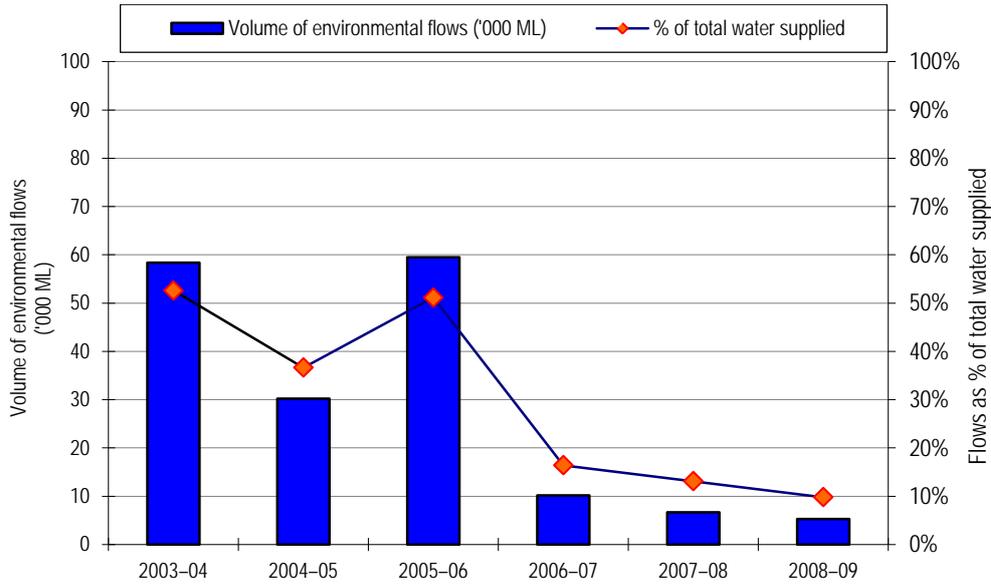
Environmental flows are the flows of water into rivers and streams that are necessary to maintain healthy aquatic ecosystems. They are designed to mimic naturally occurring water flows, including seasonal fluctuations and other variables. Under its licence conditions, ACTEW is required to release water from the Cotter and Googong catchments for environmental purposes. The volume of water released as environmental flows is in accordance with the environmental flow guidelines approved by the minister responsible for water resources. It is not determined by the water utility.

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

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

Figure 9.8 shows the total volume of environmental flows released by ACTEW Corporation, and those flows as a proportion of total water abstracted for consumptive or environmental purposes, between 2003–04 and 2008–09. In 2008–09, environmental flows released by ACTEW from water storages represented just under 10% of the total water supplied in the ACT. ACTEW is one of only a few water utilities in Australia that is responsible for the release of water for environmental flows from the storage facilities that it manages.

Figure 9.8 Environmental flows, volumes and proportion of total volumes abstracted, water supply, ACTEW Corporation, 2003–04 to 2008–09

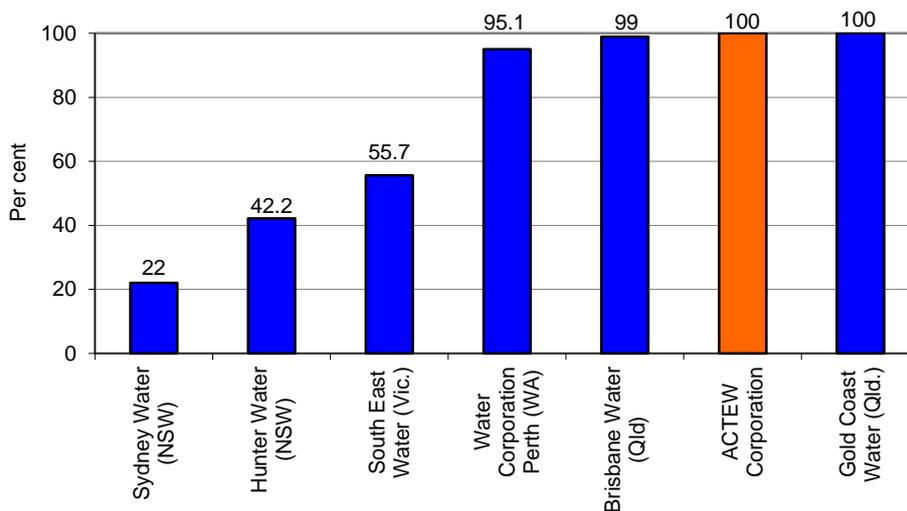


Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

9.5.3 Sewage treatment

A useful indicator of sewage treatment is the extent to which sewage is treated to a tertiary or advanced level. Figure 9.9 shows that the level for ACTEW Corporation was 100%, similar to the figure for another four utilities and well above the levels for Sydney Water (22%), Hunter Water (42.2%) and South East Water (55.7%).

Figure 9.9 Proportion of sewage treated to tertiary or advanced level, selected utilities, 2008–09



Source: Water Services Association of Australia, *National performance report 2008–2009: urban water utilities*.

Appendix 1 Regulatory framework

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 under the technical regulation regime (Part 5 of the Utilities Act).

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

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. 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 Utilities Act provides for the determination by the Commission of annual licence fees for utilities. Determined fees cover a reasonable contribution towards the costs incurred, or expected to be incurred, by the Commission, the ACT Civil and Administrative Tribunal (ACAT), and the Technical Regulator, located in the ACT Planning and Land Authority (ACTPLA). Considerations made by the Commission when determining annual licence fees include the extent of costs in relation to each utility, the annual licence fees payable by all utilities, and the relative scope and nature of the services provided by all utilities.

Until 2007–08, each utility paid an annual licence fee determined to be a reasonable contribution towards the costs incurred by the Commission, the ACAT and the Technical Regulator in performing their statutory functions under the Utilities Act.

In May 2007, the Utilities Act was amended to provide for an energy industry levy to recover the amount of the territory's national and local regulatory costs in relation to energy industry sectors. Part 3A (Energyindustry levy) commenced on 1 July 2007 with the effect of progressively replacing annual licence fees for prescribed energy utilities. Part 3A provides for the making of

determinations by the appointed Levy Administrator, currently the chief executive officer of the Commission.

National regulatory costs is the amount determined to be the cost to the territory of meeting its national regulatory obligations under the Australian Energy Market Agreement (AEMA) in relation to the Australian Energy Market Commission (AEMC) and the Ministerial Council on Energy's responsibilities under the AEMA. Local regulatory costs are currently determined to be those incurred by the Commission, the ACAT, and the Technical Regulator.

From 2008–09, levy determinations were made for national and local regulatory costs for prescribed energy utilities while licence fees were determined for utilities involved with gas transmission and water and sewerage services. Prescribed energy utilities subject to the energy levy provisions are electricity and gas distribution and supply utilities which provided an energy utility service between 1 July and 15 September of the energy levy year or at any time during the previous levy year.

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.

ACT Civil and Administrative Tribunal

The responsibilities of the ACAT in relation to complaints about utilities are established under part 12 of the Utilities Act.³⁷ The tribunal facilitates the resolution of complaints, may determine unresolved complaints, and ensures, as far as is practicable, that utility services (electricity, gas, water and sewerage) continue to be provided to people suffering financial hardship. The tribunal also protects the rights of consumers under the Act, and advises ministers with portfolio responsibilities under the Act and the Commission, about systemic problems in relation to the operation the Utilities Act and other matters that come to its attention in the course of exercising its functions under part 12.

Industry codes

Industry codes administered by the Commission in 2008–09 were as follows.

- **Consumer Protection Code** (January 2007). This code:
 - outlines the basic rights of customers and consumers in relation 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

³⁷ Under the *Justice and Community Safety Legislation (Amendment) Act 2008 (No. 2)*, the Essential Services Consumer Council was renamed the Energy and Water Consumer Council in July 2008. In February 2009, the functions of the Council were subsumed into the ACT Civil and Administrative Tribunal (ACAT).

- outlines obligations that a marketer has in relation to the marketing of electricity and gas supply services
- 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** (August 2004). 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 Australian Energy Market Operator's transfer systems that operate under the code.
- **Electricity Feed-in Code** (February 2009). This code sets out practices and standards for the operation of the scheme for feed-in from renewable energy generators to the electricity network established under the *Electricity Feed-in (Renewable Energy Premium) Act 2008*.
- **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** (August 2007). This code outlines the principles and procedures by which an electricity distributor or an electricity supplier may impose a capital contribution charge, payable by a customer, for the costs incurred by the distributor in developing or augmenting its electricity network.
- **Electricity Network Use of System Code** (October 2007). This code imposes an obligation on an electricity distributor and an electricity supplier to enter into a commercial agreement setting out the terms upon which utility services relating to the distribution of electricity are provided by the distributor to the supplier.
- **Gas Network Boundary Code** (December 2000). This code defines the boundary between a gas transmission network and a gas distribution network; between connected gas distribution networks; and between a gas distributor's network and a customer's premises.
- **Gas Network Capital Contributions Code** (August 2007). 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.
- **Prepayment Meter System Code** (July 2006). This code outlines the basic rights of customers, consumers and utilities with respect to the provision of prepayment meter systems that are not otherwise covered by the Consumer Protection Code.
- **Water and Sewerage Network Boundary Code** (December 2000). This code defines the boundaries between water utilities' networks; between a water utility's network and a customer's premises; between sewerage utilities' networks; and between a sewerage utility's network and a customer's premises.

Technical codes

Technical codes administered by the ACT Planning and Land Authority during 2008–09 were as follows.

- **Contestable Work Accreditation Code** (August 2001). This code requires each utility to prepare an accreditation scheme or adopt an approved accreditation scheme, and sets out those matters that must be included in an approved accreditation scheme. The purpose of the

accreditation scheme is to accredit persons to undertake contestable work, such as electricity connection services.

- **Dam Safety Code** (March 2003). This code ensures that utilities have in place processes and procedures to properly manage water storage dams in order to prevent unsafe operation and/or failure that can in time cause loss to life and damage to property and the environment.
- **Electricity Distribution (Supply Standards) Code** (December 2000). This code prescribes minimum standards for the quality and reliability of electricity distributed through electricity networks.
- **Electricity Metering Code** (August 2003). This code sets out requirements relating to electricity metering with which an electricity distributor must comply in providing electricity connection services to franchise customers and first-tier customers, and with which an electricity supplier must comply in providing electricity supply services to franchise customers and first-tier customers.
- **Electricity Service and Installation Rules Code** (December 2000). This code requires electricity distributors to develop service and installation rules that set out the requirements and associated obligations and procedures for the safe, reliable and efficient connection of electrical installations to an electricity network.
- **Emergency Planning Code** (March 2003). This code ensures that utilities have appropriate procedures, structures and arrangements for preventing, anticipating and responding to emergency events and potential emergency events.
- **Gas General Metering Code** (December 2000). This code sets out rules with which gas distributors must comply in providing connection services to customers and with which gas suppliers must comply in providing supply services to customers.
- **Gas Safety and Operating Plan Code** (December 2000). This code applies to operators of gas transmission and gas distribution networks to ensure the safe operation and maintenance of the networks and quality and pressure standards for gas conveyed through the networks.
- **Management of Electricity Network Assets Code** (December 2000). This code requires electricity distributors to design, construct, operate and maintain their electricity networks with reasonable care to avoid injury to any person or property.
- **Water and Sewerage Network (Design and Maintenance) Code** (December 2000). This code prescribes minimum standards for the design, construction, operation and maintenance of water networks and sewerage networks.
- **Water and Sewerage Service and Installation Code** (December 2000). This code requires water utilities and sewerage utilities to develop service and installation rules setting out the requirements and associated obligations and procedures for the safe, reliable and efficient connection of a customer's premises to a water network and a sewerage network.
- **Water Metering Code** (December 2000). This code sets out matters relating to water metering.
- **Water Supply and Sewerage Service Standards Code** (December 2000). This code prescribes minimum standards for the quality and reliability of water supply distributed through water networks and for the provision of sewerage services, including the removal of sewage from customers' premises through sewerage networks.

Appendix 2 Data tables for figures

This appendix shows tables of data used to generate each figure in the body of the report.

Table A2.1 Figure 1.1: ACT population, 2000 to 2009

At end June	Number ('000)
2000	315.2
2001	319.3
2002	322.7
2003	325.7
2004	327.5
2005	330.2
2006	334.1
2007	341.1
2008	345.6
2009	349.5

Table A2.2 Figure 1.2: ACT forecast population, low, medium and high ranges, 2006 to 2020 ('000)

At end June	High	Medium	Low
2006	334	334	334
2007	340	340	340
2008	344	344	343
2009	350	348	345
2010	356	352	347
2011	362	356	350
2012	368	360	352
2013	374	365	354
2014	381	369	356
2015	387	373	358
2016	394	377	359
2017	400	381	361
2018	407	385	363
2019	414	389	364
2020	421	393	366

Table A2.3 Figure 1.3: ACT annual rainfall, calendar years 1960 to 2008 (mm)

Year	Annual rainfall	Five-year average	Year	Annual rainfall	Five-year average
1960	813.6		1986	529.6	
1961	774.2		1987	587.8	
1962	654.0		1988	765.0	
1963	619.1		1989	825.4	655.1
1964	643.1	700.8	1990	617.2	
1965	400.3		1991	598.2	
1966	692.1		1992	770.8	
1967	352.0		1993	692.2	
1968	515.2		1994	383.4	612.4
1969	759.1	543.7	1995	801.0	
1970	722.4		1996	672.6	
1971	616.0		1997	411.8	
1972	396.1		1998	669.2	
1973	755.0		1999	711.8	653.3
1974	977.0	693.3	2000	626.4	
1975	771.0		2001	500.0	
1976	592.8		2002	505.4	
1977	513.0		2003	569.2	
1978	771.0		2004	435.2	527.2
1979	392.2	608.0	2005	648.6	
1980	476.8		2006	361.2	
1981	651.4		2007	568.4	
1982	261.6		2008	534.8	509.6
1983	757.0				
1984	739.6	577.3			
1985	567.8				

Table A2.4 Figure 1.4: ACT mean minimum temperatures, calendar years 1960 to 2008 (°C)

Year	Minimum	Year	Minimum	Year	Minimum	Year	Minimum
1960	5.8	1973	7.7	1986	6.2	1999	6.5
1961	5.9	1974	6.5	1987	6.1	2000	6.9
1962	5.6	1975	6.8	1988	7.6	2001	6.6
1963	6.4	1976	6.1	1989	7.2	2002	6.7
1964	6.1	1977	6.3	1990	7.3	2003	7.3
1965	5.7	1978	6.8	1991	7.2	2004	7.0
1966	5.9	1979	6.6	1992	6.5	2005	7.3
1967	6.1	1980	7.1	1993	6.6	2006	7.0
1968	6.8	1981	7.7	1994	6.0	2007	8.3
1969	6.3	1982	6.5	1995	6.9	2008	7.1
1970	5.8	1983	7.7	1996	6.2		
1971	5.7	1984	5.7	1997	6.5		
1972	5.6	1985	6.2	1998	7.5		

Table A2.5 Figure 1.5: ACT mean maximum temperatures, calendar years 1960 to 2008 (°C)

Year	Maximum	Year	Maximum	Year	Maximum	Year	Maximum
1960	18.7	1973	19.9	1986	19.4	1999	19.9
1961	19.4	1974	18.7	1987	20.0	2000	19.8
1962	18.9	1975	19.4	1988	20.1	2001	20.7
1963	19.2	1976	19.0	1989	18.9	2002	21.0
1964	18.9	1977	20.0	1990	19.7	2003	20.3
1965	20.1	1978	19.0	1991	20.4	2004	21.1
1966	18.7	1979	20.5	1992	18.4	2005	21.0
1967	20.2	1980	21.0	1993	19.6	2006	21.8
1968	19.7	1981	19.9	1994	20.4	2007	21.2
1969	19.2	1982	21.2	1995	19.0	2008	20.4
1970	18.7	1983	19.4	1996	19.1		
1971	19.1	1984	18.8	1997	21.0		
1972	20.1	1985	19.6	1998	20.5		

Table A2.6 Figure 2.1: Energy distributed, electricity distribution, ActewAGL Distribution, 2003–04 to 2008–09 (GWh)

Year	Residential	Non-residential	Total
2003–04	1,101	1,578	2,679
2004–05	1,119	1,510	2,629
2005–06	1,180	1,593	2,773
2006–07	1,148	1,651	2,799
2007–08	1,150	1,681	2,831
2008–09	1,176	1,703	2,879

Table A2.7 Figure 2.2: Customer numbers, electricity supply, ACT, end June, 2003–04 to 2008–09

Year	Residential	Non-residential	Total
2003–04	128,513	12,861	141,374
2004–05	130,548	13,046	143,594
2005–06	134,979	11,618	146,597
2006–07	137,016	12,421	149,437
2007–08	137,582	13,772	151,354
2008–09	139,793	14,026	153,819

Table A2.8 Figure 2.3: Sales volume, electricity supply, residential and non-residential, ACT, 2003–04 to 2008–09 (GWh)

Year	Residential	Non-residential	Total
2003–04	1,134	1,503	2,637
2004–05	1,133	1,582	2,715
2005–06	1,162	1,654	2,816
2006–07	1,156	1,668	2,824
2007–08	1,142	1,676	2,818
2008–09	1,167	1,699	2,866

Table A2.9 Figure 2.4: Average electricity consumption, residential customers, ACT, 2003–04 to 2008–09 (MWh/year)

Year	Average consumption
2003–04	8.82
2004–05	8.69
2005–06	8.61
2006–07	8.38
2007–08	8.30
2008–09	8.35

Table A2.10 Figure 2.5: Average electricity consumption, non-residential customers, ACT, 2003–04 to 2008–09 (MWh/year)

Year	Average consumption (MWh)
2003–04	116.86
2004–05	121.34
2005–06	142.80
2006–07	132.92
2007–08	121.69
2008–09	121.13

Table A2.11 Figure 2.6: Average electricity consumption, residential customers, states and territories, 2008–09 (MWh/customer)

State/territory	Average consumption (MWh/customer)	Average consumption (MWh/residential customer)
SA	16.4	6.3
WA	16.8	7.3
Vic.	18.0	5.8
ACT	19.3	8.5
NSW	21.6	7.5
NT	24.6	11.1
Qld	25.7	7.8
Tas.	40.8	7.5

Table A2.12 Figure 2.7: Number of suppliers with more than 100 customers, electricity supply, ACT, 2004–05 to 2008–09

Category	2004–05	2005–06	2006–07	2007–08	2008–09
>100	4	4	7	5	7

Table A2.13 Figure 2.8: ACT electricity customers switching to new retailers, July 2007 to June 2009

Month	Number of customers that switched	Month	Number of customers that switched
Jul-07	875	Jul-08	213
Aug-07	516	Aug-08	203
Sep-07	417	Sep-08	214
Oct-07	400	Oct-08	268
Nov-07	233	Nov-08	298
Dec-07	211	Dec-08	195
Jan-08	212	Jan-09	246
Feb-08	293	Feb-09	318
Mar-08	311	Mar-09	287
Apr-08	285	Apr-09	218
May-08	206	May-09	270
Jun-08	216	Jun-09	313

Table A2.14 Figures 2.9 and 2.10: Customer supply point numbers and volume distributed, gas distribution, ACT, 2003–04 to 2008–09

Year	Customer numbers	Volume distributed (TJ)
2003–04	84,700	7,647
2004–05	88,659	7,048
2005–06	91,330	7,731
2006–07	94,066	7,055
2007–08	94,590	6,925
2008–09	100,254	7,965

Table A2.15 Figure 2.11: Average consumption per connection, gas, selected states and territories, 2008–09

Jurisdiction	Average consumption all connections (GJ/connection)	Average consumption residential (GJ/residential connection)
NSW	96.87	n.a.
WA	45.84	22.14
SA	91.78	28.00
Qld	169.47	32.54
ACT	75.44	49.43
Vic.	108.10	66.03

n.a. = not available.

Table A2.16 Figure 2.12: ACT gas customers transferring to new retailers, July 2007 to June 2009

Fortnight ending	Number of switches in fortnight	Running sum of switches	Fortnight ending	Number of switches in fortnight	Running sum of switches
14-Jul-07	387	12,764	12-Jul-08	85	15,824
28-Jul-07	416	13,180	26-Jul-08	86	15,910
11-Aug-07	216	13,396	09-Aug-08	59	15,969
25-Aug-07	274	13,670	23-Aug-08	64	16,033
08-Sep-07	151	13,821	06-Sep-08	66	16,099
22-Sep-07	177	13,998	20-Sep-08	86	16,185
06-Oct-07	106	14,104	04-Oct-08	77	16,262
20-Oct-07	131	14,235	18-Oct-08	73	16,335
03-Nov-07	94	14,329	01-Nov-08	48	16,383
17-Nov-07	73	14,402	15-Nov-08	62	16,445
01-Dec-07	104	14,506	29-Nov-08	89	16,534
15-Dec-07	69	14,575	13-Dec-08	86	16,620
29-Dec-07	73	14,648	27-Dec-08	61	16,681
12-Jan-08	46	14,694	10-Jan-09	34	16,715
26-Jan-08	72	14,766	24-Jan-09	75	16,790
09-Feb-08	37	14,803	07-Feb-09	46	16,836
23-Feb-08	72	14,875	21-Feb-09	68	16,904
08-Mar-08	64	14,939	07-Mar-09	71	16,975
22-Mar-08	91	15,030	21-Mar-09	72	17,047
05-Apr-08	85	15,115	04-Apr-09	65	17,112
19-Apr-08	127	15,242	18-Apr-09	40	17,152
03-May-08	91	15,333	02-May-09	75	17,227
17-May-08	114	15,447	16-May-09	96	17,323
31-May-08	105	15,552	30-May-09	86	17,409
14-Jun-08	85	15,637	13-Jun-09	86	17,495
28-Jun-08	102	15,739	27-Jun-09	114	17,609

Table A2.17 Figure 2.13: Combined inflows into Corin, Bendora and Googong reservoirs, 2003–04 to 2008–09 (GL)

2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
98.3	40.8	86.2	64.7	98.3	37.9	58.4	41.3

Table A2.18 Figure 2.14: Average annual residential water supplied, selected utilities, 2008-09 (kL/property)

Water Corporation (Perth)	ACTEW	SA Water (Adelaide)	Sydney Water (NSW)	Brisbane Water
277	201	190	198	133

Table A2.20 Figure 4.1: Network revenue, residential and non-residential, electricity distribution, ActewAGL Distribution, 2003-04 to 2008-09 (\$m)

	Residential	Non-residential	Total
2003-04	43.1	61.8	104.9
2004-05	37.2	66.4	103.6
2005-06	43.1	56.9	100.0
2006-07	43.4	70.9	114.4
2007-08	47.6	76.7	124.3
2008-09	43.6	75.1	118.8

Table A2.21 Figure 4.2: Average electricity charges for residential and non-residential customers, electricity distribution, ActewAGL Distribution, 2003-04 to 2008-09 (\$/MWh)

	Residential	Non-residential
2003-04	102.6	96.9
2004-05	102.6	93.9
2005-06	110.2	97.3
2006-07	114.7	116.7
2007-08	132.6	125.3
2008-09	145.4	127.9

Table A2.22 Figure 5.1: Complaints per 1,000 properties, water quality, selected utilities, 2008-09

Utility	Value
SA Water Adelaide (SA)	0.6
Sydney Water (NSW)	0.6
ACTEW Corporation	1.3
City West Water (Vic.)	0.9
Hunter Water (NSW)	0.2
Brisbane Water (Qld)	9.8

Table A2.23 Figure 5.2: Complaints per 1,000 properties, sewerage service, selected utilities, 2008-09

Utility	Value
ACTEW Corporation	4.5
South East (Vic.)	0
Yarra Valley (Vic.)	0.5
City West Water (Vic.)	0.6
Townsville Water (Qld)	3.4
Water Corporation (WA)	6.2
Sydney Water (NSW)	0.4
Hunter Water (NSW)	2.3

Table A2.24 Figure 6.1: Unplanned interruptions, average duration, water supply, selected utilities, 2008–09 (minutes)

Utility	Average duration
ACTEW Corporation	105
South East Water (Vic.)	84.3
Yarra Valley (Vic.)	96.6
Hunter Water (NSW)	120.8
Water Corporation Perth (WA)	141
Sydney Water (NSW)	140.6
Brisbane Water (Qld.)	170.1

Table A2.25 Figure 6.2: Sewer overflows, ACTEW Corporation, 2003–04 to 2008–09 (per 100 km of mains)

2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
56	69	67	67	69	73.5

Table A2.26 Figure 6.3: Sewer main breaks and chokes, selected utilities, 2008–09 (per 100 km of sewer mains)

Utility	No./100 km sewer mains
Water Corporation Perth (WA)	19.4
Brisbane Water (Qld.)	20.7
South East (Vic.)	22.1
Power and Water (NT)	29.6
Yarra Valley (Vic.)	47.0
Sydney Water (NSW)	51.0
Hunter Water (NSW)	88.3
ACTEW Corporation ^a	189.8
SA Water Adelaide (SA)	287.1

a Figure for ACTEW includes sewer main breaks and chokes caused by tree roots.

Table A2.27 Figure 6.4: Average sewer break/choke repair time, selected utilities, 2008–09 (minutes)

Utility	Average repair time
ACTEW Corporation (ACT)	36.0
NT Power and Water (NT)	91.1
Brisbane Water (Qld.)	129.4
South East Water (Vic)	143.0
Yarra Valley (Vic.)	216.0
Sydney Water (NSW)	240.0

Table A2.28 Figure 7.1: Call centre performance, proportion of calls answered by operator within 30 seconds, water/sewerage, selected utilities, 2008–09 (%)

Utility	Calls answered by operator within 30 seconds
Hunter Water (NSW)	72.0
Water Corporation Perth (WA)	77.3
ACTEW Corporation	84.5
Sydney Water (NSW)	84.7
Gold Coast Water (Qld.)	89.9
East Gippsland Water	95.8
Yarra Valley (Vic.)	96.6
South East Water (Vic)	96.7

Table A2.29 Figure 9.1: Network losses, electricity distribution, ActewAGL Distribution, 2003–04 to 2008–09 (%)

Year	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Network losses (% of total network inputs)	4.73	5.40	4.58	4.51	4.39	4.39

Table A2.30 Figure 9.2: Electricity, residential consumption, ACT, 2003–04 to 2008–09 (MWh/customer)

2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
8.82	8.69	8.61	8.38	8.30	8.35

Table A2.31 Figure 9.3: Electricity, total consumption, states and territories, 2008–09 (MWh/person)

State/territory	Average consumption
South Australia	7.9
Western Australia	6.9
Victoria	8.1
Australian Capital Territory	8.1
New South Wales	9.7
Northern Territory	8.2
Queensland	10.7
Tasmania	21.3
Australia	9.3

Sources: Derived from Energy Supply Association of Australia, *Electricity Gas Australia 2010* and ABS population statistics.

Table A2.32 Figure 9.4: GreenPower sold in the ACT, 2003–04 to 2008–09 (MWh)

2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
28,692	32,444	43,463	61,377	103,637	107,493

Table A2.33 Figure 9.5: Total greenhouse gas emissions per head of population, ACT, 2003–04 to 2008–09 (tCO₂-e)

2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
9.65	10.01	10.25	9.84	9.70	9.66

Table A2.34 Figure 9.6: Unaccounted-for water, proportion of all water supplied, ACTEW Corporation, 2003–04 to 2007–08 (%)

2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
7.7	8.2	8.2	5.0	8.6	7.6

Table A2.35 Figure 9.7: Infrastructure leakage indices, selected water utilities, 2008–09

Utility	Infrastructure leakage index
ACTEW (ACT)	0.9
South East Water (Vic.)	0.9
Brisbane Water (Qld.)	1.2
SA Water Adelaide (SA)	1.3
Hunter Water (NSW)	1.3
Sydney Water (NSW)	1.4
Gold Coast Water (Qld.)	1.5
Water Corporation Perth (WA)	1.6
Power and Water (NT)	6.0

Table A2.36 Figure 9.8: Environmental flows, volumes and proportion of total volumes abstracted, water supply, ACTEW Corporation, 2003–04 to 2008–09

Year	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Volume of environmental flows ('000 ML)	58.4	30.2	59.5	10.2	10.2	5.3
% of total water supplied	54.6	36.6	51.2	17.6	18.5	9.8

Table A2.37 Figure 9.9: Proportion of sewage treated to tertiary or advanced level, selected utilities, 2008–09 (%)

Utility	%
Sydney Water (NSW)	22
Hunter Water (NSW)	42.2
South East Water (Vic.)	55.7
Water Corporation Perth (WA)	95.1
Brisbane Water (Qld)	99
ACTEW Corporation	100
Gold Coast Water (Qld.)	100
Sydney Water (NSW)	22

Appendix 3 Licensed energy supply operators, ACT

Table A3.1 Licensed electricity suppliers, ACT, 30 June 2009—date of entry and customer activity in 2008–09

Retailer—electricity	Licence effective from	Licensed at 30 June 2009?	Sales 2008–09
ActewAGL Retail	1 July 2001	Yes	Yes
AGL Sales Pty Ltd	1 July 2001	Yes	Yes
AGL Sales (Queensland Electricity) Pty Ltd	1 July 2001	Yes	Yes
Aurora Energy Pty Ltd	16 July 2005	Yes	Yes
Australian Power and Gas Pty Ltd	1 July 2008	Yes	No
Country Energy	1 July 2001	Yes	Yes
Dodo Power & Gas Pty Ltd	12 September 2007	Yes	No
EnergyAustralia	1 July 2001	Yes	Yes
Energy One Pty Ltd	1 July 2001	No	No
ERM Power Retail Pty Ltd	10 December 2007	Yes	No
Integral Energy Australia	1 July 2001	Yes	Yes
Jackgreen (International) Pty Ltd	4 May 2007	Yes	No
Origin Energy Electricity Ltd	1 July 2001	Yes	Yes
Powerdirect Pty Ltd	8 July 2004	Yes	Yes
Red Energy Pty Ltd	1 January 2006	Yes	Yes
SUN Retail Pty Ltd	1 July 2001	Yes	No
Sanctuary Energy Pty Ltd ^a	1 July 2009	Yes ^a	No
TRUenergy Pty Ltd	1 July 2001	Yes	Yes
TRUenergy Yallourn Pty Ltd	1 July 2001	Yes	Yes

a Licence granted 29 June 2009.

Table A3.2 Licensed gas suppliers, ACT, 30 June 2009—date of entry and customer activity in 2008–09

Retailer—gas	Licence effective from	Licensed at 30 June 2009?	Sales 2008–09
ActewAGL Retail	01-Jul-2001	Yes	Yes
Australian Power and Gas Pty Ltd ^c	01-Jul-2008	Yes	No
Country Energy	03-Feb-2003	Yes	Yes
Dodo Power & Gas Pty Ltd	21-Sep-2007	Yes	No
EnergyAustralia	22-Jul-2003	Yes	Yes
Jackgreen (International) Pty Ltd	04-May-2007	Yes	No
SUN Retail Pty Ltd	01-July-2001	Yes	No
TRUenergy Pty Ltd	17-Aug-2005	Yes	Yes

Appendix 4 Compliance and performance reports, 2001–02 to 2007–08

Reports issued 2009

- Report 5 of 2009: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance and Performance Report for 2006–2007 (June 2009)
- Report 6 of 2009: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance and Performance Report for 2007–2008 (June 2009)

Reports issued 2008

- Report 5 of 2008: Licensed Electricity, Gas and Water and Sewerage Utilities—Performance Report for 2005–2006 (December 2008)

Reports issued 2007

- Report 1 of 2007: Licensed Electricity, Gas and Water and Sewerage Utilities—Performance Report for 2004–2005 (February 2007)
- Report 10 of 2007: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance Report for 2005–2006 (November 2007)

Reports issued 2006

- Report 4 of 2006: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance Report for 2004–05 (February 2006)

Reports issued 2005

- Report 2 of 2005: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance Report for 2003–2004 (March 2005)
- Report 8 of 2005: Licensed Electricity, Gas and Water and Sewerage Utilities—Performance Report for 2003–2004 (September 2005)

Reports issued 2004

- Report 1 of 2004: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance and Performance Report for 2001–2002 (January 2004)
- Report 13 of 2004: Licensed Electricity, Gas and Water and Sewerage Utilities—Compliance and Performance Report for 2002–2003 (July 2004)

Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ACAT	ACT Civil and Administrative Tribunal
ACAT–EW	ACT Civil and Administrative Tribunal—Energy and Water
ACT	Australian Capital Territory
ACTPLA	ACT Planning and Land Authority
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
CAIDI	customer average interruption duration index
Commission	Independent Competition and Regulatory Commission
EAPL	East Australian Pipeline Limited
GGAS	Greenhouse Gas Abatement Scheme
GJ	gigajoule
GL	gigalitre
GWh	gigawatt hour
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal
kL	kilolitre
km	kilometre
km ²	square kilometres
kPa	kilopascal
kV	kilovolt
kWh	kilowatt hour
MJ	megajoule
ML	megalitre
MVA	megavolt ampere

MWh	megawatt hour
NEM	National Electricity Market
POTS	packaged off-take station
PRS	primary regulating station
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
tCO ₂ -e	tonnes of carbon dioxide equivalent
TFT	transitional franchise tariff
TJ	terajoule
Utilities Act	<i>Utilities Act 2000</i>