



# ICRC

independent competition and regulatory commission

Compliance and Performance  
Report for 2010–11  
**Licensed Electricity, Gas,  
Water and Sewerage Utilities**  
Report 10 of 2012  
November 2012

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

The Independent and Competition and Regulatory Commission (the Commission) has a statutory obligation to monitor licensed utilities (that is, electricity, gas, and water and sewerage network service providers and/or retail suppliers) operating in the Australian Capital Territory (ACT) and to report the status of licensee compliance to the ACT Government.

Each year, the Commission prepares a report summarising utilities' compliance with their statutory obligations and also provides details on key performance indicators (KPIs) for the reporting year based on information provided by the utilities. While reporting performance information is one of a utility's obligations under the conditions of its licence, the reporting of a utility's performance serves another important function, that of public accountability. Through these reports, regulators and consumers can have transparency as to whether utilities in the ACT are meeting their service obligations and how they are performing in comparison with the ACT market in general.

This is the ninth year for which the Commission has prepared reports on compliance and performance of licensed utilities. A full list of those reports is provided in Appendix D.



Malcolm Gray  
Senior Commissioner  
06 November 2012

## Executive Summary

### Utility services—main features

The following is an 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 2010–11, ActewAGL’s distribution network delivered electricity to 168,937 metered supply points, of which 152,911 were to residential customers and 16,026 were non-residential customers.
- During the year, 2,930 GWh of electricity was delivered, with 1,716 GWh delivered to non-residential customers and 1,214 GWh to residential customers.
- The ACT electricity retail market comprises mainly residential customers, with 151,290 customers at the end of June 2011, accounting for 91% of total customer numbers, but only for 41% of total electricity consumed.
- Average annual electricity consumption by residential customers decreased by 5.1% to almost 8 MWh per customer. Average consumption by non-residential customers has also decreased by 1.5% to approximately 120 MWh.
- Total sales of electricity during the year amounted to 2,937 GWh, with 1,259 GWh, or 43%, attributed to customers on standard contracts and 1,678 GWh, or 57%, to customers on negotiated contracts.
- Small customers who purchased less than 100 MWh accounted for just over 52% of all sales, with medium and large customers accounting for 38% and 10% respectively.

#### Natural gas—transmission, distribution and supply

- At 30 June 2011, ActewAGL Distribution’s network comprised 3,797 km of medium-pressure and 267 km of high-pressure mains, a total pipeline length of 4,064 km.
- In 2010–11, ActewAGL distributed 8,633 TJ of gas to almost 107,825 delivery point identifiers.
- During 2010–11, nine utilities were licensed to supply gas in the ACT; however, only four of those licensed companies—ActewAGL Retail, Essential Energy (formerly Country Energy), Ausgrid (formerly EnergyAustralia) and TRUenergy Pty Ltd—supplied gas to customers during the year.
- Total gas sales increased from 7,080 TJ in 2009–10 to 7,642 TJ in 2010–11, consistent with the increase in gas supply customer numbers.

- There were 105,160 gas supply customers in the ACT at 30 June 2011, an increase of 8.4% on the 2009–10 level.

### **Water and sewerage services**

- ACTEW Corporation delivered 45,250 ML of water to 153,916 ACT properties, which was an increase of almost 6% on the previous period.
- Residential properties accounted for 92% of ACTEW Corporation's customers.
- During 2010–11, ACTEW Corporation provided sewerage services to 150,065 customers, an increase of 5% on the previous period, and treated 21% more sewerage.

### **Utility compliance**

- No material breaches have been reported to the Commission during 2010–11.
- The Office of Regulatory Services (ORS) reported that it did not receive any complaints about the market activities of utilities or their agents during 2010–11.
- The ACT Civil and Administrative Tribunal (ACAT) reported that there were no industry-wide compliance issues in 2010–11, relating to gas and electricity supply.
- ACAT reported no material compliance issues with respect to water supply in 2010–11.
- ACT Health advised that it had not recorded any complaints in the 2010–11 reporting period about the operation of licensed utilities.
- The Environment Protection Authority (EPA) advised the Commission of two incidents reported to the EPA during the year, both involving the discharge of sewage into a waterway. The first incident, involving ActewAGL, did not result in any action by the EPA. The second incident, involving Queanbeyan City Council, was referred to the Commissioner for Sustainability and the Environment.

### **Financial outcomes**

- In 2010–11, 17 retailers were licensed to supply electricity in the ACT. Of the total revenue of almost \$440 million raised by electricity retailers during the year, non-residential customers accounted for \$243 million, or 55%, with residential customers accounting for the remaining \$197 million, or 45%.
- All utilities had increased revenue in 2010–11, with the exception of water services, which experienced a decrease.
- In 2010–11, five of the nine licensed retailers supplied gas in the ACT. Total revenue raised was \$144.2 million.

- In 2010–11, ACTEW’s sewerage services revenue increased to almost \$114 million, an increase of 8% on 2009–10.

## **Technical regulation—network reliability, serviceability and maintenance**

### **Emergency Planning Code**

- Resulting from a review of the Emergency Planning Code in 2009–10, gas network emergency planning requirements are now in line with those for water and electricity, the code has been expanded to specify matters that must be considered in the annual audit of emergency procedures, objectives for emergency plans are clearly set, and definitions better defined. The Emergency Planning Code was notified in legislation on 12 July 2010.

### **Electricity**

- As part of a Technical Regulator commissioned audit of ActewAGL’s Distribution’s management of reinstated timber poles (or ‘nailed’ poles) during 2010–11, 1,400 poles were inspected. The audit identified five major defects, condemned four poles, 14 conditionally serviceable poles downgraded to temporarily serviceable, a number of potentially serious maintenance issues, and four poles with excessive leaning. Eight recommendations were made, six of which were accepted and two accepted conditionally by ActewAGL.
- Under ActewAGL’s Electricity Service and Installation Rules, inverter protection system tests are to be undertaken every five years. It was identified however, that ActewAGL had 14 inverters over five years old that had never been tested. A sample of 127 inverters was tested, with a number of installation faults identified and passed on to the Registrar for Electrical Safety for follow-up with installers.
- It was found that ActewAGL proactively monitors voltage levels from within distribution substations, capturing instances of voltages above the standard limits.
- In 2010–11, there was an increase in the system average minutes without power and average interruption duration of planned and unplanned interruptions since last year. The system average number of interruptions remained unchanged.

### **Gas**

- In 2010–11, auditing work was conducted on the gas network operators’ systems. Audit work on gas meter set enclosures found that of the 712 meter set enclosures audited, 18% of the building managers/owners were notified of corrective actions required, and 92% of the sites that had previously required corrective actions were completed.

- An audit was also completed on sections of ActewAGL Distribution's primary pipelines. In relation to the High Pressure Primary gas pipeline, it was found that sighted signage was not fully compliant with AS2885 parts 1 and 3, and in three locations the pipeline was in close proximity to electrical power poles, indicating that future pole replacement could pose a threat to the pipeline. In relation to the Hoskingstown to Fyshwick pipeline, signs were generally compliant, however several signs were heavily faded.
- A draft 'Service and Installation Rules code' has been drafted by the ACT Planning and Land Authority (ACTPLA) and will be distributed for consultation in 2011–12. ActewAGL also drafted its 'ActewAGL Service & Installation Rules' which will be reviewed against the proposed and existing codes.
- There was a significant increase in planned interruptions to gas distribution services in 2010–11 relative to the previous year, increasing from 349 to 1,860, or 432%.

### **Water and sewerage (reliability of services)**

- Water main breaks per 100 km of main, and average frequency of unplanned interruptions per 1,000 properties –increased in 2010–11 relative to the previous year. The average frequency of unplanned interruptions had the highest increase, increasing from 83 in 2009–10 to 119 in 2010–11, or 43%.
- There was an increase of almost 11 percent in the number of burst or leaking pipes which did not affect public health, substantial damage or harm to people or property. There was a slightly higher corresponding increase in the number of times the licensee responded to these events within 24 hours of almost 14%.
- During the period there was a decrease in planned interruptions for water supply of almost 12%, however the average interruption duration increased from 16 minutes in 2009–10 to 21.6 minutes in 2010–11, or 35%. There were also 95 more unplanned interruptions, representing a 14.5% increase on last period, however interruption duration decreased by almost 17 minutes, or approximately 13%.
- There was an increase of 149% from the previous year in unplanned interruptions for sewerage services. Interruption duration also increased by four minutes, or 11%.

### **Customer safety net arrangements**

- Fewer residential electricity customers were disconnected for account non-payment, a decrease of 54% on the previous period. There was also a proportional increase in the number of customers reconnected with the same name within seven days of disconnection, with 70% of disconnected customers reconnected in 2010–11, compared with 65% reconnected in 2009–10.

- There were 12% fewer disconnections for non-payment of gas supply accounts during the 2010–11 period relative to the previous period. There was a 27% decrease in the number of customers reconnected with the same name within seven days of disconnection.

## Customer complaints and responses

- The number electricity distribution complaints increased for the second consecutive year. The main sources of complaints during the year related to administrative process or customer service, representing almost 37% of all complaints, followed by failure to provide sufficient notice representing 28%.
- ACT electricity suppliers received a total of 504 complaints, following a trend of significant decreases over the past two years. Complaints relating to ‘other retail matters’ featured most strongly, representing almost 59% of all complaints. Included within this category were complaints relating to bundled deals, discounts, disconnections, and feed-in tariffs. The next largest category of complaints relate to billing and affordability, accounting for 39% of the total.
- Of the 504 complaints received about electricity suppliers during the year, 95% were acknowledged within 10 business days, and 87% were responded to within 20 business days.
- Gas distribution reported 15 complaints during 2010–11, with all complaints acknowledged in 10 days and 80% responded to within 20 business days. There was a 36% increase in the number of notification of network problems.
- ACTEW Corporation received a total of 591 water supply complaints to premises in the ACT, an increase of 24% on the previous year’s level. Complaints about water quality were the most common, accounting for 26% of water supply complaints.
- During 2010–11, there were 421 complaints about sewerage services, a significant increase of almost 116% on the 195 complaints recorded in the previous year. Complaints regarding network issues accounted for the largest proportion, at 39% of total complaints.

## Environmental performance

- In 2010–11, ActewAGL Distribution’s electricity network losses were 4.7% of total network inputs, up slightly on the previous year’s level of 4.64%.
- The estimated volume of greenhouse gases emitted as a result of electricity consumption in 2010–11 was 2,743,945 carbon dioxide equivalent t CO<sub>2</sub>-e, representing an increase of 0.9%.



- The estimated volume of greenhouse gases emitted as a result of natural gas consumption in the ACT in 2010–11 was 391,285 t CO<sub>2</sub>-e, an increase on the 2009–10 level of 362,496 tonnes.
- In 2010–11 122,461 MWh of GreenPower was sold in the ACT an increase of 0.9% on the previous year.
- In 2010–11 total ACT greenhouse gas emissions from electricity and natural gas consumption was almost 3.14 million tonnes of carbon dioxide equivalent (t CO<sub>2</sub>-e), representing an increase of 1.75% since the last period. However, total emissions per head of population from these sources remained almost the same as for the previous year at 8.67 t CO<sub>2</sub>-e.



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# 1 Introduction

The Independent and Competition and Regulatory Commission (the Commission) has a statutory obligation to monitor licensed utilities (that is, electricity, gas, and water and sewerage network service providers and/or retail suppliers) operating in the Australian Capital Territory (ACT). One of those obligations is to monitor licensees' compliance with the conditions of their licences and to report the status of their compliance to the ACT Government.

In the ACT, licences are issued under the *Utilities Act 2000*, and require 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. Additionally utilities must report annually to the Commission on the performance of their functions against their licence conditions, statutory and relevant industry code requirements.

## 1.1 Purpose of this report

The purpose of this report is to bring together the required reporting for the Utilities Act, Electricity (Greenhouse Gas Emissions) Act, Electricity Feed-in (Renewable Energy Premium) Act and associated codes into a single report.

This report presents the compliance and performance indicators of licensed utilities which supplied services in the ACT during 2010–11. The utility services include electricity and gas distribution, the retailing (supply) of gas and electricity and the provision of water and sewerage services.

Information presented in this report is ACT specific unless otherwise stated.

### **Administering compliance and performance under the Utilities Act**

A licence issued under the Utilities Act requires licensees to notify the Commission of any material breaches of their licence conditions, legislation, codes of practice, directions or guidelines as soon as practicable. Licensees 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 submitted on a financial year basis to the Commission no later than three months after the end of the financial year (that is, by 1 October).

Licensees are also required to report against a number of key performance indicators, such as numbers of customers, sales volumes, number of complaints received and responses to those complaints.

The Commission's main objectives under the Utilities Act are to:

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

### **Regulation of the ACT Greenhouse Gas Abatement Scheme (GGAS)**

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

- establish greenhouse gas benchmarks for participants;
- monitor benchmark participants' compliance, and report to the Minister on the extent to which participants comply with greenhouse gas benchmarks; and
- 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.

### **Reporting under the Electricity Feed-in Scheme**

The Electricity Feed-in Scheme for feed-in electricity 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.

## **1.2 Commercial-in-confidence information**

To enable the Commission to undertake its responsibilities for compliance and performance reporting, licensees are required to provide confidential commercial information. 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 Commission's Compliance and Performance Report contains a unique set of data sourced from third parties including licensees and relevant regulators. While every reasonable effort is made to ensure that the information provided in this report is accurate, no guarantees for the currency or accuracy of information are made. The Commission's report is provided 'as is'. It is provided without any representation or endorsement made and without warranty of any kind, whether express or implied, including but not limited to the implied warranties of satisfactory quality, fitness for a particular purpose, non-infringement, compatibility, security and accuracy.

This report is provided for informational purposes only. Before relying on this report whether in part or full, the user should contact the Commission or other appropriate source to review the official records of the organisations, and confirm that the information is current. Our staff will be glad to assist you with obtaining the most current information and answer questions. This report may not be reproduced in part or full for sale to any person or persons without prior approval of the Commission.

### **1.4 Utilities licensed in the ACT**

Licensed utilities in the ACT during 2010–11 are set out in Table 1.1. Further details on those utilities are provided in Appendix C, including information on the dates licences were first issued and, for the 2010–11 reporting year, whether the suppliers sold energy to customers.

**Table 1.1 ACT licensed utilities, during 2010–11**

Utility service	Licensed utility
Electricity distribution and connection	ActewAGL Distribution
Electricity supply	ActewAGL Retail AGL Sales Pty Ltd AGL Sales (Queensland Electricity) Pty Ltd Aurora Energy Pty Ltd Australian Power and Gas Pty Ltd Jackgreen (International) Pty Ltd Dodo Power & Gas Pty Ltd Endeavour Energy (formerly Integral Energy) <sup>1</sup> ERM Power Retail Pty Ltd Country Energy Momentum Energy Pty Ltd Origin Energy Electricity Ltd Powerdirect Pty Ltd Red Energy Pty Ltd Sanctuary Energy Pty Ltd SUN Retail Pty Ltd TRUenergy Pty Ltd TRUenergy Yallourn Pty Ltd
Gas transmission	East Australian Pipeline Limited
Gas distribution and connection	ActewAGL Distribution
Gas supply	ActewAGL Retail Ausgrid (formerly EnergyAustralia) <sup>2</sup> Australian Power and Gas Pty Ltd AGL Sales Pty Ltd <sup>3</sup> Jackgreen (International) Pty Ltd Dodo Power & Gas Pty Ltd Country Energy SUN Retail Pty Ltd TRUenergy Pty Ltd
Water supply	ACTEW Corporation Ltd
Sewerage services	ACTEW Corporation Ltd

1 On 6 April 2011 Endeavour Energy (formerly Integral Energy) wrote to the Commission seeking to surrender its licence. The Commission has accepted an early surrender of Endeavour Energy's electricity supply licence effective from 30 June 2011.

2 Name change effective from 1 March 2011.

3 On 12 November 2010, the Commission granted AGL Sales Pty Limited a gas supply licence.



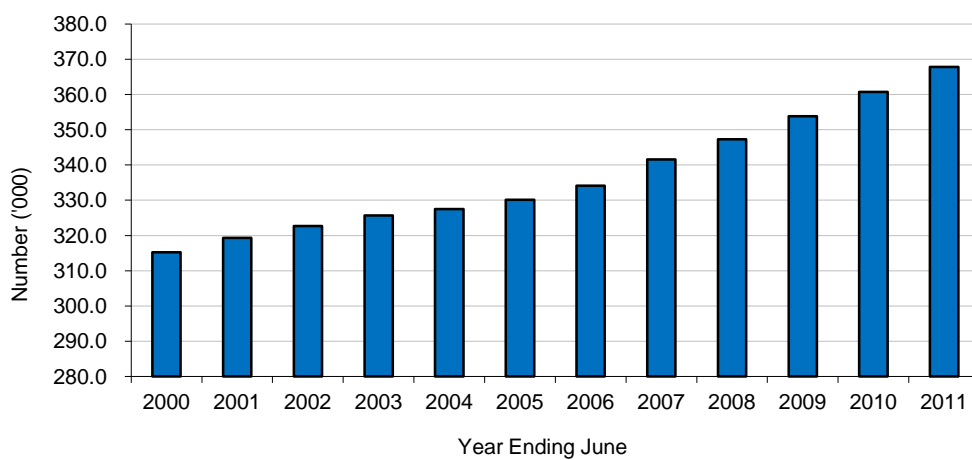
## 1.5 Key features of the ACT

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

### Population

At 30 June 2011, the ACT had an estimated resident population of 367,800, an increase of 1.9% on the 2010 level, and a 15% increase over the previous 10 years (see Figure 1.1)

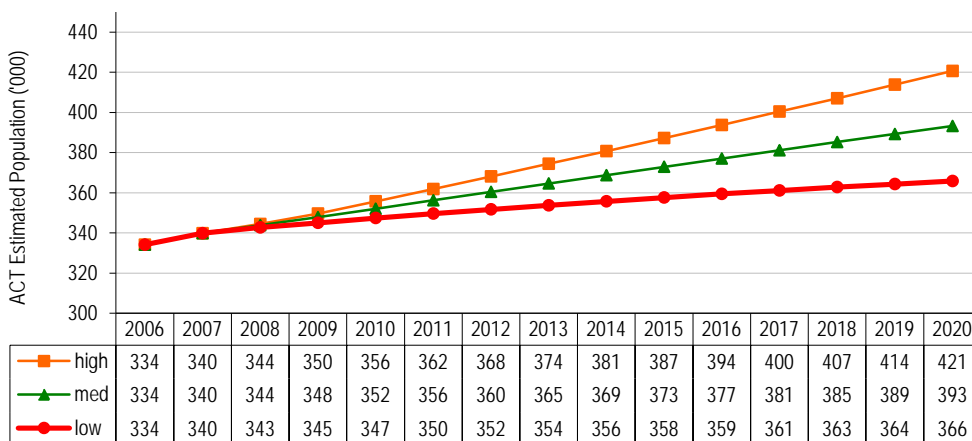
Figure 1.1 ACT population, 2000 to 2011



Source: Australian Bureau of Statistics (ABS), *Australian demographic statistics*, Table 4, 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).

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



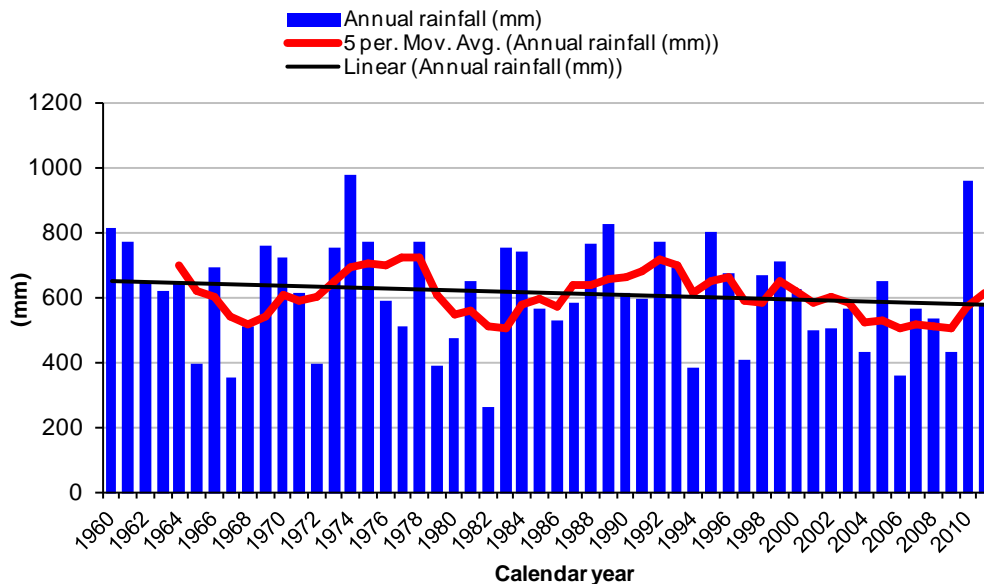
Source: ABS, *Population projections, Australia*, Table 5.11, Summary Tables, 2006 to 2101, cat. no. 3222.0, p. 88.

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.

## Climate

The ACT’s climate is essentially temperate, with hot summers and cold winters. Much of the rain that falls during the summer occurs during storms. Annual rainfall from 1960 to 2011, shown in Figure 1.3, shows a declining trend that is expected to continue over coming years, although there are likely to be years when rainfall is above the five-year moving average.

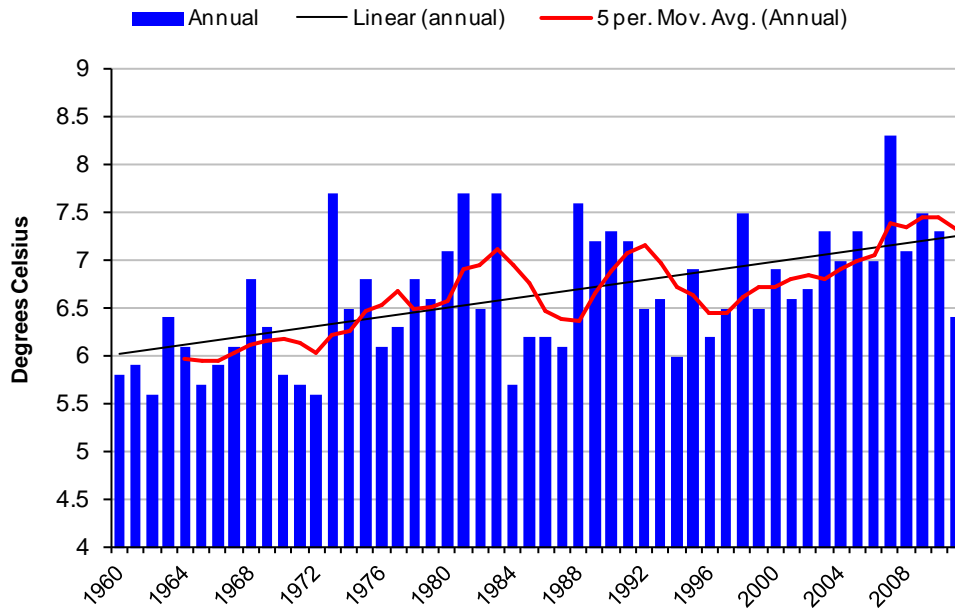
Figure 1.3 ACT annual rainfall, calendar years 1960 to 2011



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 5.8°C in 1960 to 7.4°C in 2011, while the average maximum temperature over the same period rose from 18.7°C to 20.3°C.

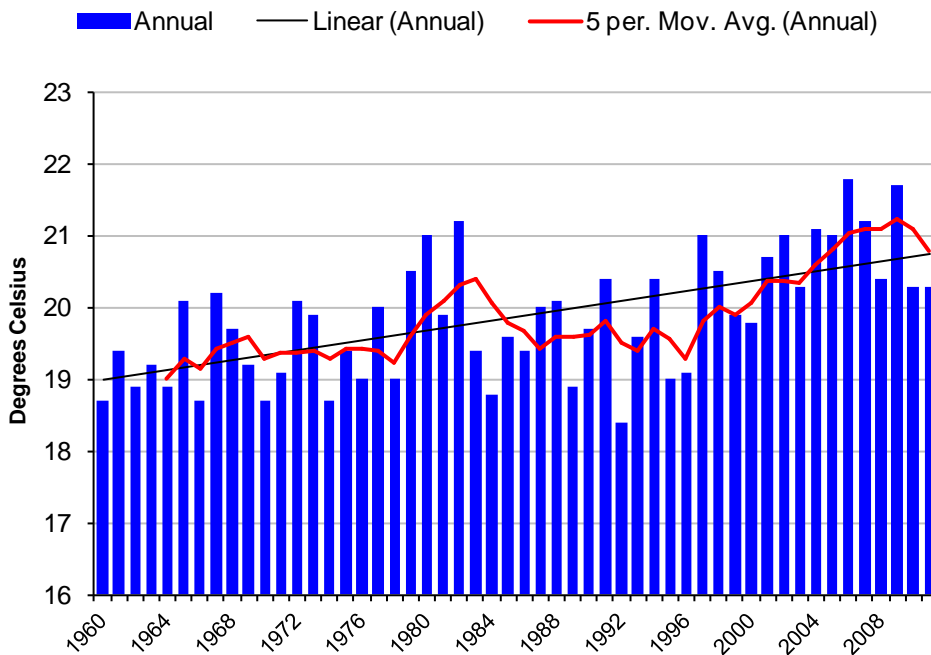
Figure 1.4 ACT mean minimum temperatures, calendar years 1960 to 2009<sup>a</sup>



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

Note: a. '5 per.Mov. Avg' refers to 5 year moving average

Figure 1.5 ACT mean maximum temperatures, calendar years 1960 to 2009



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

## **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 key metrics on customer numbers, consumption volumes and trends in each utility sector of utilities licensed by the Commission.*

### 2.1 Electricity transmission

ACT Electricity Transmission is provided by TransGrid, the NSW transmission network service provider. 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.<sup>1</sup>

### 2.2 Electricity distribution

The ACT has one licensed electricity distributor: ActewAGL Distribution.<sup>2</sup> ActewAGL Distribution's licence authorises it to provide electricity distribution services and electricity connection services. During 2010–11, ActewAGL Distribution's network delivered electricity to 168,937 metered supply points, of which 152,911 were to residential customers and 16,026 to non-residential customers.<sup>3</sup> During the same period, 2,930 GWh of electricity was delivered, with 1,716 GWh delivered to non-residential customers and 1,214 GWh delivered to residential customers (see Table 2.1).

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<sup>1</sup> Utilities (Exemption) 2006 (No. 1) Disallowable instrument DI2006-47 (repealed) and Utilities (Exemption) 2009 (No. 3) Disallowable instrument DI2009-144.

<sup>2</sup> Country Energy (now Essential Energy) was granted an exemption from the obligation 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 km long and runs along the ACT – New South Wales border.

<sup>3</sup> This number is based on the number of metered supply points on the network, or 'national metering identifiers' (NMIs). It includes both connected and disconnected (non-active) supply points.

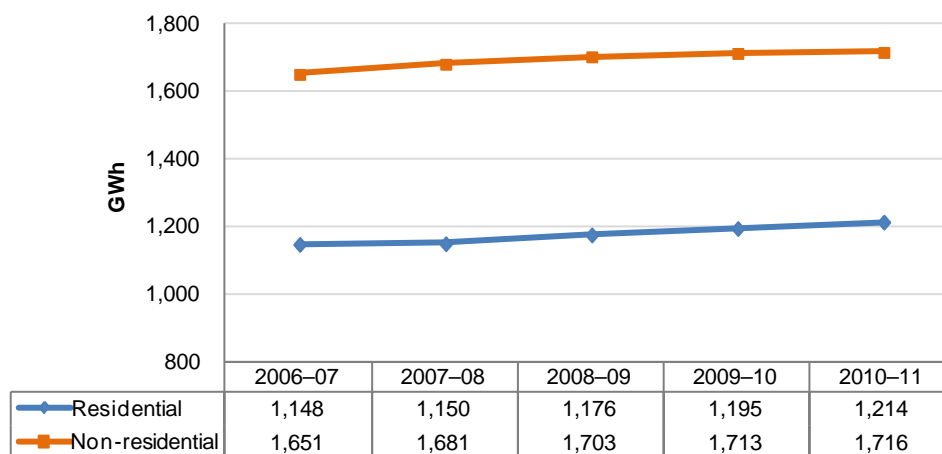
**Table 2.1 ActewAGL Distribution’s network, metered supply point numbers and energy delivered, 2010–11**

Item	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 2011)	168,937	152,911	16,026	NA	23	168,914
Energy delivered (GWh)	2,930	1,214	1,716	NA	385	2,544

Source: ActewAGL Distribution’s 2010–11 annual report to ICRC.

As shown in Figure 2.1, energy delivered to residential and non-residential customers has remained relatively constant since 2006–07.

**Figure 2.1 Energy distributed (GWh), electricity distribution, ActewAGL Distribution, 2006–07 to 2010–11**



Source: ActewAGL Distribution’s annual reports to ICRC.

At 30 June 2011 there were 28 sub-transmission transformers with a capacity of 1,342 MVA, and 4,884 distribution transformers with a capacity of 1,982 MVA (see Table 2.2).

**Table 2.2 Number of transformers, electricity distribution, ActewAGL Distribution, end June 2011**

Network type	Number	Capacity (MVA)
Sub-transmission	28	1,342
Distribution	4,884	1,982

MVA = megavolt ampere

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

b Number of substations and their capacity at 22 kV and 11 kV.

Source: ActewAGL Distribution’s 2010–11 annual report to ICRC.

Table 2.3 shows key business descriptors used by ActewAGL’s electricity distribution network for financial years 2009–10 and 2010–11. Distribution losses and peak demand both increased slightly in 2010–11 from 2009–10 levels, with:

- distribution losses increased by 1.3%
- peak demand increased by 1.7%.

**Table 2.3 Key business descriptors, electricity distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Descriptor	2009-10	2010-11
Distribution losses <sup>a</sup> (%)	4.64	4.70
Network service area (km <sup>2</sup> )	2,358	2,358
Number of poles	52,890	52,745
Peak demand - distribution (MW)	604	614

a Based on five-year moving average.

Source: ActewAGL Distribution’s annual reports to ICRC.

## 2.3 Electricity supply

The Commission regulates the retail tariff for the electricity supply market in the ACT for electricity supplied to franchise customers on standard contracts. A franchise customer is any customer who consumes less than 100 MWh/year and who remains on the standard customer contract subject to a regulated tariff. Franchise customers become non-franchise customers if they elect to enter into a negotiated supply contract with any electricity supplier; any franchise customer is eligible to become a non-franchise customer. The retail tariff for non-franchise customers is not regulated.

### Electricity sales and consumption

Table 2.4 provides details of customer numbers, customer sales and average electricity consumption for residential and non-residential customers in 2009–10 and 2010–11.

**Table 2.4 Customer numbers, sales and average consumption, electricity supply, ACT, 2009–10 and 2010–11**

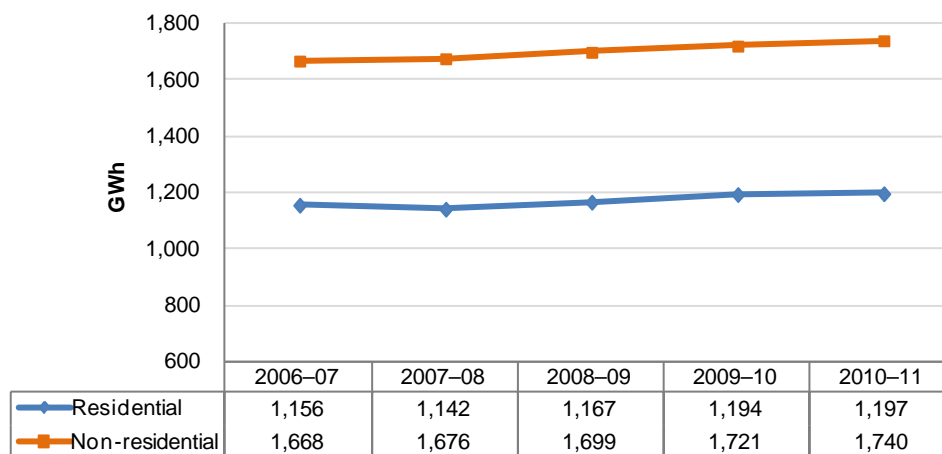
Item	2009–10	2010–11	Change (%)
<b>Customer numbers (end June)</b>			
Residential	143,187	151,290	5.7
Non-residential	14,161	14,536	2.6
<b>Total numbers</b>	<b>157,348</b>	<b>165,826</b>	<b>2.4</b>
<b>Customer sales (GWh)</b>			
Residential	1,194	1,197	0.2
Non-residential	1,721	1,740	1.1
<b>Total sales</b>	<b>2,915</b>	<b>2,937</b>	<b>0.7</b>
<b>Average consumption (MWh/customer)</b>			
Residential	8.34	7.91	-5.1
Non-residential	121.54	119.70	-1.5
<b>Average electricity consumption</b>	<b>18.52</b>	<b>17.71</b>	<b>-4.4</b>

Note: The reported sales by suppliers may not equate to the distribution volumes reported by distributors because of differences in timing of billing cycles.

Source: Licensed electricity utilities' annual reports to ICRC.

Figure 2.2 shows the quantity of electricity sold to residential and non-residential customers from 2006–07 to 2010–11. Residential and non-residential electricity sales have increased by 0.2% and 1.1%, respectively.

**Figure 2.2 Sales volume (GWh), electricity supply, residential and non-residential, 2006–07 to 2010–11**

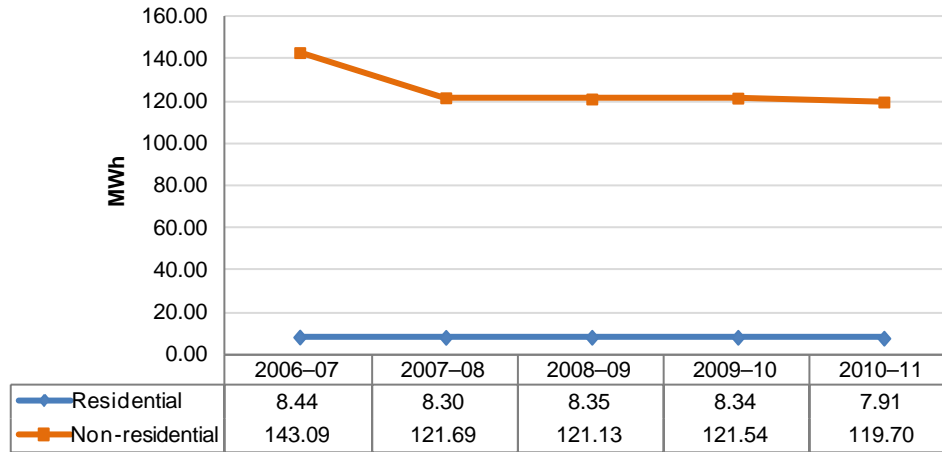


Source: Licensed electricity suppliers' annual reports to ICRC.

Average electricity consumption levels for both residential and non-residential customers over the five years from 2006–07 to 2010–11 is shown in Figure 2.3.



**Figure 2.3 Average electricity consumption (MWh per customer), residential and non-residential customers, 2006–07 to 2010–11**



Source: Licensed electricity suppliers' annual reports to ICRC.

Sales of electricity to various categories of customers during 2010–11 are listed in Table 2.5.

**Table 2.5 Electricity sales by contract type and usage level, electricity supply (MWh), ACT, 2010–11**

Contract type	Sales to small customers <sup>a</sup> (MWh)	Sales to medium customers <sup>b</sup> (MWh)	Sales to large customers <sup>c</sup> (MWh)	Total (MWh)
<b>Customers on standard contracts</b>				
Residential	974,300	0	0	974,300
Non-residential	284,605	0	0	284,605
<b>Sub-total</b>	<b>1,258,905</b>	<b>0</b>	<b>0</b>	<b>1,258,905</b>
<b>Customers on negotiated contracts</b>				
Residential	222,530	0	0	222,530
Non-residential	52,124	1,111,517	291,687	1,455,328
<b>Sub-total</b>	<b>274,654</b>	<b>1,111,517</b>	<b>291,687</b>	<b>1,677,858</b>
<b>Total sales</b>				
Residential	1,196,830	0	0	1,196,830
Non-residential	336,729	1,111,517	291,687	1,739,933
<b>Total sales</b>	<b>1,523,559</b>	<b>1,111,517</b>	<b>291,687</b>	<b>2,936,763</b>

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

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

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

Source: Licensed electricity utilities' annual reports to ICRC.

## Competition in the retail electricity market

The process of 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 shows customer and supplier numbers from 2005–06 through to 2010–11. In 2010–11, five suppliers from a total of 15 had more than 100 customers, while another five suppliers had fewer than 10 customers.

**Table 2.6** Number of suppliers by customer number categories, electricity supply, ACT, 2005–06 to 2010–11

Customer number category	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Fewer than 10	8	3	5	3	6	5
10 to 50	2	2	2	2	2	0
51 to 100	1	0	0	0	3	1
More than 100	4	7	5	7	8	5
<b>Total</b>	<b>15</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>19</b>	<b>15</b>

Source: Licensed electricity utilities' annual reports to ICRC.

## 2.4 Gas transmission

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

## 2.5 Gas distribution

The ACT has one licensed gas distributor: ActewAGL Distribution (gas). 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.

At 30 June 2011, ActewAGL Distribution's network comprised 3,797 km of medium-pressure and 267 km of high-pressure mains, a total pipeline length of 4,064 kms. In 2010–11, ActewAGL distributed 8,6331 TJ (Terra Joules) of gas to 107,825 delivery point identifiers (see Table 2.7).<sup>4</sup>

<sup>4</sup> The number of distribution customers (supply points) is not the same as the number of customers with contracts for gas supply, as the former includes quantities supplied to Queanbeyan and Bungendore in new South Wales.

**Table 2.7 Gas distribution, pipeline lengths, delivery point identifiers and quantities of gas delivered, 2009–10 and 2010–11**

Item	2009–10	2010–11	Change (%)
<b>Pipeline length at 30 June (km)</b>			
Medium pressure <sup>a</sup>	3,735	3,797	1.6
High pressure <sup>b</sup>	263	267	1.6
<b>Total pipeline length</b>	<b>3,998</b>	<b>4,064</b>	<b>1.6</b>
Number of delivery point identifiers at 30 June	104,423	107,825	3.3
Quantity of gas entering the distribution network (TJ) <sup>c</sup>	7,921	8,633	9.0
<b>Quantity of gas billed (TJ)<sup>d</sup></b>			
Small customers (<1 TJ/year)	6,718	5,442	-1.2
Large customers (>1 TJ/year)	1,067	2,201	3.5
<b>Total quantity of gas billed</b>	<b>7,785</b>	<b>7,642</b>	<b>-1.8</b>

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

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

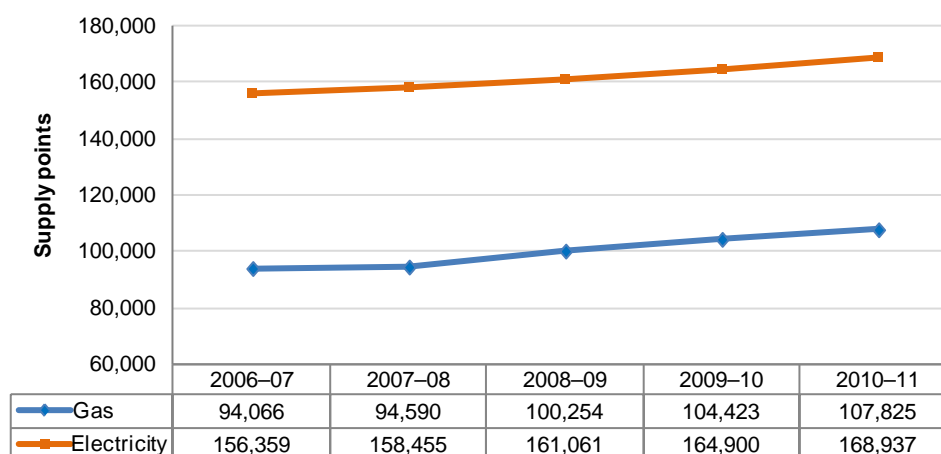
c ACT only.

d ACT only.

Source: ActewAGL Distribution's annual reports to ICRC.

There are fewer ActewAGL Distribution customer supply point numbers for gas than electricity, however, the number of gas supply points is continuing to grow (refer to Figure 2.4).

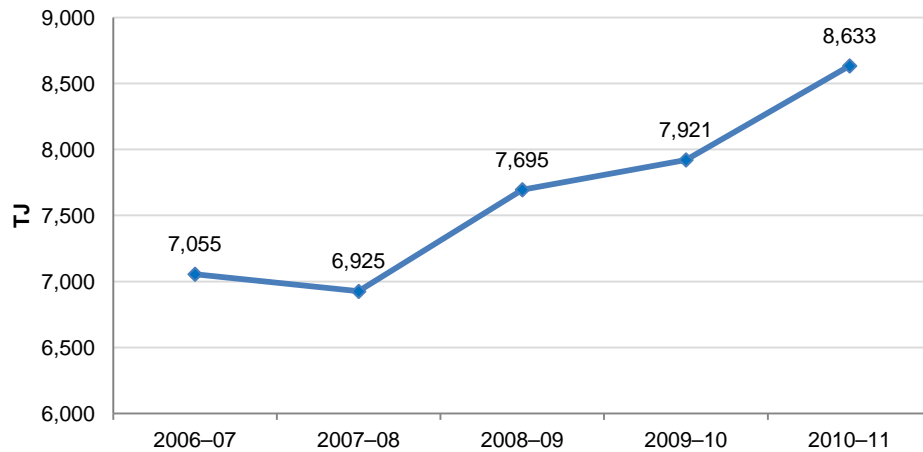
**Figure 2.4 Customer supply point numbers, gas and electricity distribution, 2006–07 to 2010–11**



Source: ActewAGL Distribution's annual reports to ICRC.

Figure 2.5 shows the volume of gas distributed in the ACT has continued to rise since 2007–08. The likely drivers for this rise are population increase and a preference for gas-fired heating in the Territory.

**Figure 2.5 Volume of gas distributed (TJ), gas distribution, 2006–07 to 2010–11**



Source: ActewAGL Distribution's annual reports to ICRC.

## 2.6 Gas retail

### Gas sales and consumption

Table 2.8 compares gas consumption and sales data for residential and non-residential customers for both 2009–10 and 2010–11.

Gas supply data shown in the table may not reconcile with the data for gas distribution, as gas distribution data includes quantities supplied to Queanbeyan and Bungendore (both in New South Wales), whilst gas supply sales data applies to customers in the ACT only.

**Table 2.8 Customer numbers and sales, gas supply, 2009–10 and 2010–11**

Item	2009–10	2010–11	Change (%)
<b>Customer numbers</b>			
Residential	95,197	102,993	8.2
Non-residential	1,778	2,167	21.9
<b>Total numbers</b>	<b>96,975</b>	<b>105,160</b>	<b>8.4</b>
<b>Customer sales (TJ)</b>			
Residential	4,513	4,855	7.6
Non-residential	2,567	2,787	8.6
<b>Total sales</b>	<b>7,080</b>	<b>7,642</b>	<b>7.9</b>
<b>Average consumption (GJ/customer)</b>			
Residential	47	47	0.3
Non-residential	1,444	1,286	-10.9
<b>Average gas consumption</b>	<b>73</b>	<b>73</b>	<b>-0.4</b>

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

Table 2.9 lists gas customer numbers by contract type and size of supply during 2010–11.

**Table 2.9 Customer numbers by category, gas supply, ACT, 2010–11**

Contract type	Small (<1 TJ/year)	Large (>1 TJ/year)	Total
<b>Customers on standard contracts</b>			
Residential	73,617	0	73,617
Non-residential	1,442	298	1,740
<b>Subtotal</b>	<b>75,059</b>	<b>298</b>	<b>75,357</b>
<b>Customers on negotiated contracts</b>			
Residential	29,376	0	29,376
Non-residential	312	115	427
<b>Subtotal</b>	<b>29,688</b>	<b>115</b>	<b>29,803</b>
<b>Total customer numbers</b>			
Residential	102,993	0	102,993
Non-residential	1,754	413	2,167
<b>Total numbers</b>	<b>104,747</b>	<b>413</b>	<b>105,160</b>

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

Table 2.10 lists gas sales by scale of supply for 2010–11.

**Table 2.10 Customer sales by category, gas supply (TJ), ACT, 2010–11**

Contract type	Sales to small customers <sup>a</sup>	Sales to large customers <sup>b</sup>	Total
<b>Total sales</b>			
Residential	4,855	0	4,855
Non-residential	587	2,201	2,787
<b>Totals</b>	<b>5,442</b>	<b>2,201</b>	<b>7,642</b>

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

b 'Large' customers use ≥1 TJ/year.

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

## 2.7 Water and sewerage services

ACTEW Corporation continues to be the only entity licensed to supply water and sewerage services in the ACT. ACTEW Corporation owns and manages the water and sewerage system in the Territory, including water storage and harvesting, treatment, bulk supply, reticulation and supply, and sewage collection and treatment. It has a range of retail customer service functions, such as reading meters, issuing accounts and handling customer complaints.

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

### Sources of water supply

The ACT draws most of its water supply from two separate catchment systems, the Cotter River catchment in the west and the Googong Dam on the Queanbeyan River. The majority of the water supply is drawn from the Cotter system. Googong supplies about 20% of demand, but that proportion has changed in recent years with the development of the Cotter–Googong Bulk Water Transfer project.

Under its licence conditions, ACTEW Corporation is required to release water from the Cotter and Googong catchments for environmental purposes. The volume of water released as an environmental flow is in accordance with the Environmental Flow Guidelines approved by the minister responsible for water resources.<sup>5</sup>

Table 2.11 sets out the relative contributions of surface water and recycled water to total water supplies over the period for 2009–10 and 2010–11. It shows there has been a decrease in the amount of surface water since 2009–10 of 4,370ML with only a slight increase in recycling water of 56ML. Overall, there has been a decrease in water supplied to the Territory of 4,314ML (or 8.7%) since 2009–10. The use of recycled water currently represents 9.5% of the total water supplied to the Territory.

<sup>5</sup> The guidelines are accessible at [www.legislation.act.gov.au/di/2006-13/default.asp](http://www.legislation.act.gov.au/di/2006-13/default.asp).

**Table 2.11 Sources and volumes of water supply (ML), ACT, 2009-10 and 2010-11**

Sources of water	2009-10	2010-11	Change (number)
Surface water	45,315	40,945	-4,370
Recycling	4,249	4,305	56
<b>Total supply</b>	<b>49,564</b>	<b>45,250</b>	<b>-4,314</b>

Source: Water Services Association of Australia, *National performance report 2010-2011: urban water utilities*, National Water Commission, Canberra, April 2012.

### Uses of water supplied

Table 2.11 and Table 2.12 show that ACTEW Corporation delivered 45,250 ML of water to 153,916 ACT properties in 2010-11. Residential properties accounted for around 92% of all properties supplied by ACTEW Corporation.

**Table 2.12 Customer numbers and properties serviced, water services, 2009-10 and 2010-11**

Item	2009-10	2010-11	Change (number)
Number of customers at 30 June	142,577	154,210	11,633
Residential	135,781	142,470	6,689
Non-residential	6,796	11,740	4,944
Number of properties receiving water services at 30 June	145,313	153,916	8,603
Residential	138,573	145,748	7,175
Non-residential	6,740	8,104	1,364
Number of new properties connected to network	3,124	3,702	578

Source: ACTEW Corporation's 2010-11 annual report to ICRC.

### Sewerage services

Sewage is collected by ACTEW Corporation through the sewerage network and treated at the Lower Molonglo Water Quality Control Centre. Table 2.13 lists key statistics on sewerage services for 2009-10 and 2010-11. In 2010-11, ACTEW Corporation operated 3,134 km of sewerage mains and treated an increased volume of 32,382 ML of sewage. The average volume of sewage collected per person increased to 216 kL.

**Table 2.13 Sewerage service statistics, ACTEW Corporation, 2009–10 and 2010–11**

Item	2009-10	2010-11	Change (number)
Number of customers	142,577	150,065	7,488
Quantity of sewage treated (ML)	26,769	32,382	5,613
Sewage treated per customer (kL)	188	216	28
Length of mains (km)	3,094	3,134	40

Source: Water Services Association of Australia, *National performance report 2010–2011*



## 3 Utility compliance

*This chapter documents licensed utilities' compliance with the Utilities Act, utility licences, industry codes and minimum service standards set out in schedules to the Consumer Protection Code during 2010–11. It reports on compliance issues from previous Commission reports as well as those during 2010–11.*

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

*Having considered the reports submitted and the advice of other regulators, the Commission is of the view that utility licensees demonstrated compliance with the requirements of the Utilities Act, licence conditions and industry codes. The ACT Civil and Administrative Tribunal (ACAT) in its report to the Commission noted some issues and noted that these issues were assessed as non-material. These issues are described in section 3.4.*

### 3.1 Statutory compliance framework

#### 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 Commission, an annual report for each financial year in relation to its compliance with the conditions of the licence.

#### 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 one 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**

The reports the Commission required all utilities to complete as part of the annual reporting requirements sought:

- 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); and
- 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, such as 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 guidance note issued in March 2009, *Utility reporting of material breaches and non-compliance*,<sup>6</sup> sets out the Commission's position on what constitutes utility compliance under the terms of clauses 7.2 and 7.3 and provides a fuller account of materiality.

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<sup>6</sup> Available on the Commission's website ([www.icrc.act.gov.au](http://www.icrc.act.gov.au)).

As in 2009–10, licensees did not report any material breaches of their regulatory requirements in 2010–11.

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

### **3.4 Assessment of licensee compliance by other ACT regulators**

As part of its assessment of licensee compliance, the Commission sought the advice of the Office of Regulatory Services, ACAT,<sup>7</sup> ACT Health, and the Environment Protection Authority.

#### **Office of Regulatory Services**

The Office of Regulatory Services (ORS) within the Justice and Community Safety Directorate reported that it did not receive any complaints about the market activities of utilities or their agents during 2010–11.

#### **ACT Civil and Administrative Tribunal (ACAT)**

ACAT reported that there were no industry-wide compliance or feed-in tariff scheme issues to note for the year. However, it did make a number of comments in regard to compliance by some utilities.

#### **ActewAGL Retail – gas**

ACAT reported that in the 2009–10 Compliance and Performance report, the Tribunal had noted concerns with response times from AGL Customer Advocacy. However, the Tribunal reported that during 2010–11 response times from AGL had improved.

#### **ActewAGL Retail – electricity**

In May 2011 the Tribunal raised concerns that ActewAGL Retail's (ActewAGL water) response times on complaint applications were too slow. The issue was further raised in the Tribunal's Annual Report where it noted the delays in responses received from the company. As previously reported by ACAT, the lack of a time-based financial penalty for the utilities, similar to those financial penalties that operate in other jurisdictions, may negatively affect response times to the ACAT.

#### **TRUenergy (formerly EnergyAustralia) – electricity and gas**

ACAT did not report any adverse compliance issues in 2010–11. ACAT reported that it continued to be impressed by the high standard of TRUenergy's (formerly

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<sup>7</sup> 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).

EnergyAustralia) non-hardship complaint handling processes. In the reporting period the company responded to all complaint applications within 14 days. The Tribunal also noted the utilities constructive approach to energy hardship issues.

### **TRUenergy – electricity and gas**

In April 2011, TRUenergy reported to ACAT there were problems with incorrect tariff and billing issues on a large number of accounts throughout Australia. This included at least 964 customers in the ACT. The company wrote to all affected customers and advised ACAT that they would not be seeking to recover any undercharges.

### **ACT Health**

ACT Health advised that it recorded no complaints in 2010–11 about the operation of licensed utilities to the Health Directorate.

### **Environment Protection Authority**

Routine reports about sewer overflows are generally not recorded unless there are significant environmental or health implications.

The Environment and Protection Authority (EPA) reported two incidents during 2010–11. Both incidents involved the discharge of sewer into a waterway.

ActewAGL, the relevant utility for the first incident notified the EPA of an overflow from a sewer treatment plant which resulted in the discharge of untreated effluent into a waterway within the ACT. No action was taken by the EPA in relation to this matter.

Queanbeyan City Council also notified the EPA of a system failure involving the wall of a maturation pond failing and effluent being discharged into a waterway within the ACT. The incident was referred to the Commissioner for Sustainability and the Environment as part of a larger investigation into the state of water courses and catchments for Lake Burley Griffin, and findings arising out of the report are due in 2012.<sup>8</sup>

Utilities holding Environmental Authorisations under the *Environment Protection Act 1997* have generally complied, to the satisfaction of the EPA, with the conditions of their authorisation.

### **TRUenergy customer billing 2010–11**

During the 2010–11 compliance year, TRUenergy reported to the Commission on issues in the media associated with the billing of TRUenergy's customers. The company reported that in responding to those media enquiries it had come to the company's attention that a large number of customers were being billed incorrect amounts or in a small number of cases not being billed at all.

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<sup>8</sup> Office of the Commissioner for Sustainability and the Environment, *Annual Report 2010-11*, September 2011.

The company reported that up to 100,000 customers were affected of which the majority are in Victoria, with about 5% to 10% of TRUenergy's 3,500 customers in ACT being affected. Customers acquired under the EnergyAustralia brand were not affected by this problem.

The company reported it was still in the process of assessing the root causes of why these customers have either not received their bill or have been billed incorrectly. All affected customers were contacted by mail to explain their situation and no customer will be required to pay anything other than the correct amount. In the case of the small proportion of customers with larger arrears, arrangements will be made to give them time to manage their repayments.

The company reported that it would be writing to affected customers with additional information.

### **3.5 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 the work of the utility.

To gain an appreciation of issues that may indicate a utility's compliance with these 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, taking into consideration ACT's Consumer Protection Code's minimum service standards.

### **3.6 Ring fencing guidelines and compliance**

The Commission's ring fencing guidelines<sup>9</sup> are binding on ActewAGL Distribution under its current 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 (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 2010–11. The measures included:

- the implementation of appropriate procedures and policies
- staff training

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<sup>9</sup> ICRC, *Ring fencing guidelines for gas and electricity network service operators in the ACT*, November 2002.

- 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 a range of financial indicators for both aggregated electricity and gas retailers. Some financial details are also provided for the ACT's supplier of water and wastewater services (ACTEW Corporation).*

### 4.1 Electricity retailers: revenue levels and customer charges

Table 4.1 provides information about aggregated revenue levels and customer charges for 2009–10 and 2010–11. In 2010–11 total revenue rose by 4.0% to \$432.6 million, and the average charge to residential customers and non-residential customers rose by 3.6% and 0.1%, respectively. The average charge per unit of power supplied to all customers rose by 5.1% during the year, reflecting an increase for the residential sector of 8.4% and an increase for the non-residential sector of 2.7%.

**Table 4.1 Revenue levels and customer charges, electricity supply, ACT, 2009–10 and 2010–11**

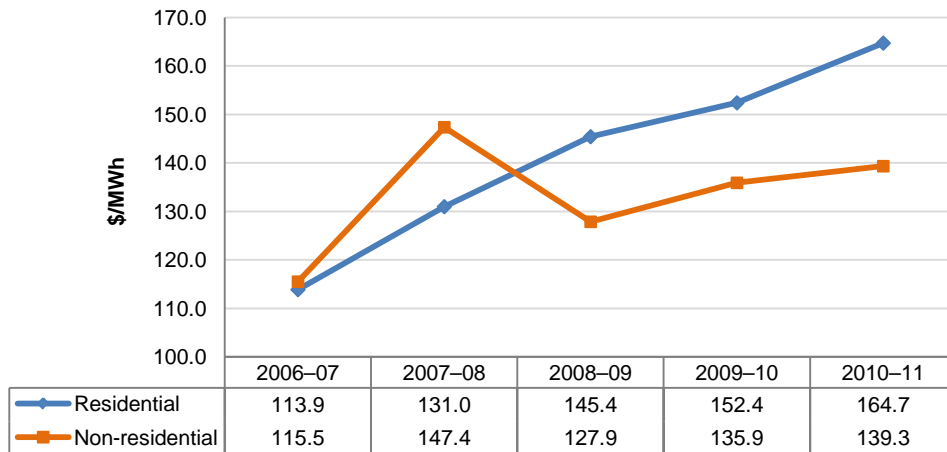
Indicator	2009–10	2010–11	Change (%) <sup>a</sup>
<b>Revenue (\$m, nominal)</b>			
Residential	182.0	197.1	8.3
Non-residential	233.9	242.4	3.6
<b>Total revenue</b>	<b>415.8</b>	<b>439.6</b>	<b>5.7</b>
<b>Average charge per customer (\$/customer, nominal)</b>			
Residential	1,270.9	1,303.1	2.5
Non-residential	16,515.7	16,678.4	1.0
<b>Average charge all customers</b>	<b>2,642.9</b>	<b>2,650.8</b>	<b>0.3</b>
<b>Average charge per unit (\$/MWh)</b>			
Residential	152.4	164.7	8.1
Non-residential	135.9	139.3	2.5
<b>Average charge per unit all customers</b>	<b>142.7</b>	<b>149.7</b>	<b>4.9</b>

a Change from 2009–10 to 2010–11.

Source: Licensed electricity utilities' annual reports to ICRC.

Average costs trends for residential and non-residential customers from 2006–06 to 2010–11 are shown in Figure 4.1.

**Figure 4.1 Average electricity charges for residential and non-residential customers (\$/MWh), electricity retailers, 2006–07 to 2010–11**



Source: Licensed electricity utilities' annual reports to ICRC.

Table 4.2 lists revenues from various customer categories during 2010–11.

Some key features from this table are:

- of the total \$439.6 million in revenue raised by electricity suppliers during the year, non-residential customers accounted for \$242.4 million, or 55%
- of the total \$439.6 million, small size customers accounted for \$260.1 million (59%), medium sized customers \$147.6 million (34%) and large customers the remaining \$31.9 million (7%).



**Table 4.2 Customer revenues by category, electricity supply, ACT, 2010–11 (\$m)**

Contract type	Small customers <sup>a</sup> (\$m)	Medium customers <sup>b</sup> (\$m)	Large customers <sup>c</sup> (\$m)	Total (\$m)
<b>Standard</b>				
Residential	161.0	0.0	0.0	161.0
Non-residential	55.2	0.0	0.0	55.2
<b>Subtotal</b>	<b>216.2</b>	<b>0.0</b>	<b>0.0</b>	<b>216.2</b>
<b>Negotiated</b>				
Residential	36.1	0.0	0.0	36.1
Non-residential	7.7	147.6	31.9	187.2
<b>Subtotal</b>	<b>43.9</b>	<b>147.6</b>	<b>31.9</b>	<b>223.4</b>
<b>Standard and negotiated</b>				
Residential	197.1	0.0	0.0	197.1
Non-residential	62.9	147.6	31.9	242.4
<b>Total</b>	<b>260.1</b>	<b>147.6</b>	<b>31.9</b>	<b>439.6</b>

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.

## 4.2 Gas retailers: revenue levels and customer charges

During 2010–11, five of the nine licensed gas retailers supplied gas in the ACT. Table 4.3 provides details on revenue and average charges for residential and non-residential gas customers for 2009–10 and 2010–11. The total revenue of ACT gas suppliers in 2010–11 increased by 12.4% to \$144.2 million. The average charge to residential customers rose by 2.6% to \$1,050 while charges for non-residential customers fell by 4.4% to \$16,601.

**Table 4.3 Revenue levels and customer charges, gas supply, ACT, 2009–10 and 2010–11**

Contract category	2009-10	2010-11	Change (%) <sup>a</sup>
<b>Revenue (\$m, nominal)</b>			
Residential	97.5	108.2	11.0
Non-residential	30.9	36.0	16.5
<b>Total revenue</b>	<b>128.3</b>	<b>144.2</b>	<b>12.4</b>
<b>Average charge per customer (\$/customer)</b>			
Residential	1,024	1,050	2.6
Non-residential	17,369	16,601	-4.4
<b>Average total charge all customers</b>	<b>1,323</b>	<b>1,371</b>	<b>3.6</b>
<b>Average charge per unit (\$/GJ)</b>			
Residential	21.6	22.3	3.2
Non-residential	12.0	12.9	7.6
<b>Average unit charge all customers</b>	<b>18.1</b>	<b>18.9</b>	<b>4.2</b>

a Change from 2009–10 to 2010–11

Source: Licensed gas utilities' annual reports to ICRC

Table 4.4 shows the level of prices being charged by ActewAGL Retail for gas from 1 July 2010.

**Table 4.4 Residential and non-residential gas prices, ActewAGL, ACT, from 1 July 2009**

Category	Units	Price level from 1 July 2009 <sup>a</sup>	Price level from 1 July 2010 <sup>a</sup>	Price level from 1 July 2011 <sup>a</sup>
<b>Residential<sup>b</sup></b>				
Supply fee	cents/day	56.859	57.893	60.313
Usage fee	cents/MJ	1.9866	2.0614	2.2308
<b>Industrial and commercial</b>				
Supply fee	cents/day	113.058	113.058	113.058
Usage rate	cents/MJ			
First 1,643.8356 MJ/day		1.9096	1.9822	2.0009
Thereafter		1.6863	1.7171	1.9536

a Prices are inclusive of GST.

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

Source: ActewAGL website.

### 4.3 Water and wastewater services

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

The Commission is responsible for determining the tariffs that ACTEW Corporation applies to provide water and wastewater services in the ACT. To determine those

charges, the Commission undertakes a comprehensive inquiry into ACTEW Corporation's water and wastewater business towards the end of each current determination period. 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.

## Water supply

Table 4.5 shows some key indicators of ACTEW Corporation's water supply for 2009–10 and 2010–11. Some of the key features over the two year period:

- there has been an increase in the number of connected properties in 2010–11, which contrasts with a decrease in urban water supplied and water services revenue.
- the typical residential bill has decreased in 2010–11 by 9%, indicating reduced water consumption by ACT residents.
- capital expenditure on water services has increased by 34%, reflecting ACTEW's investments in water security projects.

**Table 4.5 Revenue and capital expenditure, water services, ACTEW Corporation, 2009–10 and 2010–11**

Indicator	2009-10	2010-11	Change (number)
Number of connected properties ('000) <sup>a</sup>	146	150	4
Total urban water supplied (ML)	41,572	37,371	-4,201
Total revenue—water (\$'000) <sup>b,c</sup>	102,085	92,431	-9,654
Typical residential bill (\$/customer) <sup>c</sup>	492	446	-46
Capital expenditure (\$'000 nominal) <sup>c</sup>	159,398	213,410	54,012

a Residential and non-residential.

b Does not include ACT government water abstraction charge or utilities network facilities tax.

c Historical data updated to match Water Services Association Australia, National performance report 2010–11.

Note: Figures may vary from earlier data supplied by ACTEW Corporation due to different definitions used.

Source: Water Services Association Australia, National performance report 2010–2011: urban water utilities.

## Sewerage services

Table 4.6 shows that in 2010–11 ACTEW Corporation's sewerage services revenue increased by almost 5%, with the average revenue received per property increasing by a similar proportion. There was an increase in the number of connected properties, which is consistent with the increase in connected properties for water services.

**Table 4.6 Property numbers, revenue and capital expenditure, sewerage services, ACTEW Corporation, 2009–10 and 2010–11**

Indicator	2009–10	2010–11	Change (number)
Number of connected properties ('000)	145	149	4
Total revenue (\$'000) <sup>a,c</sup>	105,258	113,821	5,300
Average revenue per property <sup>b</sup>	726	764	38
Capital expenditure (\$'000, nominal)	22,574	21,419	-1,855

a Nominal. Levels quoted may vary from earlier data supplied by ACTEW due to different definitions used.

b Does not include ACT government utilities network facilities tax.

c Historical data updated to match Water Services Association Australia, National performance report 2010–11.

Source: Water Services Association Australia, National Performance Report 2010–2011: urban water utilities.

### Residential tariff structure—water and sewerage

The residential tariff structure for water and sewerage since 1 July 2009 is shown in Table 4.7.

**Table 4.7 ACT residential tariff structure for water and sewerage, from 1 July, 2009 to 2011**

Tariff item	Description	Amount (\$), from 1 July 2009	Amount (\$), from 1 July 2010	Amount (\$), from 1 July 2011
Fixed charge—water (\$/property)		85.00	92.08	95.63
User charge—water: first step (\$/kL)	Up to 548 litres per day	1.85	2.00	2.33
User charge—water: second step (\$/kL)	Above 548 litres	3.70	4.01	4.66
Fixed charge—sewerage (\$/property)		443.82	516.11	555.39

Source: ActewAGL website: [www.actewagl.com.au](http://www.actewagl.com.au).

## 5 Technical regulation—network reliability, serviceability and maintenance

*This chapter details matters relevant to network reliability and serviceability and, in particular, compliance and monitoring reporting by utilities.*

### 5.1 ACT technical regulation framework

Part 5 of the Utilities Act provides for technical regulation of ACT utility services. In the compliance period covered by this report, Part 5 was administered by the ACT Planning and Land Authority (ACTPLA). Since 1 July 2011 the functions have been incorporated in the Environment and Sustainability Development Directorate.

The functions of the Chief Planning Executive in relation to technical regulation are set out in section 66 of the Utilities Act. The functions include monitoring and enforcing utilities' compliance with technical codes made under the Utilities Act, advising the Commission and the responsible 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 2010–11. 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 ACTPLA has instituted in recent years.

### 5.2 Objectives of technical regulation

The Utilities Act does not specify explicit objectives for technical regulation, but cites the following as being fit purposes for technical codes:

- protecting the integrity of a utility network;
- protecting health and safety of workers and others;
- ensuring proper connection of premises to a network;
- ensuring appropriate design and performance features to protect public and private property, and the environment;
- ensuring appropriate design and performance features in equipment used to connect a premises to a network;

- ensuring appropriate emergency planning by a utility; and
- accrediting persons for work associated with the connection of premises to a network.

### **5.3 Utility compliance monitoring and reporting**

#### **Electricity distribution audits**

During 2010, the ACTPLA commissioned an audit into ActewAGL's management of reinstated timber poles (or 'nailed poles'). It was intended to inspect 1,631 sites but only 1,400 sites were available due to data inaccuracies. The audit identified:

- maintenance was required in 182 items, including five major defects;
- four reinstated poles were condemned;
- 14 conditionally serviceable poles were reassessed and downgraded to temporarily serviceable;
- a number of potentially serious maintenance issues were noted and reported to ActewAGL; and
- 103 poles had a degree of leaning, with four considered to be leaning excessively. Again, these were reported to ActewAGL.

The auditor made eight recommendations, six of which were accepted by ActewAGL in their entirety and two conditionally.

#### **Gas distribution audits**

In 2010–11, an audit was commissioned on the gas network operators' systems. The audits focussed on ActewAGL's network infrastructure targeting gas meter set enclosures.

##### ***Meter set enclosure audit***

The audit was designed to measure compliance with the safety requirements relating to high and medium pressure gas meter sets placed within buildings.

Evaluating risk levels of high pressure gas meters set enclosures using AS4360—Risk Management indicates the risk to the community for these meter sets is extreme where maintenance safety regimes are not adhered to.

The following findings and actions resulted from the 712 meter set enclosures audited:

- 130 of the 712 (18%) building managers or building owners were notified of corrective actions required to their meter set enclosures
- 120 of the 130 sites (92%) requiring corrective actions or modifications were completed – this is an improvement of 31 sites compared with 2009-10

- 10 of the 130 sites (8%) requiring corrective actions or modifications were outstanding – this is an improvement of 41 sites compared with 2009-10.

### ***Primary pipeline audit***

The auditor visited representative segments of the primary pipeline route to assess location specific threats and signage adequacy.

The auditor based the assessment on general industry knowledge and relevant clauses from:

- AS2885.1–2007, Australian Standard Pipelines—Gas and Liquid Petroleum Part 1: Design and construction; and
- AS2885.3–2001, Australian Standard Pipelines—Gas and Liquid Petroleum Part 3: Operation and maintenance.

In relation to the High Pressure Primary gas pipeline, the audit determined the following:

- A large portion of the high pressure primary gas pipeline passes through land that has a primary location classification of Residential T1. T1 applies to land that is developed for community living and applies where multiple dwellings exist in proximity to each other.
- The signage sighted is not fully compliant with AS2885 parts 1 and 3 in the following areas:
  - distance between signs;
  - signs not always located at changes of direction; and
  - sign not always present on both sides of public road crossings.
- There are a number of T1 (residential) locations along the pipeline route where the signage adequacy may not be sufficient enough to be counted as an external interference protection procedural control.
- There was one location identified where there was vegetation growth, which in time could lead to coating damage over the pipeline.
- There were three locations identified where the pipeline was in close proximity to electrical power poles. Future pole replacement could pose a threat to the pipeline.

In relation to the Hoskingstown to Fyshwick pipeline, the audit determined the following:

- The placement of signage was generally compliant with AS2885 parts 1 and 3, with the exception of a sign missing at the entrance to the concrete recycling plant.
- Several of the signs sighted were heavily faded.

The following was recommended by the auditor:

- Each of the signage deficiency examples identified in the audit be individually investigated and rectified as appropriate.

- Additional signage be installed at the entrance area of the Concrete Recycling Plant.
- The vegetation over the pipeline in Horse Park Drive be investigated and if appropriate be removed.
- If there is not already a similar arrangement in place, consideration be given to:
  - identifying all power poles which could be a threat to the pipeline;
  - installing small danger signs on each of the power poles identified in the auditor's report; and
  - recording the pole identification details and forwarding to the power company with a request that the poles be appropriately flagged within the company's asset management system as a pole with a high pressure gas pipeline nearby.

#### ***Transmission pipeline audit***

No audit or significant operations were investigated relating to APT's transmission pipeline (Dalton to Canberra) during this reporting period.

## **5.4 Technical codes**

Details of licence holders during 2010–11 and the technical codes associated are shown in Table 5.1.



**Table 5.1 Licence holders and applicable technical codes**

Service sector	Applicable technical code	Licence holder <sup>a</sup>
Electricity distributors	Emergency Planning Code	ACTEW Distribution Ltd
	Contestable Work Accreditation Code	ACN 073 025 224 and
	Electricity Service and Installation Rules Code	Jemena Networks (ACT) Pty Ltd
	Franchise Customer Electricity Metering Code	ACN 008 552 663 trading as
	Management of Electricity Network Assets Code	'ActewAGL Distribution'
	Electricity Distribution (Supply Standards) Code	
Gas transmission	Gas Safety and Operating Plan Code	East Australian Pipeline Limited ACN 064 629 009
	Emergency Planning Code	(now APA Group)
Gas distribution and connection	Gas Safety and Operating Plan Code	ACTEW Distribution Ltd
	Gas General Metering Code	ACN 073 025 224 and
	Emergency Planning Code	Jemena Networks (ACT) Pty Ltd ACN 008 552 663 trading as 'ActewAGL Distribution'
Gas supply	Gas General Metering Code	ACTEW Retail Ltd ACN 074 371 207 and AGL ACT Retail Investments Pty Ltd ACN 093 631 586 trading as 'ActewAGL Retail'
Water services and sewerage services	Water Supply and Sewerage Service Standards Code	ACTEW Corporation Ltd ACN 069 381 960
	Water and Sewerage Network (Design and Maintenance) Code	
	Water and Sewerage Service and Installation Code	
	Water Metering Code	
	Dam Safety Code	
	Emergency Planning Code	
	Contestable Work Accreditation Code	

a Includes only the licence holders whose annual reports were provided to ACT Planning and Land Authority.

## Emergency Planning Code

The purpose of the Emergency Planning Code is to ensure that utilities have in place appropriate procedures, structures and arrangements for preventing, anticipating and responding to emergency events. A utility must develop and periodically review emergency plans, must report to the Chief Executive of ACTPLA on compliance with the code and must develop cooperative arrangements with other utilities and directorates within the ACT Government (Emergency Management Authority).

During the previous reporting year, 2009–10, the Emergency Planning Code was reviewed in conjunction with ActewAGL. Outcomes resulting from the review included:

- the code has been reworded so that emergency planning requirements for gas networks are now in line with those for water and electricity.
- emergency planning in gas is currently covered by the Gas Safety and Operating Plan Code. However, the current gas emergency planning requirements are considered to be very general and may not be adequate.

- the code has been expanded to specify the matters that must be considered in the annual audit of emergency procedures—these include relevance, effectiveness (as demonstrated in an emergency or in annual testing exercises) and compliance.
- the code now includes a clear set of objectives for emergency plans.
- a definition of an emergency event is now provided.
- the dictionary has been updated to ensure definitions are consistent with relevant legislation and technical codes.

The Emergency Planning Code was notified in legislation on 12 July 2010<sup>10</sup> with an amended code legislated on 11 October 2011<sup>11</sup>.

### **Electricity Service and Installation Rules Code**

The purpose of the Electricity Service and Installation Rules Code is to ensure that electricity distributors 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.

Following ACTPLA representations, ActewAGL advised amended service and installation rules to remove the requirement to maintaining notional supply standards to 95% of customers.

#### *Embedded generation*

ActewAGL reported a total of 6,057 photovoltaic installations connected to its network at the end of the reporting period. In addition, there were twelve medium stand alone generators with a capacity of 5,393kVA also connected to the network.

ACTPLA was concerned with the possible safety to personnel working on the ActewAGL network if inverters associated with photovoltaic installations did not function correctly.

In ActewAGL's Electricity Service and Installation Rules – Appendix A11, paragraph 8.2 ('Re-verification Testing'), ActewAGL calls for inverter protection system tests to be undertaken at least every five years. ActewAGL did not meet this requirement as 14 inverters were over five years old and had never been tested.

ACTPLA required assurance that the inverters were still functioning correctly and would disconnect from the network when electricity supply is lost, as per their design. A sample of 127 inverters, four years and older were tested. All tested inverters disconnected from the electricity network in < 2 seconds when supply was lost. A number of installation faults were found which have been passed to the Registrar for Electrical Safety for follow-up with the installers.

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<sup>10</sup> Utilities (Emergency Planning Code) Determination 2010, DI2010–170

<sup>11</sup> Utilities (Emergency Planning Code) Determination 2011, DI2011–274

It is understood that ActewAGL will now be seeking to apply its Service and Installation Rule requirement.

## **Electricity Distribution Supply Standards Code**

### ***Voltage Regulation LV network***

ActewAGL is statutorily obliged to supply voltage that is in accordance with AS2926 or AS 60038, two standards used by the electricity industry in Australia that relate to voltage quality. AS2926 states that voltage must be  $\pm 6\%$  of 240 V (225.6 V to 254.4 V). AS60038 states that the voltage must be  $+10\%$  to  $-6\%$  of 230 V (216.2 V to 253 V). There are no constraints on time or customers, but ActewAGL uses a figure of 95% of the time under test, which is considered to be reasonable.

ActewAGL proactively monitors voltage levels from within distribution substations, capturing instances of voltages above the standard limits. It was noted however that no proactive surveys to identify instances of low voltage at residential consumers' terminals were undertaken.

ActewAGL reported four consumer complaints of low voltage, however, previous audits by ACTPLA found a higher occurrence of voltages below standard. To reconcile these differences, it would be useful for ActewAGL to extend its survey to include residential consumer terminals at the end of networks where low voltages could be expected.

ActewAGL reported that no 'smart meters' were installed during 2010–11.

## **Management of Electricity Networks Asset Code**

ActewAGL responded to questions from the Technical Regulator employee safety, training programs, maintenance, serious electrical accidents and bushfire mitigation. ActewAGL reported the following:

### ***Risk management***

A request was made to ActewAGL to provide a register of risks associated with their electrical network. This was not provided during 2010–11.

### ***Quality assurance***

ActewAGL commissioned an audit by private consultants titled 'The Surveillance Audit Report into Electricity Network Division's Quality, Safety and Environmental Management Systems'. The report indicated that four out of seven audited areas had regressed since the last audit. Two areas, 'Continual Improvement' and 'Legal and Regulatory Requirements' were treated as not conforming to standard.

### ***Training***

All employees in each category were stated to have received appropriate training. An audit into the training of all trades was carried out by ACTPLA in January 2012.

### ***Accidents***

ActewAGL reported no accidents resulting in death or injury for the reporting period.

### ***Maintenance of electrical equipment***

Vegetation inspections scheduled for 14 suburbs were not undertaken as programmed. ActewAGL reported that all other maintenance was on schedule.

### ***Bushfire mitigation***

ActewAGL reported it complied with its bushfire mitigation program, having inspected and maintained all its power lines within the designated bushfire zones before the start of the bushfire season. ACTPLA intends to conduct an audit into ActewAGL's compliance with its bushfire manual in the next financial year.

Of particular concern to ACTPLA is the number of 'private' power poles on the rural network. Although ActewAGL continues to inspect these poles on an annual basis, the responsibility for repairs and maintenance remains with the rural leaseholder. ACTPLA is concerned that rural leaseholder may not have the expertise, competency, resources, or will to carry out these repairs. This presents a notable risk of bushfire caused by private rural power lines.

## **Gas General Metering Code**

### ***Metering equipment installation procedures***

A copy of a current document satisfying the requirement for compliant documents or procedures was provided to ACTPLA for review purposes. During this reporting period, Jemena 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 gas meters.

A draft 'Service and Installation Rules code' has been prepared by ACTPLA and will be distributed for consultation during 2011–12. ActewAGL also drafted an 'ActewAGL Service & Installation Rules' document that will be reviewed against the proposed code and other existing codes.

### ***Metering equipment maintenance plans***

ACTPLA received a request from ActewAGL's supplier of gas meters, seeking approval for retrofitting of polycarbonate meter seals to gas meters of a particular type, namely Landis & Gyr models 750 and 1010, issued into service prior to July 2007. This was approved by ACTPLA, with ActewAGL expecting to complete the programme of work by December 2011.

### ***Metering equipment and testing***

The Gas General Metering Code contains provisions for approvals by the Chief Executive of metering and metering procedures. Section 12.2 states 'a Gas Distributor is to submit Meter Testing Procedures to the Chief Executive for approval'. Meter

testing procedures are procedures to test the accuracy of meters. The gas distributor must have procedures for the installation of metering equipment that should include life cycle requirements.

ACTPLA requires the gas distributor to lodge application for approval each time that the gas distributor proposes to extend the life cycle of any batch of gas meters.

Although ActewAGL has reported having applied for extending the in-service life of meters greater than 15 years, it is noted that the ACTPLA did not receive an application for the extension this reporting period.

**Table 5.2 Overview of gas audit and testing, ActewAGL Distribution, 2010–11**

Category	2010–11
<b>Total meters</b>	<b>114,990</b>
Meters audited	
Total meters audited	522
Number of audits/inspections identifying installation non-compliance	0
Number of non-compliant in-service metering installations	0
Meters tested	
Initiated by customer request	32
Initiated by utility	100
Number of meters that failed testing	
Initiated by customer request	4
Initiated by utility	12
Number of meters under 15 years of in-service life	63,146
Number of meters greater than 15 years of in-service life	51,844
Number of meters exchanged <sup>a</sup>	1,579

a ACTPLA to investigate why an application was not received

Source: ActewAGL Distribution's annual reports to ICRC; ACTPLA technical regulation report to ICRC.

## Gas Safety and Operating Code

During this reporting period, the ACTPLA received the Safety and Operating Plan (SAOP) 2011 submitted by ActewAGL.

ACTPLA reviewed the SAOP in conjunction with the ACT Emergency Services Agency. Due to the late receipt of ActewAGL's Emergency Management Plan—an integral component of the SAOP ACTPLA and ACT Emergency Services Agency did not finalise the SAOP approval within the reporting period.

### *Gas regulator and meter replacements*

**Table 5.3 Gas regulator and meter replacements, ActewAGL Distribution, 2009–10 and 2010–11**

Category	2009–10	2010–11	Change (number)
Regulators replaced	534	502	-32
Meters replaced	132	119	-13

Source: ActewAGL Distribution's annual reports to ICRC.

### **Planned and unplanned interruptions to electricity supply**

Planned and unplanned interruptions to electricity supply for 2009–10 and 2010–11 are shown in Table 5.4 and Table 5.5 respectively.

**Table 5.4 Planned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Index	2009–10	2010–11	Change (%)
<b>SAIDI (average minutes per customer per year without power)</b>			
Urban	51.5	53.4	3.7
Rural	45.3	56.7	25.2
<b>Network total</b>	<b>51.3</b>	<b>54.3</b>	<b>5.8</b>
<b>SAIFI (average number of interruptions per customer per year)</b>			
Urban	0.24	0.24	0.0
Rural	0.2	0.24	20.0
<b>Network total</b>	<b>0.24</b>	<b>0.24</b>	<b>0.0</b>
<b>CAIDI (average duration in minutes per interruption)</b>			
Urban	215.6	222.2	3.1
Rural	229.7	241.6	5.2
<b>Network total</b>	<b>216.1</b>	<b>222.9</b>	<b>3.1</b>

SAIDI = system average interruption duration index; SAIFI = system average interruption frequency index; CAIDI = customer average interruption duration index.

Source: ActewAGL Distribution's annual reports to ICRC.

**Table 5.5** **Unplanned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Index	2009–10	2010–11	Change (%)
<b>SAIDI (average minutes per customer per year without power)</b>			
Urban	29.7	45.5	53.2
Rural	26.1	92.5	254.4
<b>Network total</b>	<b>29.6</b>	<b>47.7</b>	<b>61.1</b>
<b>SAIFI (average number of interruptions per customer per year)</b>			
Urban	0.66	0.78	18.18
Rural	0.78	0.83	6.41
<b>Network total</b>	<b>0.67</b>	<b>0.80</b>	<b>19.4</b>
<b>CAIDI (average duration in minutes per interruption)</b>			
Urban	45.0	58.3	29.6
Rural	33.4	111.1	232.6
<b>Network total</b>	<b>44.5</b>	<b>60.0</b>	<b>34.8</b>

SAIDI = system average interruption duration index; SAIFI = system average interruption frequency index; CAIDI = customer average interruption duration index.

Source: ActewAGL Distribution's annual reports to ICRC.

### Planned and unplanned interruptions to gas distribution

Table 5.6 shows the levels of planned and unplanned interruptions for gas distribution for 2009–10 and 2010–11. There was a significant increase in planned interruptions to services, with 1,860 in 2010–11 compared with 349 in 2009–10. The number of unplanned interruptions remained steady at 87 in 2009–10 and 86 in 2010–11, however the customer hours lost for interruptions affecting five or more customers increased by almost 113%.

**Table 5.6** **Planned and unplanned interruptions, gas distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Interruption item	2009–10	2010–11
<b>Planned interruptions to services</b>	<b>349</b>	<b>1,860</b>
Instances where licensee did not provide at least 2 days' notice of the planned interruption to each of the premises affected	1	0
Instances where supply was not restored within 12 hours of the initial interruption	0	1
<b>Unplanned interruptions to services</b>	<b>87</b>	<b>86</b>
Instances where supply was not restored within 12 hours of the initial interruption	0	0
Total instances of lost supply affecting 5 or more customers	2	3
Total customer hours lost for interruptions affecting 5 or more customers	235	500
<b>Burst or leaking pipes that affected public health, or were causing, or likely to cause, substantial damage or harm to people or property</b>	<b>258</b>	<b>273</b>

Source: ActewAGL Distribution's annual reports to ICRC.

## Mechanical damage and gas leaks

Table 5.7 shows the extent of gas leaks in the ACT's gas distribution system for 2009–10 and 2010–11. Between the two periods, there has been a decrease in the number of leaks, although mechanical damage incidents to mains and services increased by approximately 10%. The number of times gas specification reached the maximum or minimum limits almost doubled from eleven in 2009–10 to 20 in 2010–11.

**Table 5.7** Reported leaks, gas distribution, ActewAGL Distribution, 2009–10 and 2010–11

Indicator	2009–10	2010–11	Change (%)
Pipeline length (km)	3,998	4,064	1.6
Reported leaks	1,247	1,210	-3.0
Leaks per 1,000 customers	11.9	11.5	-3.3
Leaks per 1,000 km of pipe	312	298	-4.6
Mechanical damage incidents to mains and services	234	258	10.3
Number of times gas specification reached the maximum or minimum limits	11	20	81.8

Source: ActewAGL Distribution's annual reports to ICRC.

## 5.5 Gas transmission

East Australian Pipeline Limited (EAPL) holds the utility licence for the gas 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.

An audit of the transmission pipelines took place from June 2009 to August 2010, and investigated whether there were any specific threats and assessed signage adequacy. The field audit found the pipeline, easement and above-ground assets to be consistent with a 'well-maintained pipeline'. The final report from the auditor did not identify any areas of significant concern.

## 5.6 Water and wastewater network serviceability, indicators and standards

### Water supply

The two principal types of key performance indicators (KPIs) used in the water industry to measure water main breaks that cause interruptions to supply, both of which are benchmarked by the Water Services Association of Australia (WSAA) are:

- main breaks per 100 km of main—directly reflecting network condition and preventive maintenance, but only indirectly related to customer service level; and



- interruptions per 1,000 properties—directly reflecting current customer service levels, but only indirectly related to mains condition and upkeep.

Table 5.8 details the number of water main breaks and average frequency of unplanned interruptions in 2009–10 and 2010–11.

**Table 5.8 Principal water service industry KPIs, 2009–10 and 2010–11**

Indicator	2009–10	2010–11	Change (%)
Water main breaks per 100 km of main	24	27	12.5
Average frequency of unplanned interruptions per 1,000 properties	83	119	43.4

Source: Water Services Association of Australia, *National Performance Report 2010–2011*

The regulatory framework established by the Utilities Act currently does not specify any explicit performance standard for these indicators. The technical regulator has proposed that the introduction of measurable, performance standards is necessary for effective technical regulation.

Installing more stop valves in the network, over the short term, has the benefit of reducing the number of customers affected by network outages and in the longer term, the additional valves add to network maintenance, renewal and replacement. This consideration supports the adoption of water main breaks per 100 km as the main indicator of network serviceability.

A review of ACTEW Corporation’s record for unplanned interruptions (which are counted by every customer affected by each interruption event) shows an improving performance over the last couple of years. This trend is in line with most of the other utilities against which ACTEW Corporation is benchmarked.

ACTEW Corporation’s reporting shows a slight decrease in the average shut size (that is, the number of customers that can be isolated from the mains by shutting off the valves on either side of them).

### Network serviceability

Table 5.9 shows there was a 11% increase in the number of instances of burst or leaking pipes not affecting public health from 2009–10 and 2010–11. The number of times the licensee responded within 24 hours to additional burst or leaking pipes that did not affect public health, improved to 81%.

**Table 5.9 Burst or leaking pipes, water supply, 2009–10 and 2010–11**

Indicator	2009–10	2010–11	Change (%)
Instances of burst or leaking pipes that did not affect public health, or that caused or were likely to cause substantial damage or harm to people or property	1,167	1,294	10.9
Times licensee responded within 24 hours	922	1,049	13.8

Source: ACTEW Corporation’s annual reports to ICRC.

## Planned and unplanned interruptions

Table 5.10 and Table 5.11 show the changes in levels of planned and unplanned interruptions for 2009–10 and 2010–11.

**Table 5.10 Planned interruptions, frequency and duration, water supply, ACTEW Corporation, 2009–10 and 2010–11**

Planned interruption item	2009–10	2010–11
Total number of planned interruptions	6,219	5,481
Total number of connected properties ('000s)	139	142
Average water supply interruption duration <sup>a</sup> (minutes)	16	21.6
Average number of planned interruptions per 1,000 properties	44.7	38.6
Total interruption faced by an average customer <sup>b</sup> (minutes per property)	0.68	0.69

NA. = not available

a Calculated as follows: total time of all planned interruptions/total number of interruptions.

b Calculated as follows: total time of all planned interruptions/total number of water properties.

Source: ACTEW Corporation's annual reports to ICRC; Water Services Association of Australia, *National Performance Report 2010–2011*.

In 2010–11, ACTEW Corporation experienced 752 unplanned interruptions, up by almost 15% on the previous year. The average duration of outages during the year of 111 minutes was a 13% decrease from 2009–10 levels.

**Table 5.11 Unplanned interruptions, frequency and duration, water supply, ACTEW Corporation, 2009–10 and 2010–11**

Unplanned interruption item	2009–10	2010–11
Total number of unplanned interruptions to water supply services	657	752
Average water supply interruption duration <sup>a</sup> (minutes)	127.6	110.7

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

Source: ACTEW Corporation's annual reports to ICRC.

## 5.7 Sewerage services

Industry KPIs used commonly by WSAA include:

- number of sewage overflows, normalised to length of sewer mains;
- number of breaks and chokes in sewer mains, also normalised to length of sewer mains. Although breaks and chokes can result from different causes and also have different implications for network serviceability, they have traditionally been lumped together;

- number of breaks and chokes in the utility-owned portion of sewer connections; and
- proportion of breaks and chokes attributable to root infestation.

The regulatory framework established by the Utilities Act does not specify an explicit performance standard for any of these indicators. ACTPLA encourages the use of performance levels that include at least a standard for main breaks and chokes per 100km, and has proposed its introduction in the review of the Utilities Act, being undertaken by the Department of Territory and Municipal Services.

### Unplanned interruptions

Details of unplanned interruptions to sewerage services over the five years to 2010–11 are shown in Table 5.12.

**Table 5.12 Unplanned interruptions, frequency and duration, sewerage services, ACTEW Corporation, 2009–10 and 2010–11**

Unplanned interruptions items	2009–10	2010–11	Change (%)
Total number of unplanned interruptions	646	1,608	148.9
Total number of connected properties ('000s)	145	149	2.8
Average interruption time (minutes)	36	40	11.1
Average number of outages per 1,000 properties	4.5	10.8	142.2
Sewer main breaks and chokes	3,245	2,435	-25.0
Sewer main breaks and chokes caused by tree roots	2,942	1,607	-45.4
Property connection sewer main breaks and chokes	2,240	1,637	-26.9
Property connection sewer main breaks and chokes caused by tree roots	1,963	1,293	-34.1

Source: ACTEW Corporation's annual reports to ICRC; Water Services Association of Australia, *National Performance Report 2010–2011*.

## 5.8 Technical Regulator Recommendations

- The regulatory framework established by the Utilities Act currently does not specify any explicit performance standard for water main breaks or average frequency of unplanned interruptions per 1,000 properties. The technical regulator has proposed that the introduction of measurable, performance standards is necessary for effective technical regulation.
- The regulatory framework established by the Utilities Act currently does not specify an explicit performance standard for common sewerage industry KPIs that are commonly used by WSAA. ACTPLA encourages the use of performance levels that include at least a standard for main breaks and chokes per 100km, and

has proposed its introduction in the review of the Utilities Act, being undertaken by the Department of Territory and Municipal Services.

## 6 Customer complaints handling

*This chapter analyses information on licensees' customer complaints handling and compliance with the Consumer Protection Code's Minimum Service Standard 3 (that is, response time to notification of problem or concern).*

*During 2010–11, complaints for electricity supply, gas supply, water and sewerage services, increased, with sewerage services experiencing the largest percentage increase in complaints of almost 116%. Electricity and gas distribution had a decrease in the number of complaints, with electricity supply having the largest percentage decrease of 54%.*

### 6.1 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.

Table 6.1 lists the number of complaints per 1,000 customers for all licensed utilities in 2010–11, and categorises the most common complaints made during the year. In the electricity distribution sector, complaints about customer service were the most common, at 38.1% of the total. In the gas distribution sector, complaints about connection issues were the most common, at 26.7% of all complaints. For electricity suppliers, complaints relating to billing and affordability were the most common at 39.6%, while for gas suppliers complaints about marketing were the most common at 51.5%.

**Table 6.1 Complaints, ACT utility groups, 2010–11**

Licensee	Total number of complaints	Complaints per 1,000 customers	Most common complaints	Proportion of total (%)
ActewAGL Distribution (electricity)	696	4.12	Customer service	36.8
ActewAGL Distribution (gas)	15	0.14	Other network operations <sup>a</sup>	40
ACT electricity suppliers	504	3.13	Other retail <sup>b</sup>	58.5
ACT gas suppliers	1,583	15.05	Billing affordability	51.5
ACTEW Corporation –water	577	3.85	Water quality	26.9
ACTEW Corporation –sewerage	383	2.57	Other network <sup>c</sup>	43.9

a Complaints related to the safety of customers, safety of ActewAGL's gas equipment (e.g., meters), and gas leaks

b Detail on 'other retail' was not provided by utilities

c Complaints largely related to blowbacks, damage to assets, environmental damage, customer service, noise, water leaks, pressure, and waste.

Source: Licensed utilities' 2010–11 annual reports to ICRC; Water Services Association Australia, *National Performance Report 2009–2010: urban water utilities*.

## 6.2 Electricity distribution

Table 6.2 details the customer complaints about electricity distribution for 2009–10 and 2010–11. The number of complaints received increased by 36 in 2010–11. The main sources of complaints in both years related to administrative processes of customer service and failure to provide notice or sufficient notice.

**Table 6.2 Customer complaints, electricity distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Complaint item	2009-10	2010-11	Change (number)
Reliability of supply	10	26	16
Technical quality of supply	9	1	-8
Administrative process or customer service	259	256	-3
Property damage/restoration of property	75	43	-32
Connections	11	8	-3
Metering/meter reading	13	6	-7
Failure to provide notice or provision of sufficient notice	183	196	13
Unplanned interruption	1	24	23
Other	75	136	60
<b>Total<sup>a</sup></b>	<b>636</b>	<b>696</b>	<b>36</b>

a The total number of complaints may differ from the total number reported by ActewAGL Distribution. The totals presented in the table represent the sum of the complaints attributed to each category.

Source: ActewAGL Distribution's annual reports to ICRC.

Table 6.3 compares responses to complaints and notifications for electricity distribution for 2009–10 and 2010–11.

**Table 6.3 Response to complaints and notifications, electricity distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Complaint response	2009–10	2010–11	Change (number)
<b>Complaints received</b>	636	696	60
Complaints acknowledged within 10 business days	554	481	-73
Complaints responded to within 20 business days	531	472	-59
<b>Notifications of network problems or concerns about licensee's network received</b>	8,697	9,252	555
Notifications of network problems likely to affect public health or cause damage to people or property	198	281	83
Responses not made within 6 hours	213	49	-164
Notifications of network problems not likely to affect public health, or cause damage to people or property	8,499	8,983	484
Responses not made within 48 hours	0	0	0
<b>Planned interruptions to services</b>	2,207	1,636	-571
Times licensee did not provide at least 2 days notice	416	15	-401
Times supply not restored within 12 hours of the initial interruption	4	10	6
<b>Unplanned interruptions to services</b>	625	839	214
Times supply not restored within 12 hours of the initial interruption	2	18	16

Source: ActewAGL Distribution's annual reports to ICRC.

### 6.3 Electricity supply

During 2010–11, ACT electricity suppliers received a total of 504 complaints, a significant decrease on the 924 in the previous year (refer Table 6.4). Complaints about billing and affordability in 2010–11 accounted for 39% of the total, marketing accounted for 2%, and the general category of 'other retail matters' accounted for almost 59%, representing the bulk of complaints. Included within this category were complaints relating to bundled deals, discounts, disconnections, and feed-in tariffs.

**Table 6.4 Complaints, electricity suppliers, 2009–10 and 2010–11**

Complaint item	2009–10	2010–11	Change (number)
Complaints related to:			
billing and affordability	271	199	-72
marketing	16	10	-6
other retail matters	679	295	-384
<b>Total number</b>	<b>966</b>	<b>504</b>	<b>-462</b>

Source: ActewAGL Distribution's annual reports to ICRC.

While the number of complaints lodged against utilities is a useful indicator of customer service standards, it is perhaps more important to gauge the responses to those complaints by utilities. Table 6.5 shows the responses by electricity suppliers to complaints during 2010–11, and in particular the number acknowledged within 10 days and responded to within 20 business days. Of the 504 complaints received during the year, 477 or 95% were acknowledged within 10 business days, and 437 or 87% were responded to within 20 business days. These acknowledgement times are broadly unchanged.

**Table 6.5 Responses to complaints, ACT electricity suppliers, 2009–10 and 2010–11**

Complaint response item	2009–10	2010–11
Total number of complaints	966	504
Complaints acknowledged within 10 business days	922	477
Complaints responded to within 20 business days	819	437

Source: Licensed electricity utilities' annual reports to ICRC.

## 6.4 Gas distribution

Table 6.6 shows the main categories of complaints and the numbers of complaints about gas distribution for 2009–10 and 2010–11. There has been a decrease in the number of complaints, with only two categories ('metering' and 'other') experiencing increases.

**Table 6.6 Complaints, type and number, gas distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Complaint item	2009-10	2010-11	Change (number)
Property damage/restoration of property	6	1	-5
Administrative process or customer service	1	0	-1
Quality and reliability of supply	3	1	-2
Connections	7	4	-3
Metering/meter reading	0	3	3
Failure to provide, or insufficient, notice	1	0	-1
Unplanned interruptions	0	0	0
Other	2	6	4
<b>Total</b>	<b>20</b>	<b>15</b>	<b>-5</b>

Source: ActewAGL Distribution's annual reports to ICRC.

Table 6.7 shows responses made to complaints about gas distribution in 2009–10 and 2010–11. Of the 15 complaints received during 2010–11, all were acknowledged within 15 business days and 12 responded to within 20 business days. There was a small decrease in the number of notifications to customers of problems or concerns about the licensee's network—from 1,506 in 2009–10 to 2,042 in 2010–11.



**Table 6.7 Response to complaints and notifications, gas distribution, ActewAGL Distribution, 2009–10 and 2010–11**

Complaint and notification response item	2009-10	2010-11	Change (number)
Total number of complaints	20	15	-5
Number acknowledged in 10 business days	20	15	-5
Number responded to in 20 business days	18	12	-5
<b>Number of notifications of network problems or concerns about licensee's network received in 2010–11</b>	<b>1,506</b>	<b>2,042</b>	<b>536</b>
Notifications likely to affect public health, or cause damage to person/property	258	273	15
Number of responses not made within 6 hours	0	0	0
Notifications not likely to affect public health, or cause damage to person or property	1,248	1,769	521
Number of responses not made within 48 hours	217	98	-119

Source: ActewAGL Distribution's annual reports to ICRC.

## 6.5 Gas supply

Table 6.8 provides a comparison of complaints in the gas supply sector for the two years, 2009–10 and 2010–11. During 2010–11, ACT gas suppliers reported receiving 1,583 complaints, up by almost 55% on the previous year's level of 1,022.

**Table 6.8 Complaints, gas supply, ACT suppliers, 2009–10 and 2010–11**

Complaint item	2009-10	2010-11	Change (number)
Billing and affordability	567	815	248
Marketing	17	19	2
Other retail	438	749	311
<b>Total</b>	<b>1,022</b>	<b>1,583</b>	<b>561</b>

Source: Licensed gas utilities' annual reports to ICRC.

The responses to gas supplier complaints provide an indicator of improvement in handling complaints. Table 6.9 shows that during 2010–11 ACT gas suppliers responded to nearly all complaints within 20 business days.

**Table 6.9 Response to complaints, ACT gas suppliers, 2009–10 and 2010-11**

Complaint response	2009–10	2010–11	Change (number)
Total number of complaints	1,022	1,583	561
Complaints acknowledged within 10 business days	1,022	1,577	555
Complaints acknowledged within 20 business days	1,022	1,573	551

Source: Licensed gas utilities' annual reports to ICRC.

## 6.6 Water and sewerage

### Water supply complaints

In 2010–11, ACTEW Corporation received a total of 591 complaints about water supply to premises in the ACT, 113 more than the previous year's level. Table 6.10 lists the types and numbers of complaints received by ACTEW Corporation over the past two years. Complaints about water quality again featured prominently in 2010–11, with 155 during received during the year.

**Table 6.10 Complaints, water supply, 2009–10 and 2010–11**

Complaint item <sup>a</sup>	2009–10	2010–11	Change (number)
Water quality <sup>b</sup>	159	155	-4
Water supply reliability	1	14	13
Property damage / restoration of property	105	81	-24
Accounts / billing	59	91	32
Metering / meter reading	68	95	27
Failure to provide, or insufficient, notice	7	50	43
Unplanned interruptions	1	14	13
Other network / retail complaints	78	91	13
<b>Total</b>	<b>478</b>	<b>591</b>	<b>113</b>

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.

### Sewerage service complaints

Numbers of complaints about sewerage services for 2009–10 and 2010–11 are summarised in Table 6.11. In 2010–11, 421 complaints were received, 226 above the levels in the previous three years. The main categories of complaints during 2010–11 related to property damage and the unreliability of sewerage services. Both these categories together accounted for nearly half the total number of complaints.

**Table 6.11 Complaints, sewerage services, 2009–10 and 2010–11**

Complaint item	2009–10	2010–11	Change (number)
Sewage odour <sup>a</sup>	15	7	-8
Sewerage services reliability and quality	40	76	36
Property damage / restoration of property	74	125	51
Accounts/billing	0	0	0
Failure to provide, or insufficient, notice	4	8	4
Unplanned interruptions	40	40	0
Other networks	22	165	143
<b>Total sewerage services</b>	<b>195</b>	<b>421</b>	<b>226</b>

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.

## **6.7 Rebates payable for failure to meet 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 6.12 summarises the payment of rebates for failure to meet minimum service standards in 2009–10 and 2010–11. The amount of rebates paid in 2010–11 of \$4,320, was slightly higher than the previous year's level of \$3,720. As in previous years, most rebate payments were made without the customer submitting a claim.

**Table 6.12 Payment of performance rebates, selected utilities, 2009–10 and 2010–11**

Utility	2009-10			2010-11		
	Number of claims made (no.)	Number of rebates paid (no.)	Value of rebates (\$)	Number of claims made (no.)	Number of rebates paid (no.)	Value of rebates (\$)
ACTEW Corporation (water)	0	0	0	0	0	0
ACTEW Corporation (sewerage)	0	0	0	0	0	0
ActewAGL Distribution (electricity)	0	63	3,150	0	76	3,800
ActewAGL Distribution (gas)	0	0	0	1	1	300
ActewAGL Retail (electricity)	0	27	570	2	11	220
ActewAGL Retail (gas)	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>90</b>	<b>3,720</b>	<b>3</b>	<b>88</b>	<b>4,320</b>

Source: Licensed utilities' annual reports to ICRC.

The Commission notes ACAT's comments, 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 remain unaware of their rights.

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

## 7 Customer safety net arrangements

*This chapter highlights the various safety net arrangements available to 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 (which is 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.*

### 7.1 Disconnection for non-payment of accounts

Before a supplier disconnects a customer for non-payment of an account, the supplier must issue reminder notices, allow a certain number of days between notices, and make 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.

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

#### Electricity customers

Table 7.1 shows that in 2010–11, 402 residential electricity customers were disconnected for non-payment of an account, a significant drop on the level of 880 the previous year while 282 were reconnected within seven days, compared with 573 in 2009–10.

**Table 7.1 Disconnections and reconnections of residential customers for non-payment of an account, electricity supply, 2009–10 and 2010–11**

Item	2009–10	2010–11	Change (%)
Customers disconnected for non-payment of an account	880	402	-54.3
Customers reconnected in the same name within seven days)	573	282	-50.7

Source: Licensed electricity utilities' annual reports to ICRC.

### Gas customers

The reported instances of disconnections of residential gas supply customers for non-payment of an account for 2009–10 and 2010–11 are shown in Table 7.2. In 2010–11 there was a decrease in the number of disconnections and a corresponding decrease in the number of customers reconnected within seven days.

**Table 7.2 Disconnections and reconnections of residential customers for non-payment of an account, gas supply, 2009–10 and 2010–11**

Item	2009–10	2010–11	Change (%)
Customers disconnected for non-payment of an account	1,611	1,411	-12.4
Customers reconnected in the same name within seven days <sup>a</sup>	506	387	-23.5

Source: Licensed gas utilities' annual reports to ICRC.

### 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. ACTEW Corporation did not restrict the water flow to any customer for failure to pay an account in 2010–11.

## 8 Environmental performance

*This chapter covers the Commission's responsibility for environmental performance of utilities, being water losses, greenhouse gas emissions and consumption efficiency. The chapter also refers to natural gas safety issues.*

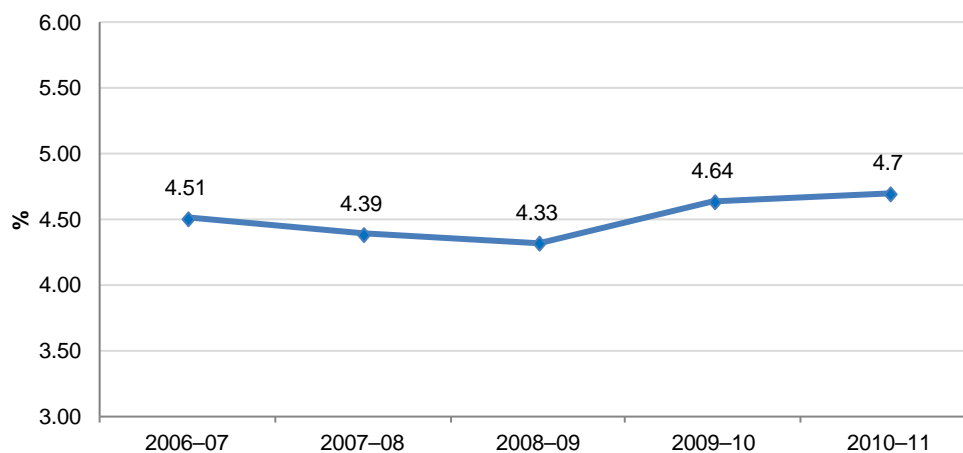
### 8.1 Electricity distribution

#### Electricity network losses

Electricity networks lose energy mainly through heat generated by resistance in wires and transformers. The greater the electricity network losses, the greater the need for more electricity to be generated to meet demand, thus the greater the potential impact on the environment.

Figure 8.1 summarises ActewAGL Distribution's electricity network losses from 2006–07 to 2010–11. In 2010–11 network losses were 4.70% of total network inputs, up from the previous year's level of 4.64%.

Figure 8.1 Network losses, electricity distribution, ActewAGL Distribution, 2006–07 to 2010–11



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 network losses. ActewAGL Distribution stated that 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);
- use of various network tariff initiatives to manage network demand and, as a result, network losses; and
- provision of appropriate price signals, including demand tariffs designed to improve the system’s load profile and so result 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.

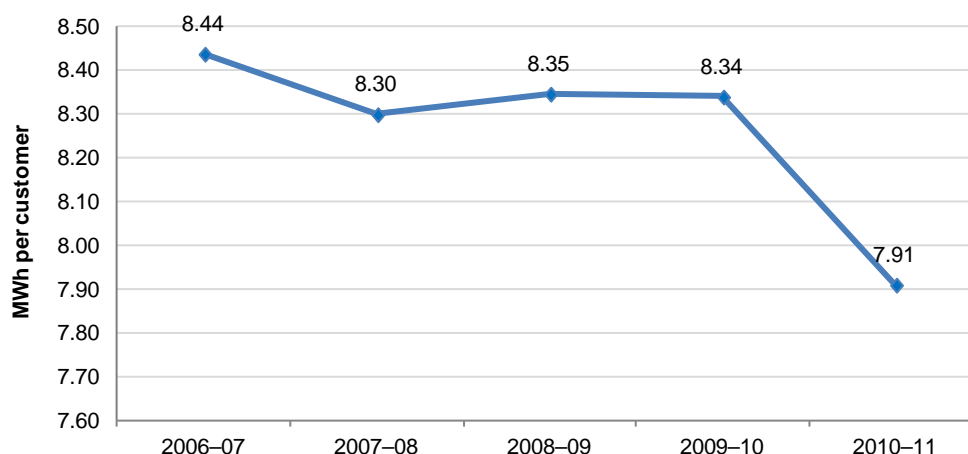
## 8.2 Electricity supply

### 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 resulting in a greater environmental impact.

As a measure of the efficiency of residential energy consumption over time, per person rather than total consumption measure is used, overcoming the effect of population growth masking efficiency. As Figure 8.2 shows, consumption per customer in the ACT has maintained a broad downward trend since 2006–07, with a compound annual growth rate (CAGR) of -6.2%.

Figure 8.2 Residential electricity consumption (MWh per customer), 2006–07 to 2010–11



Source: Licensed electricity utilities’ annual reports to ICRC.



## 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 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 *Electricity Feed-in (Renewable Energy Premium) 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.

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 feeding 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.

Table 8.1 details ActewAGL Distribution's (electricity) statistics for the period ending 30 June 2011. During this period 6,057 sites were connected, with a capacity of 13.99 GW and total metered output to end June 2011 of 11.84 million KWh.

**Table 8.1 ACT Electricity Feed-in Scheme to end June 2011**

Total no. of sites connected	Total capacity installed (W)	Total metered output to end June 2011 (KWh)
6,057	13,987,950	11,840,448

kWh = kilowatt hours; W = watts.

Source: ActewAGL Distribution (electricity).

## 8.3 Gas distribution

### Codes of practice compliance

ActewAGL Distribution confirmed 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.

## 8.4 Greenhouse Gas Abatement Scheme

The ACT Government introduced GGAS in the ACT through the *Electricity (Greenhouse Gas Emissions) Act 2004*, to assist in addressing the climate change challenge. The operation of the ACT GGAS commenced on 1 January 2005 and mirrors the NSW scheme as it operated in that state until 30 June 2009. The ACT GGAS is mandatory for all licensed electricity retailers.

Responsibility for the operation of ACT GGAS rests with the Commission as the scheme regulator, and the scheme's administrator, the Independent Pricing and Regulatory Tribunal (IPART) of NSW.

The policy objectives of the ACT GGAS are to:

- reduce greenhouse gas emissions associated with the production and use of electricity; and
- develop and encourage activities to offset the production of greenhouse gas emissions.

This section covers the environmental impacts of greenhouse gas emissions associated with the consumption of gas and electricity sourced from outside the ACT.

### Electricity consumption

The Commission estimates the greenhouse gas emissions which 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 (net amount of greenhouse gas-producing electricity). This figure is then multiplied by an emissions intensity coefficient for

NSW and ACT electricity consumption as supplied by the Department of Climate Change and Energy Efficiency.<sup>12</sup>

Table 8.2 provides details of the levels of greenhouse emissions in the ACT for both 2009–10 and 2010–11 and shows that the estimated volume of greenhouse gases emitted as a result of electricity consumption. During 2010–11 electricity consumption increased slightly contributing to an increase in carbon dioxide equivalent emissions of 25,044 tonnes, or 0.92% increase on 2009–10 levels.

**Table 8.2 GreenPower and estimated greenhouse gas emissions, ACT electricity consumption, 2009–10 and 2010–11**

Indicator	2009–10	2010–11	Change (%)
Electricity sold in the ACT (MWh)	2,914,779	2,936,763	0.75
GreenPower sold in the ACT (MWh) <sup>a</sup>	120,431	122,461	1.69
Percentage of GreenPower sold (%)	4.13	4.17	0.92
Greenhouse gas-producing electricity sold in the ACT (MWh)	2,794,348	2,814,302	0.71
Electricity pool coefficient for greenhouse gas emissions (t CO <sub>2</sub> -e/MWh)	0.973 <sup>b</sup>	0.975 <sup>c</sup>	0.21
Estimated greenhouse gas emissions arising from ACT electricity consumption (t CO <sub>2</sub> -e)	2,718,901	2,743,945	0.92
Estimated ACT population end June	355,700 <sup>b</sup>	361,800 <sup>c</sup>	1.71
Estimated greenhouse gas emissions per head of population (t CO <sub>2</sub> -e/person)	7.64	7.58	-0.78

MWh = megawatt hours; t CO<sub>2</sub>-e = tonnes of carbon dioxide equivalent.

a Government-accredited GreenPower products.

b Electricity (Greenhouse Gas Emissions) Determination 2009 Notifiable Instrument NI2009–586

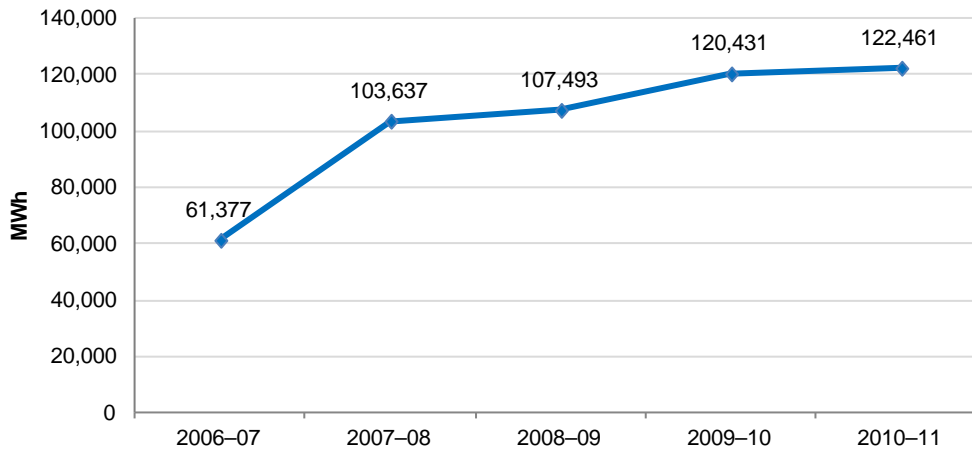
c Electricity (Greenhouse Gas Emissions) Determination 2010 Notifiable Instrument NI2010–685.

Source: Licensed electricity utilities' annual reports to ICRC.

Figure 8.3 shows GreenPower from electricity sold in the ACT increased slightly in 2010–11 from 2009–10 levels.

<sup>12</sup> Department of Climate Change and Energy Efficiency, *National greenhouse accounts (NGA) factors*, January 2010.

**Figure 8.3** GreenPower electricity sold (MWh), 2006–07 to 2010–11



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 NSW and ACT consumption of natural gas provided in the National Greenhouse Account (NGA) Factors produced annually by the Department of Climate Change and Energy Efficiency (DCCEE).

As shown in Table 8.3, the estimated volume of greenhouse gases emitted as a result of natural gas consumption in the ACT in 2010–11 was 391,285 tonnes, an increase of 7.9% on 2009–10 levels.

**Table 8.3** Estimated greenhouse gas emissions, ACT natural gas sales, 2009–10 and 2010–11

Indicator	2009–10	2010–11	Change (%)
Natural gas sold in the ACT (TJ)	7,080	7,642	7.9
Sales to large customers (TJ)	1,933	2,201	13.8
Sales to small customers (TJ)	5,146	5,442	5.7
Emission factors (t CO <sub>2</sub> -e/TJ) <sup>a</sup>	51.2	51.2	-0.7
Estimated greenhouse gas emissions arising from ACT total natural gas consumption (t CO <sub>2</sub> -e)	362,496	391,285	7.9

TJ = terajoule; t CO<sub>2</sub>-e = tonnes of carbon dioxide equivalent.

a Emissions factors for 2009–10 and 2010–11 are from Department of Climate Change, *National greenhouse accounts (NGA) factors*, January 2010, table 2.

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

Table 8.4 shows the combined effect of both electricity and gas on greenhouse gas emissions in the ACT for 2009–10 and 2010–11. Total emission levels increased by 1.75% in 2010–11. On a per capita basis, emission levels remained relatively stable..

**Table 8.4 Estimated total greenhouse gas emissions, ACT electricity and natural gas consumption, 2009–10 and 2010–11**

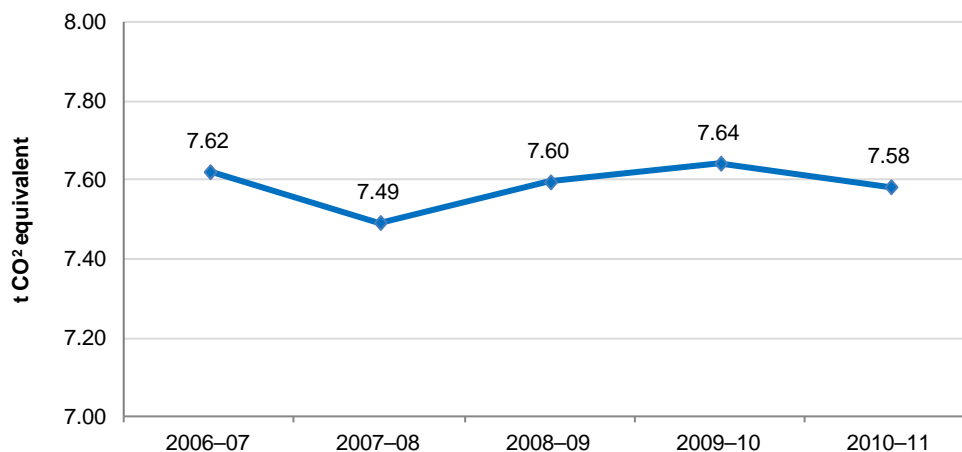
Indicator	2009–10	2010–11	Change (%)
Total ACT emissions (t CO <sub>2</sub> -e)	3,081,397	3,135,230	1.75
Emissions per head of population (t CO <sub>2</sub> -e)	8.66	8.67	0.03

t CO<sub>2</sub>-e = tonnes of carbon dioxide equivalent

Source: Licensed gas utilities' annual reports to ICRC.

Figure 8.4 shows the per capita levels of greenhouse gas emissions from electricity consumption over the past five years. In 2010–11, greenhouse gas emissions from electricity consumption per head of ACT population are slightly lower than both the previous two years.

**Figure 8.4 Total greenhouse gas emission (electricity consumption) levels per head of ACT population, 2006–07 to 2010–11**



Source: Licensed electricity utilities' annual reports to ICRC.

## 8.5 Water distribution and supply

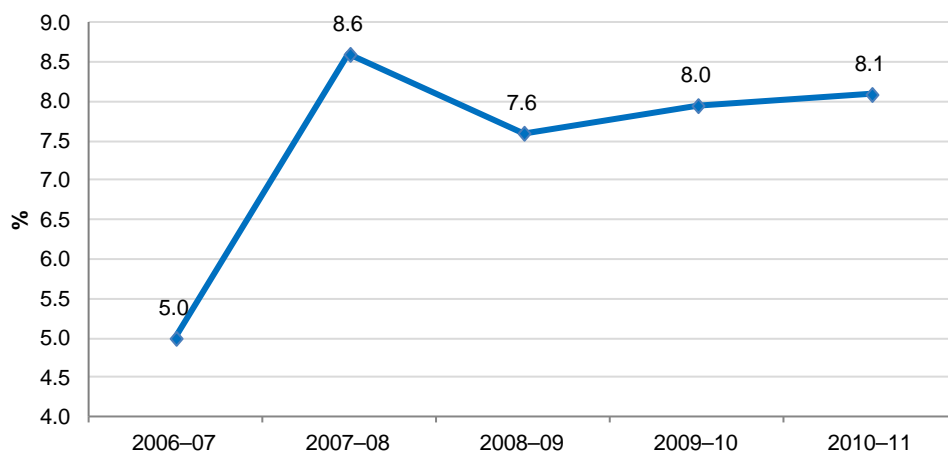
### Water losses—unaccounted-for water

‘Unaccounted-for water’ (or ‘non-revenue’) is water that has been wasted or lost through leakages, bursts or evaporation from open-air treatment and storage facilities and includes water consumption that has not been billed, unauthorised consumption and water lost through metering inaccuracies or errors. Thus, the volume of unaccounted-for water is the difference between the volume of water extracted and the amount of water for which the utility bills its customers.

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

Figure 8.5 shows the annual quantity of unaccounted-for water in the ACT, as a proportion of total water volume of water supplied from 2006–07 to 2010–11. The percentage of unaccounted-for water has slightly increased over the past three years, from 7.6% to 8.1%.

**Figure 8.5** Unaccounted-for water, proportion of total volume, ACTEW Corporation, 2006–07 to 2010–11



Source: ACTEW Corporation's annual reports to ICRC.

In 2010–11, 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 improve meter measurement. The intention is to increase unaccounted-for flow identification and investigation to reduce water loss.

### **Environmental flows**

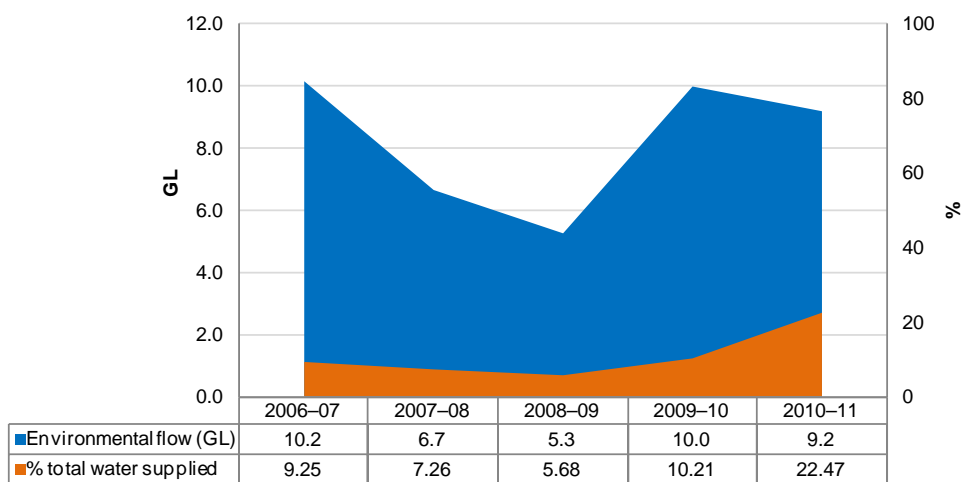
Environmental flows are the water flows into rivers and streams necessary for maintaining healthy aquatic ecosystems. They are designed to mimic naturally occurring water flows, including seasonal fluctuations and other variables. Under its licence conditions, ACTEW Corporation is required to release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

The environmental flows recommended for water supply catchments are based on research and monitoring of environmental flows in river systems and are intended to ensure both water supply and conservation objectives are met. In response to prolonged

drought, the relevant authorities reduced environmental flow requirements in recent years.

Figure 8.6 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 2006–07 and 2010–11. In 2010–11, environmental flows released by ACTEW from water storages represented just over 10% of the total water supplied in the ACT.

**Figure 8.6** Environmental flows, volumes and proportion of total volumes abstracted, water supply, ACTEW Corporation, 2006–07 to 2010–11



Source: Water Services Association of Australia, National performance report 2010–2011: urban water utilities.





## Appendix A 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 as well as guidelines which 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 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, 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 (energy industry 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 are the amount determined to be the cost to the territory of meeting its national regulatory obligations under the Australian Energy Market Agreement in relation to the Australian Energy Market Commission and the Ministerial Council on Energy's responsibilities under the agreement. Local regulatory costs are currently determined to be those incurred by the Commission, 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 ACAT in relation to complaints about utilities are established under part 12 of the Utilities Act.<sup>13</sup>

ACAT 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. It 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 2010–11 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

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<sup>13</sup> 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 ACAT.

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;
  - outlines obligations that a marketer has in relation to the marketing of electricity and gas supply services; and
  - 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 ACTPLA during 2010–11 were as follows.

- **Contestable Work Accreditation Code** (August 2000). 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** (July 2010). 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 B Data tables for figures

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

**Table B.1 Figure 2.1: Energy distributed (GWh), electricity distribution, ActewAGL Distribution, 2006–07 to 2010–11**

Year	Residential	Non-residential	Total
2006–07	1,148	1,651	2,799
2007–08	1,150	1,681	2,831
2008–09	1,176	1,703	2,879
2009–10	1,195	1,713	2,908
2010–11	1,214	1,716	2,930

**Table B.2 Figure 2.2: Sales volume (GWh), electricity supply, residential and non-residential, 2006–07 to 2010–11**

Year	Residential	Non-residential	Total
2006–07	1,148	1,651	2,799
2007–08	1,142	1,676	2,818
2008–09	1,167	1,699	2,866
2009–10	1,194	1,721	2,915
2010–11	1,197	1,740	2,937

**Table B.3 Figure 2.3: Average electricity consumption (MWh per customer), residential customers and non-residential customers, 2006–07 to 2010–11**

Year	Residential	Non-residential	Total
2006–07	8.37	132.92	18.73
2007–08	8.30	121.69	18.62
2008–09	8.35	121.13	18.63
2009–10	8.34	121.54	18.52
2010–11	7.91	119.70	17.71

**Table B.4**     **Figure 2.4: Customer supply point numbers, gas distribution, 2006–07 to 2010–11**

Year	Number of supply points
2006–07	94,066
2007–08	94,590
2008–09	100,254
2009–10	104,423
2010–11	107,825

**Table B.5**     **Figure 2.5: Volume of gas distributed (TJ), gas distribution, 2006–07 to 2010–11**

Year	Volume distributed (TJ)
2006–07	7,055
2007–08	6,925
2008–09	7,695
2009–10	7,921
2010–11	8,633

**Table B.6**     **Figure 4.1: Average electricity charges for residential and non-residential customers (\$/MWh), electricity retailers, 2006–07 to 2010–11**

Year	Residential	Non-residential
2006–07	113.9	115.5
2007–08	131.0	147.4
2008–09	145.4	127.9
2009–10	152.4	135.9
2010–11	164.7	139.3

**Table B.7**     **Figure 9.1: Network losses, electricity distribution, ActewAGL Distribution, 2006–07 to 2010–11**

Year	%
2006–07	4.51
2007–08	4.39
2008–09	4.33
2009–10	4.64
2010–11	4.70



**Table B.8**     **Figure 9.2: Residential electricity consumption (MWh per customer), 2006–07 to 2010–11**

Year	Residential consumption (MWh per customer)
2006–07	8.38
2007–08	8.30
2008–09	8.35
2009–10	8.34
2010–11	7.91

**Table B.9**     **Figure 9.3: GreenPower electricity sold (MWh), 2006–07 to 2010–11**

Year	GreenPower (MWh)
2006–07	61,377
2007–08	103,637
2008–09	107,493
2009–10	120,431
2010–11	122,461

**Table B.10**    **Figure 9.4: Total greenhouse gas emission (tonnes CO<sub>2</sub> equivalent) levels from electricity and natural gas consumption per head of ACT population, 2006–07 to 2010–11**

Year	Emissions (t CO <sub>2</sub> -e)
2006–07	7.62
2007–08	7.49
2008–09	7.60
2009–10	7.64
2010–11	7.58

**Table B.11**    **Figure 9.5: Unaccounted-for-water, proportion of total volume, ACTEW Corporation, 2006–07 to 2010–11**

Year	Unaccounted-for-water (%)
2006–07	5.0
2007–08	8.6
2008–09	7.6
2009–10	8.0
2010–11	8.1

**Table B.12 Figure 9.6: Environmental flows, volumes and proportion of total volumes abstracted, water supply, ACTEW Corporation, 2006–07 to 2010–11**

Year	Environmental flow (GL)	Total water supplied (GL)	% total water supplied
2006–07	10.2	109.918	9.25
2007–08	6.7	91.796	7.26
2008–09	5.3	92.696	5.68
2009–10	10.0	97.949	10.21
2010–11	9.2	40.945	22.47

## Appendix C ACT Licensed energy suppliers

**Table C.1 Licensed electricity suppliers, ACT, license effective date, licensed as at 30 June 2011 and sales activity in 2010–11**

Retailer—electricity	Licence effective from	Licensed at 30 June 2011	Sales 2010–11
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
Jackgreen (International) Pty Ltd	4 May 2007	Yes	Yes
Dodo Power & Gas Pty Ltd	12 September 2007	Yes	No
Endeavour Energy (formerly Integral Energy) <sup>a</sup>	1 July 2001	No	Yes
ERM Power Retail Pty Ltd	10 December 2007	Yes	No
Country Energy	1 July 2001	Yes	Yes
Momentum Energy Pty Ltd	10 August 2009	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	1 July 2009 (granted 30 June 2009)	Yes	No
TRUenergy Pty Ltd <sup>b</sup>	1 July 2001	Yes	Yes
TRUenergy Yallourn Pty Ltd	1 July 2001	Yes	Yes

a On 6 April 2011 Endeavour Energy (formerly Integral Energy) wrote to the Commission seeking to surrender its licence. The Commission has accepted an early surrender of Endeavour Energy's electricity supply licence effective from 30 June 2011.

b Includes EnergyAustralia from 1 March 2011.

**Table C.2 Licensed gas suppliers, ACT, license effective date, licensed as at 30 June 2011 and sales activity in 2010–11**

Retailer—gas	Licence effective from	Licensed at 30 June 2011	Sales 2010–11
ActewAGL Retail	1 July 2001	Yes	Yes
AGL Sales Pty Ltd	8 November 2010	Yes	No
Australian Power and Gas Pty Ltd	1 July 2008	Yes	No
Jackgreen(International) Pty Ltd	04 May 2007	Yes	No
Dodo Power & Gas Pty Ltd	21 September 2007	Yes	No
EnergyAustralia	22 July 2003	Yes	Yes
Country Energy	3 February 2003	Yes	Yes
SUN Retail Pty Ltd	01 July 2001	Yes	No
TRUenergy Pty Ltd <sup>a</sup>	17 August 2005	Yes	Yes

a Includes EnergyAustralia from 1 March 2011.

## Appendix D Compliance and performance reports issued, 2004 to 2012

### Reports issued 2012

- Report 7 of 2012: Licensed Electricity, Gas, Water and Sewerage Utilities— Compliance and Performance Report for 2010–11 (August 2012)

### Reports issued 2011

- Report 5 of 2011: Licensed Electricity, Gas, Water and Sewerage Utilities— Compliance and Performance Report for 2008–09 (June 2011)
- Report 10 of 2011: Licensed Electricity, Gas, Water and Sewerage Utilities— Compliance and Performance Report for 2009–10 (November 2011)

### 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)

## Appendix E Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ACAT	ACT Civil and Administrative Tribunal
ACT	Australian Capital Territory
ACTPLA	ACT Planning and Land Authority
Commission	Independent Competition and Regulatory Commission
EPA	Environment Protection Authority
EAPL	East Australian Pipeline Limited
GJ	gigajoule
GL	gigalitre
GWh	gigawatt hour
ICRC	Independent Competition and Regulatory Commission
kL	kilolitre
km	kilometre
km <sup>2</sup>	square kilometres
kPa	kilopascal
KPI	key performance indicator
kV	kilovolt
kWh	kilowatt hour
MJ	megajoule
ML	megalitre
MWh	megawatt hour
POTS	packaged off-take station
PRS	primary regulating station
TJ	terajoule

TRS	trunk receiving station
Utilities Act	<i>Utilities Act 2000</i>
WSAA	Water Services Association of Australia



## Appendix F Statistical Appendix – Performance Statistics, ACT Utilities

**Table F.1 ActewAGL Distribution’s network, metered supply points and energy delivered, 2005–06 to 2010–11**

Item	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Number of metered supply points (at end June 2011)</b>						
Residential	140,849	142,410	143,281	144,929	149,197	152,911
Non-residential	13,661	13,949	15,174	16,132	15,703	16,026
<b>Total supply points</b>	<b>154,510</b>	<b>156,359</b>	<b>158,455</b>	<b>161,061</b>	<b>164,900</b>	<b>168,937</b>
<b>Energy delivered (GWh)</b>						
Residential	1,180	1,148	1,150	1,176	1,195	1,214
Non-residential	1,593	1,651	1,681	1,703	1,713	1,716
<b>Total energy delivered</b>	<b>2,773</b>	<b>2,799</b>	<b>2,831</b>	<b>2,879</b>	<b>2,908</b>	<b>2,930</b>
<b>Energy delivered as proportion (%)</b>						
Residential	42.55	41.01	40.62	40.85	41.09	41.43
Non-residential	57.45	58.99	59.38	59.15	58.91	58.57
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: ActewAGL Distribution reports to the ICRC.

**Table F.2 Key business descriptors, electricity distribution, ActewAGL Distribution, 2007–08 to 2010–11**

Item	2007–08	2008–09	2009–10	2010–11
Distribution losses <sup>a</sup> (%)	4.39	4.32	4.64	4.70
Network service area (km <sup>2</sup> )	2,358	2,358	2,358	2,358
Number of poles—distribution	53,037	53,020	52,890	52,745
Peak demand—distribution (MW)	589	607	604	614

a Based on five-year moving average.

Source: ActewAGL Distribution's 2007–08, 2008–09 and 2010–11 annual reports to ICRC.

**Table F.3 Customer numbers, sales and average consumption, electricity supply, ACT, 2005–06 to 2010–11**

Item	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Customer numbers (end June)</b>						
Residential	134,979	137,016	137,582	139,793	143,187	151,290
Non-residential	11,618	12,421	13,772	14,026	14,161	14,536
<b>Total numbers</b>	<b>146,597</b>	<b>149,437</b>	<b>151,354</b>	<b>153,819</b>	<b>157,348</b>	<b>165,826</b>
<b>Customer sales (GWh)</b>						
Residential	1,162	1,148	1,142	1,167	1,194	1,197
Non-residential	1,659	1,651	1,676	1,699	1,721	1,740
<b>Total sales</b>	<b>2,821</b>	<b>2,799</b>	<b>2,818</b>	<b>2,866</b>	<b>2,915</b>	<b>2,937</b>
<b>Average consumption (MWh/customer)</b>						
Residential	8.61	8.38	8.30	8.35	8.34	7.91
Non-residential	142.80	132.92	121.69	121.13	121.54	119.70
<b>Average, all categories</b>	<b>19.24</b>	<b>18.73</b>	<b>18.62</b>	<b>18.63</b>	<b>18.52</b>	<b>17.71</b>

Note: The reported sales by suppliers may not equate to the reported distribution volumes reported by distributors because of differences in timing of billing cycles.

Source: Licensed electricity utilities, annual reports to ICRC.

**Table F.4 Gas distribution, pipeline details, gas delivered and customers connected, 2008–09 to 2010–11**

Item	2008–09	2009–10	2010–11
<b>Pipeline length at 30 June (km)</b>			
Medium pressure <sup>a</sup>	3,718	3,735	3,797
High pressure <sup>b</sup>	249	263	267
<b>Total pipeline length</b>	<b>3,967</b>	<b>3,998</b>	<b>4,064</b>
Number of delivery point identifiers at 30 June	100,254	104,423	107,825
Quantity of gas entering the distribution network (TJ) <sup>c</sup>	7,695	7,921	8,633
<b>Quantity of gas billed (TJ)<sup>d</sup></b>			
Tariff customers (<1 TJ/year)	6,798	6,718	5,442
Non-tariff customers (>1 TJ/year)	1,030	1,067	2,201
<b>Total quantity of gas billed</b>	<b>7,828</b>	<b>7,785</b>	<b>7,642</b>

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 annual reports to ICRC

**Table F.5 Customer numbers and sales, gas supply, 2005–06 to 2010–11**

Contract type	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Customer numbers</b>						
Residential	87,010	91,177	92,107	91,944	95,197	102,993
Non-residential	1,956	1,977	2,106	2,075	1,778	2,167
<b>Total numbers</b>	<b>88,966</b>	<b>93,154</b>	<b>94,213</b>	<b>94,019</b>	<b>96,975</b>	<b>105,160</b>
<b>Customer sales (TJ)</b>						
Residential	4,335	4,196	4,432	4,553	4,513	4,855
Non-residential	2,522	2,307	2,784	2,554	2,567	2,787
<b>Total sales</b>	<b>6,857</b>	<b>6,503</b>	<b>7,216</b>	<b>7,107</b>	<b>7,080</b>	<b>7,642</b>
<b>Average consumption (GJ/customer)</b>						
Residential	50	46	48	50	47	47
Non-residential	1,289	1,167	1,322	1,231	1,444	1,286
<b>Overall consumption/customer</b>	<b>77</b>	<b>70</b>	<b>77</b>	<b>76</b>	<b>73</b>	<b>73</b>

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

**Table F.6 Sources and levels of water supply (ML), ACT, 2005–06 to 2010–11**

Sources of water	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Surface water	54,340	51,060	43,694	44,950	45,315	40,945
Recycling	2,141	2,104	3,789	4,207	4,249	4,305
<b>Total supply</b>	<b>56,481</b>	<b>53,164</b>	<b>47,483</b>	<b>49,157</b>	<b>49,564</b>	<b>45,250</b>

Source: Water Services Association of Australia, *National Performance Report 2009–2010: urban water utilities*, National Water Commission, Canberra, April 2011.

**Table F.7 Revenue, customer numbers, consumption and charges, electricity supply, ACT, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Revenue (\$m, nominal)</b>						
Residential	128.0	131.6	151.4	169.7	182.0	197.1
Non-residential	161.5	192.7	210.0	217.2	233.9	242.4
<b>Total revenue</b>	<b>289.5</b>	<b>324.3</b>	<b>361.4</b>	<b>386.9</b>	<b>415.8</b>	<b>439.6</b>
<b>Customers (no.)</b>						
Residential	134,979	137,016	137,582	139,793	143,187	151,290
Non-residential	11,618	11,656	13,772	14,026	14,161	14,536
<b>Total customers</b>	<b>146,597</b>	<b>148,672</b>	<b>151,354</b>	<b>153,819</b>	<b>157,348</b>	<b>165,826</b>
<b>Consumption (GWh)</b>						
Residential	1,162	1,148	1,142	1,167	1,194	1,197
Non-residential	1,659	1,651	1,676	1,699	1,721	1,740
<b>Total consumption</b>	<b>2,821</b>	<b>2,799</b>	<b>2,818</b>	<b>2,866</b>	<b>2,915</b>	<b>2,937</b>
<b>Average consumption/customer (MWh)</b>						
Residential	8.60	8.44	8.30	8.35	8.34	7.91
Non-residential	142.8	141.6	121.7	121.1	121.5	119.7
<b>Average consumption all customers</b>	<b>19.2</b>	<b>18.8</b>	<b>18.6</b>	<b>18.6</b>	<b>18.5</b>	<b>17.7</b>
<b>Average total charge (\$) (nominal)</b>						
Residential	948	961	1,100	1,213	1,271	1,303
Non-residential	13,901	16,530	15,248	15,488	16,516	16,678
<b>Average total charge all customers</b>	<b>1,975</b>	<b>2,181</b>	<b>2,387</b>	<b>2,515</b>	<b>2,642.90</b>	<b>2,650.84</b>
<b>Average charge per unit (\$/MWh)</b>						
Residential	110.2	114.7	132.6	145.4	152.4	164.7
Non-residential	97.3	116.7	125.3	127.9	135.9	139.3
<b>Average charge per unit all customers</b>	<b>102.6</b>	<b>115.9</b>	<b>128.3</b>	<b>135.0</b>	<b>142.7</b>	<b>149.7</b>

Source: Licensed electricity utilities' annual reports to ICRC.

**Table F.8 Revenue, customer numbers, consumption and average charges, gas supply, ACT, 2005–06 to 2010–11**

Contract category	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
<b>Revenue (\$m)</b>						
Residential	65.3	67.4	76.7	90.8	97.5	108.2
Non-residential	20.9	22.8	25.8	31.0	30.9	36.0
<b>Total revenue</b>	<b>86.2</b>	<b>90.2</b>	<b>102.5</b>	<b>121.8</b>	<b>128.3</b>	<b>144.2</b>
<b>Customers (no.)</b>						
Residential	87,010	91,177	92,107	91,944	95,197	102,993
Non-residential	1,956	1,977	2,106	2,075	1,778	2,167
<b>Total customer numbers</b>	<b>88,966</b>	<b>93,154</b>	<b>94,213</b>	<b>94,019</b>	<b>96,975</b>	<b>105,160</b>
<b>Consumption (TJ)</b>						
Residential	4,335	4,196	4,432	4,553	4,513	4,855
Non-residential	2,522	2,307	2,784	2,554	2,567	2,787
<b>Total consumption</b>	<b>6,857</b>	<b>6,503</b>	<b>7,216</b>	<b>7,107</b>	<b>7,080</b>	<b>7,642</b>
<b>Average consumption per customer (GJ)</b>						
Residential	49.8	46.0	48.1	49.5	47.4	47.1
Non-residential	1,289.4	1,166.9	1,321.8	1,230.8	1,443.7	1,286.2
<b>Average consumption all customers</b>	<b>77.1</b>	<b>69.8</b>	<b>76.6</b>	<b>75.6</b>	<b>73.0</b>	<b>72.7</b>
<b>Average total charge per customer (\$)</b>						
Residential	750.0	739.0	832.6	987.7	1,023.7	1,050.3
Non-residential	10,685.0	11,526.0	12,257.0	14,931.0	17,369.0	16,600.8
<b>Average total charge all customers</b>	<b>968.9</b>	<b>967.9</b>	<b>1,087.9</b>	<b>1,295.5</b>	<b>1,323.4</b>	<b>1,370.8</b>
<b>Average unit charge per customer (\$/GJ)</b>						
Residential	15.1	16.1	17.3	19.9	21.6	22.3
Non-residential	8.3	9.9	9.3	12.1	12.0	12.9
<b>Average unit charge all customers</b>	<b>12.6</b>	<b>13.9</b>	<b>14.2</b>	<b>17.1</b>	<b>18.1</b>	<b>18.9</b>

Source: Licensed gas utilities' annual reports to ICRC.

**Table F.9 Revenue and capital expenditure, water services, ACTEW Corporation, 2005–06 to 2010–11<sup>1</sup>**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Number of connected properties ('000) <sup>2</sup>	139	140	141	144	146	150
Total urban water supplied (ML)	52,470	47,699	40,749	41,797	41,572	37,371
Total revenue water(\$'000) <sup>3</sup>	78,541	76,031	82,754	101,958	105,250	92,431
Typical residential bill (\$/customer)	403	383	473	484	492	446
Capital expenditure (\$'000 nominal)	27,095	22,122	51,890	95,168	159,398	213,410

1. Levels quoted may vary from earlier data supplied by ACTEW due to different definitions used

2. residential and non-residential

3. Does not include ACT government water abstraction charge or utilities network facilities tax

Source: Water Services Association Australia, National Performance Report 2009–2010: urban water utilities.

**Table F.10 Property numbers and revenue, sewerage services, ACTEW Corporation, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Number of connected properties ('000)	138	139	141	144	145	149
Total revenue (\$'000) <sup>1</sup>	84,539	94,642	97,376	100,390	108,521	113,821
Average revenue per property <sup>1</sup>	613	681	691	697	748	764
Capital expenditure (\$'000, nominal)	6,001	12,135	22,126	54,724	23,274	21,419

1. Does not include ACT government utilities network facilities tax

Source: Water Services Association Australia, National Performance Report 2009–2010: urban water utilities.

**Table F.11 ACT residential tariff structure for water and sewerage, from 1 July 2009 to 1 July 2011**

Tariff item	Description	Tariffs from 1 July 2009 (\$)	Tariffs from 1 July 2010	Tariffs from 1 July 2011
Fixed charge (\$/property—water)		89.55	92.08	95.63
User charge water—first step (\$/kL)	Up to 548 litres per day	1.95	2.00	2.33
User charge water- second step (\$/kL)	Above 548 litres	3.90	4.01	4.66
Fixed charge – sewerage (\$/property)		484.25	516.11	555.39

Source: ActewAGL website:www.actewagl.com.au.

**Table F.12 Customer complaints, electricity distribution, ActewAGL Distribution, 2006–07 to 2010–11**

Complaint item	2006–07	2007–08	2008–09	2009–10	2010–11
Reliability of supply	17	7	26	10	26
Technical quality of supply	21	7	5	9	1
Administrative process or customer service	232	253	181	259	256
Property damage/restoration of property	123	139	86	75	43
Connections	4	17	12	11	8
Metering/meter reading	9	14	15	13	6
Failure to provide notice or provision of insufficient notice	285	225	209	183	196
Other network operations	NA	NA	26	1	24
Other	126	98	51	75	136
<b>Total<sup>a</sup></b>	<b>817</b>	<b>760</b>	<b>611</b>	<b>636</b>	<b>696</b>

NA = not available

a The total number of complaints may differ from the total number reported by ActewAGL Distribution. The totals presented in the table represent the sum of the complaints attributed to each category.

Source: ActewAGL Distribution's annual reports to ICRC.



**Table F.13 Response to complaints and notifications, electricity distribution, ActewAGL Distribution, 2008–09 to 2010–11**

Complaint response	2008–09	2009–10	2010–11
<b>No. of complaints received</b>	611	555	488
No. of complaints acknowledged within 10 business days	607	554	481
No. of complaints responded to within 20 business days	575	531	472
<b>No. of notifications of network problems or concerns about licensee's network received</b>	8,636	8,697	9,252
No. of notifications of network problems likely to affect public health or cause damage to person or property	199	198	281
No. of responses not made within 6 hours	13	213	49
No. of notifications of network problems not likely to affect public health, or cause damage to person or property	8,439	8,499	8,983
No. of responses not made within 48 hours	33	0	0
<b>No. of planned interruptions to services</b>	1,705	2,207	1,636
No. of times licensee did not provide at least 2 days notice	646	416	15
No. of times supply not restored within 12 hours of initial interruption	14	4	10
<b>No. of unplanned interruptions to services</b>	953	625	839
No. of times supply not restored within 12 hours of initial interruption	10	2	18

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.14 Complaints, electricity suppliers, 2008–09 to 2010–11**

Complaint item	2008–09	2009–10	2010–11
Complaints related to:			
billing and affordability	297	244	199
marketing	116	16	10
other retail matters	896	664	295
<b>Total number</b>	<b>1,309</b>	<b>924</b>	<b>504</b>

Source: Licensed electricity utilities' annual reports to ICRC.

**Table F.15 Responses to complaints, ACT electricity suppliers, 2008–09 to 2010–11**

Complaint response item	2008–09	2009–10	2010–11
Total number of complaints	1,309	966	504
Complaints acknowledged within 10 business days	1,237	922	477
Complaints responded to within 20 business days	1,138	819	437

Source: Licensed electricity utilities' annual reports to ICRC.

**Table F.16 Complaints, type and number, gas distribution ActewAGL Distribution, 2007–08 to 2010–11**

Complaint item	2007–08	2008–09	2009–10	2010–11
Property damage/restoration of property	3	6	6	1
Administrative process or customer service	3	3	1	0
Quality and reliability of supply	0	1	3	1
Connections	4	4	7	4
Metering/meter reading	1	0	0	3
Failure to provide, or insufficient, notice	1	0	1	0
Unplanned interruptions	0	0	0	0
Other	0	0	2	6
<b>Total</b>	<b>12</b>	<b>14</b>	<b>20</b>	<b>15</b>

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.17 Response to complaints and notifications, gas distribution, ActewAGL Distribution, 2008–09 to 2010–11**

Complaint and notification response item	2008–09	2009–10	2010–11
<b>Total number of complaints</b>	14	20	15
Number acknowledged in 10 business days	13	20	15
Number responded to in 20 business days	14	18	12
<b>Number of notifications of network problems or concerns about licensee's network received in 2010–11</b>	1,549	1,506	2,042
Notifications likely to affect public health, or cause damage to person or property	225	258	273
Number of responses not made within 6 hours	0	0	0
Notifications not likely to affect public health, or cause damage to person or property	1,324	1,248	1,769
Number of responses not made within 48 hours	168	217	98

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.18 Complaints, gas supply, ACT suppliers, 2007–08 to 2010–11**

Complaint item	2007–08	2008–09	2009–10	2010–11
Billing and affordability	351	411	567	815
Marketing	20	27	17	19
Other retail	325	526	438	749
<b>Total</b>	<b>696</b>	<b>964</b>	<b>1,022</b>	<b>1,583</b>

Source: Licensed gas utilities' annual reports to ICRC.

**Table F.19 Complaints, water supply, 2006–07 to 2010–11**

Complaint item <sup>a</sup>	2006–07	2007–08	2008–09	2009–10	2010–11
Water quality <sup>b</sup>	141	144	191	159	155
Water supply reliability	24	7	3	1	14
Property damage / restoration of property	40	49	54	105	81
Accounts / billing	62	44	63	59	91
Metering / meter reading	40	12	7	68	95
Failure to provide sufficient, notice	9	4	9	7	50
Unplanned interruptions	3	1	3	1	14
Other complaints	44	140	219	78	91
<b>Total</b>	<b>363</b>	<b>401</b>	<b>549</b>	<b>478</b>	<b>591</b>

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 regarding discolouration, taste, odour, stained washing, illness, etc.

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.20 Complaints, sewerage services, 2006–07 to 2010–11**

Complaint item	2006–07	2007–08	2008–09	2009–10	2010–11
Sewage odour <sup>a</sup>	10	9	26	15	7
Sewerage services reliability and quality	14	27	29	40	76
Property damage / restoration of property	19	28	26	74	125
Accounts/billing	0	0	0	0	0
Failure to provide, or insufficient, notice	0	1	0	4	8
Unplanned interruptions	0	18	19	40	40
Other networks	7	14	0	22	168
<b>Total sewerage services</b>	<b>50</b>	<b>97</b>	<b>100</b>	<b>195</b>	<b>421</b>

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.

**Table F.21 Responses to complaints—obligations under Consumer Protection Code, water supply, 2006–07 to 2010–11**

Complaint response item	2006–07	2007–08	2008–09	2009–10	2010–11
No. of customer connections that failed to meet the performance standard specified in the Consumer Protection Code	0	0	0	0	0
Percentage of total connections	0	0	0	0	0
No. of consumer/customer complaints received	363	401	541	474	591
No. acknowledged within 10 business days	341	382	539	460	576
No. responded to within 20 business days	343	376	541	467	572
No. of notifications of network problems or concerns about the licensee's network received	4,537	3,673	3,944	3,525	3,509
No. of 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	114	71
No. of responses not made within 6 hours	0	0	0	0	0
No. of 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	3,411	3,438
No. of responses not made within 48 hours	840	859	980	855	700
No. of problems or concerns not resolved in the time specified in the response	77	116	126	123	147
No. of planned interruptions to services	10,777	1,414	4,750	6,219	5,481
No. of instances where licensee did not provide at least 2 days' notice of a planned interruption to each premises affected	0	0	0	0	22
No. of instances where supply was not restored within 12 hours of initial interruption	0	0	0	0	0
No. of unplanned interruptions to services	727	594	692	657	752
No. of instances where supply not restored within 12 hours of initial interruption	0	0	2	0	0

Complaint response item	2006-07	2007-08	2008-09	2009-10	2010-11
No. of claims for a rebate for failing to meet the performance standards specified in Schedule 1 to the Consumer Protection Code	3	0	0	0	0
No. of rebates paid to customers	8	2	0	0	0
Total value of rebates paid (\$)	220	40	0	0	0

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.22 Response to complaints—obligations under Consumer Protection Code, sewerage services, 2006–07 to 2010–11**

Complaint response item	2006–07	2007–08	2008–09	2009–10	2010–11
No. of customer connections that failed to meet the performance standard specified in the Consumer Protection Code	0	0	0	0	0
Percentage of total connections	0	0	0	0	0
No. of complaints received	50	97	100	155	421
No. acknowledged within 10 business days	50	97	100	151	383
No. responded to within 20 business days	50	96	100	152	382
No. of notifications of network problems or concerns about the licensee's network received	5,181	5,252	5,593	5,249	3,485
No. of 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	25	16
No. of responses not made within 6 hours	0	0	0	0	0
No. of 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	5,224	3,469
No. of responses not made within 48 hours	15	15	27	23	30
No. of problems or concerns not resolved in the time specified in the response	61	63	74	71	47
No. of planned interruptions to services	0	0	0	0	0
Number of instances where licensee did not provide at least 2 days' notice of a planned interruption to each premises affected	0	0	0	0	0
No. of instances where supply was not restored within 12 hours of initial interruption	0	0	0	0	0
No. of unplanned interruptions to services	1,985	2,059	2,229	2,220	1,608
No. of instances where supply not restored within 12 hours of initial interruption	3	1	2	1	3
No. of claims for a rebate for failing to meet the performance standards specified in Schedule 1 to the Consumer Protection Code	1	0	0	0	0



Complaint response item	2006-07	2007-08	2008-09	2009-10	2010-11
No. of rebates paid to customers	0	0	0	0	0
Total value of rebates paid (\$)	0	0	0	0	0

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.23 Planned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2005-06 to 2010-11**

Index	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
<b>SAIDI (average minutes per customer per year without power)</b>						
Urban	49.8	52.2	64.6	59.4	51.5	53.4
Rural	49.5	31.6	38.8	35.9	45.3	56.7
<b>Network total</b>	<b>49.5</b>	<b>51.4</b>	<b>63.6</b>	<b>58.6</b>	<b>51.3</b>	<b>54.3</b>
<b>SAIFI (average number interruptions per customer per year)</b>						
Urban	0.23	0.21	0.25	0.25	0.24	0.24
Rural	0.24	0.14	0.16	0.17	0.20	0.24
<b>Network total</b>	<b>0.23</b>	<b>0.21</b>	<b>0.25</b>	<b>0.25</b>	<b>0.24</b>	<b>0.24</b>
<b>CAIDI (average duration in minutes per interruption)</b>						
Urban	216.5	243.4	255.0	235.6	215.6	222.2
Rural	206.1	225.3	247.0	205.8	229.7	241.6
<b>Network total</b>	<b>215.2</b>	<b>243.0</b>	<b>254.8</b>	<b>234.8</b>	<b>216.1</b>	<b>222.9</b>

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.24 Unplanned interruptions, performance indices, electricity distribution, ActewAGL Distribution, 2005–06 to 2010–11**

Index	2005–06	2006–07	2007–08	2008–09	2010–11	2010–11
SAIDI (average minutes per customer per year without power)						
Urban	45.5	30.7	26.2	33.7	29.7	45.5
Rural	42.9	70.7	10.5	17.0	26.1	92.5
Network total	44.1	32.2	25.6	33.0	29.6	47.7
SAIFI (average number of interruptions per customer per year)						
Urban	0.8	0.6	0.5	0.63	0.66	0.78
Rural	2.9	0.6	1.8	0.27	0.78	0.83
Network total	0.8	0.6	0.6	0.62	0.67	0.80
CAIDI (average duration in minutes per interruption)						
Urban	59.8	52.3	51.0	53.5	45.0	58.3
Rural	15.0	113.5	5.9	62.5	33.4	111.1
Network total	55.1	54.7	45.7	53.5	44.5	60.0

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.25 Gas regulator and meter replacements, ActewAGL Distribution, 2005–06 to 2010–11**

Category	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Regulators replaced	621	620	622	717	534	502
Meters replaced	264	278	203	235	132	119

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.26 Reported leaks, gas distribution, ActewAGL Distribution, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Pipeline length (km)	3,621	3,709	3,758	3,967	3,998	4,064
No. of reported leaks	1,060	897	842	1,185	1,247	1,210
Leaks per 1,000 customers	11.6	9.5	8.9	11.8	11.9	11.5
Leaks per 1,000 km of pipe	294	242	224	299	312	298
No. of mechanical damage incidents to mains and services	195	196	229	224	234	258
No. of times gas specification reached the maximum or minimum limits	72	48	41	48	11	20

Source: ActewAGL Distribution's annual reports to ICRC.

**Table F.27 Planned interruptions, frequency and duration, water supply, ACTEW Corporation, 2005–06 to 2010–11**

Planned interruption item	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Total number of planned interruptions <sup>a</sup>	144	170	682	4,750	6,219	5,481
Average water supply interruption duration <sup>b</sup> (minutes)	71	27	51	17	16	22
Average number of planned interruptions per 1,000 properties	41.0	NA	NA	32.8	NA	622.8
Total interruption faced by an average customer <sup>c</sup> (minutes per property)	2.90	2.06	0.51	0.57	0.68	0.69

NA=not available

a For 2008–09, includes upgrading of approximately 3,800 standard meters and for 2009-10 an upgrading of a further large number of meters.

b Calculated as follows: total time of all planned interruptions/total number of interruptions

c Calculated as follows: total time of all planned interruptions/total number of water properties

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.28 Unplanned interruptions, frequency and duration, water supply, ACTEW Corporation, 2005–06 to 2010–11**

Unplanned interruption item	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Total number of unplanned interruptions to water supply services	798	727	594	692	657	752
Average water supply interruption duration <sup>a</sup> (minutes)	99.0	108.0	110.1	127.6	127.6	110.7

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

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.29 Unplanned interruptions, frequency and duration, sewerage services, ACTEW Corporation, 2005–06 to 2010–11**

Unplanned interruptions items	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Total no. of interruptions	1,847	1,985	2,059	2,229	646	1,608
No. of sewer main breaks and chokes	3,863	3,203	3,363	3,344	3,245	2,435
Sewer main breaks and chokes caused by tree roots	3,670	2,915	3,035	3,034	2,942	1,607
No. of property connection sewer main breaks and chokes	2,033	1,849	2,004	2,077	2,240	1,637
No. of property connection sewer main breaks and chokes caused by tree roots	1,830	1,590	1,708	1,794	1,963	1,293

Source: ACTEW Corporation's annual reports to ICRC.

**Table F.30 Estimated greenhouse gas emissions, ACT electricity consumption, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Electricity sold in the ACT (MWh)	2,816,479	2,823,995	2,817,869	2,865,755	2,914,779	2,936,763
Green power sold in the ACT (MWh) <sup>a</sup>	43,463	61,377	103,637	107,493	120,431	122,461
Per cent of green power sold (%)	1.54	2.17	3.68	3.75	4.13	4.17
Greenhouse gas producing electricity sold in the ACT (MWh)	2,773,015	2,762,618	2,714,232	2,758,262	2,794,348	2,814,302
Electricity pool coefficient for greenhouse emissions(t CO <sub>2</sub> -e/MWh)	0.929	0.941	0.954	0.967	0.973	0.975
Estimated greenhouse gas emissions arising from ACT electricity consumption (t CO <sub>2</sub> -e)	2,576,131	2,599,624	2,589,377	2,667,239	2,718,901	2,743,945
Estimated ACT Population end June	334,119	341,054	345,551	351,118	355,700	361,800
Estimated greenhouse gas emissions per head of population (t CO <sub>2</sub> -e/person)	7.7	7.6	7.5	7.6	7.6	7.6

MWh = megawatt hours; tCO<sub>2</sub>-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.

**Table F.31 Estimated greenhouse gas emissions, ACT natural gas sales, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Natural gas sold in the ACT (TJ)	6,857	6,503	7,216	7,107	7,080	7,642
Sales to large customers (TJ)	1,490	1,041	1,826	1,150	1,933	2,201
Sales to small customers (TJ)	5,368	5,462	5,389	5,957	5,146	5,442
Emission factors (t CO <sub>2</sub> -e/TJ) <sup>a</sup>	68.0	51.2	51.2	51.2	51.2	51.2
Estimated greenhouse gas emissions arising from ACT total natural gas consumption (t CO <sub>2</sub> -e)	466,276	332,954	369,459	363,878	362,496	391,285

a Emission factor for 2005–06 is the NSW and ACT figures from Australian Greenhouse Office, *Factors and methods workbook*, December 2006, Table 2. Emissions factors for 2006–07 to 2010–11 are from Department of Climate Change, *National greenhouse accounts (NGA) factors*, July 2011, Table 2.

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

**Table F.32 Estimated total greenhouse gas emissions, ACT electricity and natural gas consumption, 2005–06 to 2010–11**

Indicator	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Total ACT emissions (t CO <sub>2</sub> -e)	3,042,407	2,932,577	2,958,837	3,031,118	3,081,397	3,135,230
Emissions per head of population (t CO <sub>2</sub> -e)	9.11	8.60	8.56	8.63	8.66	8.67

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