



Energy

Energy Businesses Regulatory Performance Report 2015-16

Network, LPG and off-grid energy businesses

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Glossary of terms

Term	Description
AEMA	Australian Energy Market Agreement
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGN	Australian Gas Networks
APY lands	Anangu Pitjantjatara Yunkunytjarara lands
CBD	Central Business District
Commission	Essential Services Commission
Electricity Act	Electricity Act 1996
ESC Act	Essential Services Commission Act 2002
Gas Act	Gas Act 1997
GSL	Guaranteed Service Level
KPa	Kilopascal (1,000 newtons per square metre) – a measure of pressure
LPG	Liquefied Petroleum Gas
MED	Major event day
NEM	National Electricity Market
NER	National Electricity Rules
SMOS	System Minutes Off Supply
TJ	Terajoules (joules x 10 ¹²)
UAFG	Unaccounted for Gas
USAIDI	Unplanned System Average Interruption Duration Index
USAIFI	Unplanned System Average Interruption Frequency Index

Executive summary

The Essential Services Commission (**Commission**) reports annually on the performance of regulated energy businesses in delivering essential services to South Australian consumers. This is the Commission's 17th annual report on the performance of regulated energy businesses against their customer service and reliability service standards and the consumer protection framework. It covers the period 1 July 2015 to 30 June 2016.

The Commission has functions under the Electricity Act 1996 (**Electricity Act**) and the Gas Act 1997 (**Gas Act**) for licensing and monitoring the performance of businesses in the electricity and gas supply industries. Businesses that engage in generation of electricity, operation of a transmission or distribution network, power system control or retailing of energy (off-grid energy retailers only)¹ fall under the Commission's licensing and monitoring regime.

The Commission's role encompasses the regulation of service reliability standards for SA Power Networks (electricity distribution), ElectraNet (electricity transmission) and Australian Gas Networks (gas distribution). Those service standards are set out in Industry Codes administered by the Commission. The Australian Energy Regulator (**AER**), with reference to the Commission's service reliability standards, sets the efficient level of expenditure for network operators to provide the required distribution or transmission services at the specified standards.

The licensing and monitoring regime also extends to regional areas of South Australia. Locations that do not participate in the National Electricity Market (**NEM**) are provided with electricity by off-grid generators, distributors and retailers. Similarly, some locations not connected to Australian Gas Networks' natural gas distribution network are provided with a reticulated gas service by distributors and retailers of Liquefied Petroleum Gas (**LPG**). Distribution and retail licences issued by the Commission authorise these activities and set out conditions for operating in the industry.

This is the first year of a new regulatory period for SA Power Networks (running from 1 July 2015 to 30 June 2020), during which network reliability service standards will be applied to the performance of categories of distribution lines, rather than for regions (as in prior years). The regulatory period for ElectraNet runs from 2013 to 2018, and from 2011 to 2016 for Australian Gas Networks.

The Energy Businesses Regulatory Performance Report 2015-16 (**Report**) covers the three energy network businesses, as well as off-grid and LPG distributors and retailers. It does not cover electricity generation businesses licenced by the Commission.² An accompanying time series data for SA Power Networks, ElectraNet and Australian Gas Networks is available on the Commission's website.

The Commission's key observations in the Report are set out below.

SA Power Networks

- ▶ SA Power Networks met network reliability service standards for all feeder categories.
- ▶ The state-wide distribution network experienced only one Major Event Day (**MED**)³ in 2015-16. MEDs had the lowest contribution to interruptions on the distribution network since 2007-08.

¹ The AER is responsible for customer protection and performance monitoring in the national electricity and gas retail markets, that is, on-grid energy retailers.

² The Commission licenses generators with a rated nameplate output of more than 100 kilovolt-amperes that supply electricity for reward by means of a transmission or distribution network. The Commission undertakes monitoring and enforcement of compliance with the conditions in those licences and relevant industry regulation Acts.

³ MEDs refer to days on which reliability performance are statistical outliers from normal performance. The majority of MEDs result from severe or abnormal weather events (although other factors can result in MEDs).

- ▶ The duration of state-wide network outages, excluding MEDs, was lower than the average over the last 10 years.
- ▶ Regional network reliability was in line with prior years.
- ▶ SA Power Networks met all customer responsiveness service standards.

ElectraNet

- ▶ The number of transmission supply interruptions (and duration of these interruptions) was lower than the historical average.
- ▶ ElectraNet met exit point reliability standard timeframes for restoring transmission line capacity after line failures.

Australian Gas Networks

- ▶ Australian Gas Networks met service standards relating to the amount of gas lost from the gas distribution network. Gas lost reduced in 2015-16 (to approximately 2.6 percent of gas entering the distribution system), continuing the downward trend of the past six years.
- ▶ There were no significant, protracted interruptions to customers' supply on the gas distribution network in the year.

Off-grid and LPG retailers and distributors

- ▶ Approximately 9,000 customers receive either electricity or LPG through off-grid distribution networks.
- ▶ All of these businesses complied with their customer service and network reliability obligations in 2015-16, as set out in their licences.

1 Introduction

The Essential Services Commission (**Commission**) is a statutory authority established as an independent economic regulator and advisory body under the Essential Services Commission Act 2002 (**ESC Act**).

The Commission has economic regulatory responsibility in the water and sewerage, electricity, gas, maritime and rail industries, conducts formal public inquiries and provides advice to Government on economic and regulatory matters. The ESC Act, together with various industry Acts, provide the Commission with those regulatory and advisory powers and functions.

Under the ESC Act, the Commission has the primary objective of:

“...protection of the long term interests of South Australian consumers with respect to the price, quality and reliability of essential services”.

The ESC Act, the Electricity Act 1996 (**Electricity Act**) and the Gas Act 1997 (**Gas Act**) (and the regulations under those Acts) establish the Commission’s regulatory powers and functions in relation to energy businesses.

The Commission’s role includes the licensing of energy businesses (generation, transmission, distribution, power system control and off-grid suppliers), making industry codes (including setting service standards), enforcing compliance with licensees’ regulatory obligations and performance monitoring and reporting.

1.1 Purpose

The Commission publishes annual regulatory performance reports for licensed energy businesses operating in South Australia. The provision of information to the general public on the performance of regulated businesses promotes the Commission’s primary objective by ensuring that those businesses are accountable for their performance.

This Regulatory Performance Report 2015-16 (**Report**) is for the period 1 July 2015 to 30 June 2016 and covers the following energy businesses:

- ▶ SA Power Networks⁴ (electricity distribution)
- ▶ ElectraNet⁵ (electricity transmission)
- ▶ Australian Gas Networks⁶ (gas distribution)
- ▶ Off-grid electricity retailers and distributors, and
- ▶ Liquefied Petroleum Gas (**LPG**) retailers and distributors.

⁴ SA Power Networks, ABN 13 332 330 749

⁵ ElectraNet Pty Ltd, ABN 41 094 482 416

⁶ Australian Gas Networks Ltd, ABN 19 078 551 685

1.2 Regulation of energy businesses

The Commission is responsible, under the Electricity Act and the Gas Act, for licensing and monitoring businesses in the electricity and gas supply industries. Businesses that engage in generation of electricity, operation of a transmission or distribution network, power system control or retailing of energy (off-grid energy retailers only) fall under the Commission's licensing and performance monitoring regime.

Table 1 summarises the Commission's functions under the Electricity and Gas Acts.

Table 1: Commission's regulatory functions in the electricity and gas industries

Legislation	Regulatory functions
Electricity Act 1996	<p>Electricity generation, transmission, distribution and off-grid suppliers:</p> <ul style="list-style-type: none"> ▶ licensing ▶ network service/reliability standard setting, and ▶ performance monitoring and reporting. <p>Electricity retail operations:</p> <ul style="list-style-type: none"> ▶ determination of the retailer solar photovoltaic Feed-in Tariff ▶ preparation and publication of Ministerial Energy Retail Pricing reports, and ▶ Retailer Energy Efficiency Scheme administration.
Gas Act 1997	<p>Gas retail operations:</p> <ul style="list-style-type: none"> ▶ preparation and publication of Ministerial Energy Retail Pricing reports, and ▶ Retailer Energy Efficiency Scheme administration. <p>Licensing of retail and distribution LPG gas operations.</p> <p>Licensing of natural gas network operations, standard setting, performance monitoring and reporting.</p>

1.2.1 Energy network businesses

The Commission's role encompasses the regulation of service reliability standards for SA Power Networks (electricity distribution), ElectraNet (electricity transmission) and Australian Gas Networks (gas distribution), in accordance with the Australian Energy Market Agreement (**AEMA**). The AEMA provides for State and Territory Governments to have responsibility for developing service reliability standards for those network businesses. These service standards are set out in Industry Codes administered by the Commission. The Australian Energy Regulator (**AER**), with reference to the Commission's customer service and network reliability service standards, sets the efficient revenue requirement for network operators to provide the required distribution or transmission services at the specified standards.

The Commission monitors network businesses' performance against those service reliability standards and other key metrics that impact on services to South Australian customers.

1.2.2 Off-grid and LPG networks businesses

The licensing and monitoring regime also extends to regional areas of South Australia. Locations that do not participate in the NEM are provided with electricity by off-grid generators, distributors and retailers. Similarly, some locations not connected to Australian Gas Networks' gas distribution network, are provided with a reticulated gas service by distributors and retailers of LPG. Distribution and retail licences issued by the Commission authorise these activities and set out conditions for operating in the industry.

The Commission monitors certain customer service and network reliability metrics for these off-grid and LPG distributors and retailers to ensure customers are receiving an appropriate level of service. During 2016-17, the Commission will be undertaking an Inquiry into the regulatory arrangements for small-scale and off-grid water, electricity and gas services.⁷ The Commission has formed the view that an Inquiry into the way in which it regulates small-scale utility operations is necessary and desirable at this time to ensure that the regulatory frameworks it applies under industry regulation Acts protect consumer's long-term interests and are proportionate and responsive to recent and emerging issues.

⁷ Refer <http://www.escosa.sa.gov.au/projects-and-publications/projects/inquiries/inquiry-into-regulatory-arrangements-for-small-scale-water-sewerage-and-energy-services/inquiry-into-regulatory-arrangements-for-small-scale-and-off-grid-water-gas-and-electricity-services>.

2 Electricity distribution

2.1 South Australian electricity distribution network

SA Power Networks operates the major South Australian electricity distribution network which connects each of its customers to the NEM.

The SA Power Networks distribution network covers an area of about 178,200 square km, along a coastline of over 5,000 km. The network extends to over 85,000 km of which approximately 20 percent is underground. SA Power Networks serves over 850,000 customers. Approximately 70 percent of customers reside in the Greater Metropolitan Area of Adelaide, but 70 percent of the network infrastructure is required to deliver energy to the remaining 30 percent of customers.

2.2 Regulatory regime

The Commission's powers and functions in relation to SA Power Networks are contained in the Electricity Act and the ESC Act, and its regulatory requirements for SA Power Networks are set out in the terms and conditions of its electricity distribution licence, the Electricity Distribution Code and Electricity Industry Guideline No. 1 - Distribution.

As a monopoly service provider, SA Power Networks is subject to economic regulation in respect of the revenues it is permitted to earn from South Australian consumers. The AER is responsible for administering that regulatory regime under the National Electricity Rules (NER). 2015-16 is the first year of the 2015-2020 regulatory determination period.

In May 2014, the Commission released its Final Decision on the jurisdictional service standards to apply to SA Power Networks for the 2015-2020 regulatory period. These standards relate to network reliability and customer service and are set out in the Electricity Distribution Code.⁸ The AER, with reference to these standards, made a regulatory determination for SA Power Networks on 31 October 2015.

In setting the services standards to apply to SA Power Networks for 2015-2020, a key consideration was consistency with the AER's Service Target Performance Incentive Scheme, which provides financial rewards or penalties to SA Power Networks based on performance against service targets.

2.3 Customer service

2.3.1 Performance against customer service standards

SA Power Networks is required to use best endeavours to achieve customer service standards relating to response to customer telephone calls and written enquires. SA Power Networks received approximately 432,000 telephone calls and 723 written enquiries in 2015-16. It met both its customer service standards in 2015-16 (Table 2).

Table 2: SA Power Networks Performance against Customer Service Standards

Standard	Target	2015-16 performance	Service standard met
Telephone calls answered within 30 seconds	85%	87%	
Written enquiries answered within five business days	95%	99%	

⁸ Refer <http://www.escosa.sa.gov.au/ArticleDocuments/512/20141007-Elec-DistributionCodeEDC12.pdf.aspx?Embed=Y>.

2.4 Network reliability

2.4.1 How performance is measured

2.4.1.1 Network reliability service standards

For the 2015-2020 regulatory period, the reliability of SA Power Networks' distribution network is measured by the frequency and the duration of unplanned interruptions. The Commission set the following network reliability service standards:

- ▶ Unplanned System Average Interruption Duration Index (**USAIDI**). This reliability index is the average duration (in minutes) of supply interruptions per customer per year. This standard is referred to as "duration of interruptions (USAIDI)" in this report.
- ▶ Unplanned System Average Interruption Frequency Index (**USAIFI**) reliability indices. This reliability index is the average number of supply interruptions per customer per year. This standard is referred to as "frequency of interruptions (USAIFI)" in this report.

The network reliability targets reflect differences in the levels of interconnection and redundancy in SA Power Networks' physical network across the state. SA Power Networks' feeders are divided into four broad categories for the purposes of monitoring network reliability:

- ▶ Central Business District (**CBD**) feeders - those supplying predominantly commercial, high-rise buildings, supplied by a predominantly underground distribution network containing significant interconnection and redundancy when compared to urban areas.
- ▶ Urban feeders – those with actual maximum demand over the reporting period per total feeder route length (for example, load density) greater than 0.3 megavolt amps/km (but which are not CBD feeders).
- ▶ Short rural feeders – those with a total route length less than 200 km (but which are not CBD or urban feeders). Short Rural feeders may include feeders in fringe urban areas with low load densities.
- ▶ Long rural feeders – those with a total route length greater than 200 km (but which are not CBD or urban feeders).

Basing targets on feeder categories is consistent with the reliability indices used in the AER's Service Target Performance Incentive Scheme. Prior to the 2015-2020 regulatory period, network reliability targets were set for seven geographic regions (Figure 1).

The network reliability targets have been set based on historical performance for the years 2009-10 to 2013-14, reflecting generally high customer satisfaction with current levels of electricity supply reliability.

The targets exclude SA Power Networks' performance during a Major Event Day (**MED**)⁹ (such as storms/heatwaves), and are referred to as normalised performance – the metrics used are normalised duration of interruptions (USAIDI) and normalised frequency of interruptions (USAIFI). SA Power Networks' restoration performance during MEDs is assessed separately from daily operations. This is

⁹ MEDs refer to days on which reliability performance are statistical outliers from normal performance. The methodology used to identify excluded days was developed by the Institute of Electrical and Electronics Engineers. The majority of MEDs result from severe or abnormal weather events (although other factors can result in MEDs). Excluding MEDs allows major events to be studied separately from daily operations, and in the process, to better reveal trends in daily operation that would be hidden by the large statistical effect of major events.

consistent with the reliability methodology used in the AER's Service Target Performance Incentive Scheme.

The network reliability standards are 'best endeavours' average annual service standards for unplanned interruptions. They require SA Power Networks to use its best endeavours to meet specified average service level targets each year for the four feeder categories. Where a target is not met, this does not necessarily mean the standard is not met. The standard may still be met if SA Power Networks can demonstrate that it has used best endeavours in trying to meet the target that year.

The Commission considers several factors in assessing whether or not SA Power Networks has used its best endeavours to meet a network reliability standard. These include:

- ▶ the effect of localised weather events which may impact significantly on a particular feeder category performance.
- ▶ performance of SA Power Networks' restoration of supply following severe weather events, based on:
 - the time taken to restore supply, using the Unplanned Customer Average Interruption Duration Index, considering the relative severity of the event, and
 - the contribution of equipment failure to the duration of the interruption.
- ▶ preparation for imminent severe weather events, and
- ▶ other impacts on the network that may have affected performance during the year.

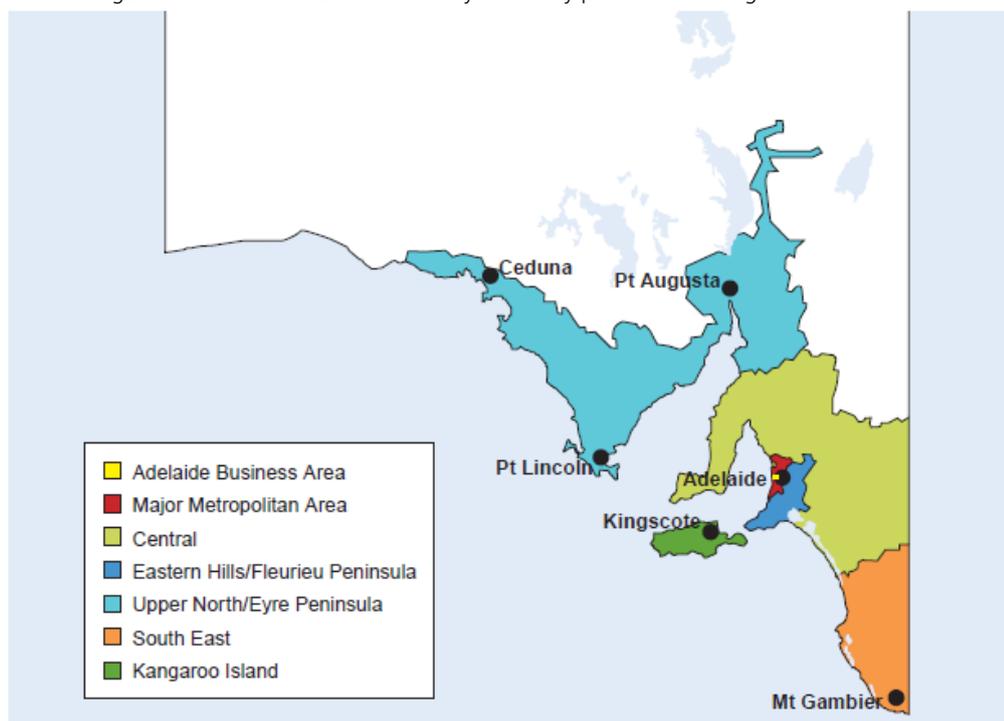
As network performance is expected to vary from year to year, and the service standard targets are based on average historical performance, the Commission also considers whether there is any evidence of a deteriorating long-term trend in performance.

The Electricity Distribution Code also requires SA Power Networks to use its best endeavours to minimise interruptions or limitations to supply caused by planned interruptions, such as carrying out maintenance or repair to the distribution network, connecting a new supply address to the distribution network or carrying out augmentations or extensions to the distribution network.

2.4.1.2 Regional reliability monitoring

Recognising that customers seeking to understand the levels of reliability they receive may be unaware of the type of network feeder they are on, the Commission also continues to review the reliability performance outcomes in the seven geographic regions (Figure 1).

Figure 1- South Australian electricity reliability performance regions



Observing departures from longer term average performance outcomes allows the Commission to monitor whether the shift to feeder categories results in any degradation of average historical performance at a regional level.

2.4.1.3 Other network reliability metrics

The Commission also assesses performance of Low Reliability Distribution Feeders, which are the parts of the network that experience frequent and protracted outages. This element of performance reporting provides some assurance that SA Power Networks is giving due consideration to poorly performing parts of its network.

A Low Reliability Distribution Feeder within a particular region is defined as an individual feeder with duration of interruptions (USAIDI) performance approximately twice as high as the target for that feeder class for two consecutive financial years.¹⁰ Low Reliability Distribution Feeders are often located in rural or remote parts of the network where restoration activities following a fault can often be influenced by difficult terrain or long distances that need to be patrolled to locate and repair the fault.

Remediation of Low Reliability Distribution Feeders is dependent, to a degree, on the extent of the benefit gained relative to the cost of the work. Understandably, there will be situations where the costs far outweigh the benefits. There will remain parts of the network with lower reliability, and the Commission will continue to report on performance of those over time. To some extent, Guaranteed Service Level (GSL) payments serve to balance the impact of lower reliability performance for the affected customers.

¹⁰ Refer p. 16 <http://www.escosa.sa.gov.au/library/100617-ServiceStandards2010-2015-FinalDecision.pdf>.

2.4.2 Network performance in 2015-16

2.4.2.1 Summary of performance

In 2015-16, SA Power Networks met all supply interruption service standards (Table 3).

Table 3: SA Power Networks Performance against interruption service standards

Feeder category	Duration of interruptions (minutes/customer/year)			Frequency of interruptions (number/customer/year)		
	Target	2015-16 result	Service standard met	Target	2015-16 result	Service standard met
CBD	15	2	●	0.15	0.02	●
Urban	120	98	●	1.30	1.04	●
Rural short	220	175	●	1.85	1.48	●
Rural long	300	289	●	1.95	1.70	●
Overall (implied target)	165	139	●	1.50	1.20	●

Figures 2 to 5 show the normalised duration of interruptions and frequency of interruptions performance of SA Power Networks for each of the four feeder categories over the last 11 years – the historical performance for the years 2009-10 to 2013-14 was used to set the current regulatory period targets) and 2015-16. The duration of interruptions and frequency of interruptions for each feeder category in 2015-16 were low compared to prior years.

Figure 2 – CBD feeder category normalised duration of interruptions (USAIDI) and frequency of interruptions (USAIFI) performance over the last 11 years

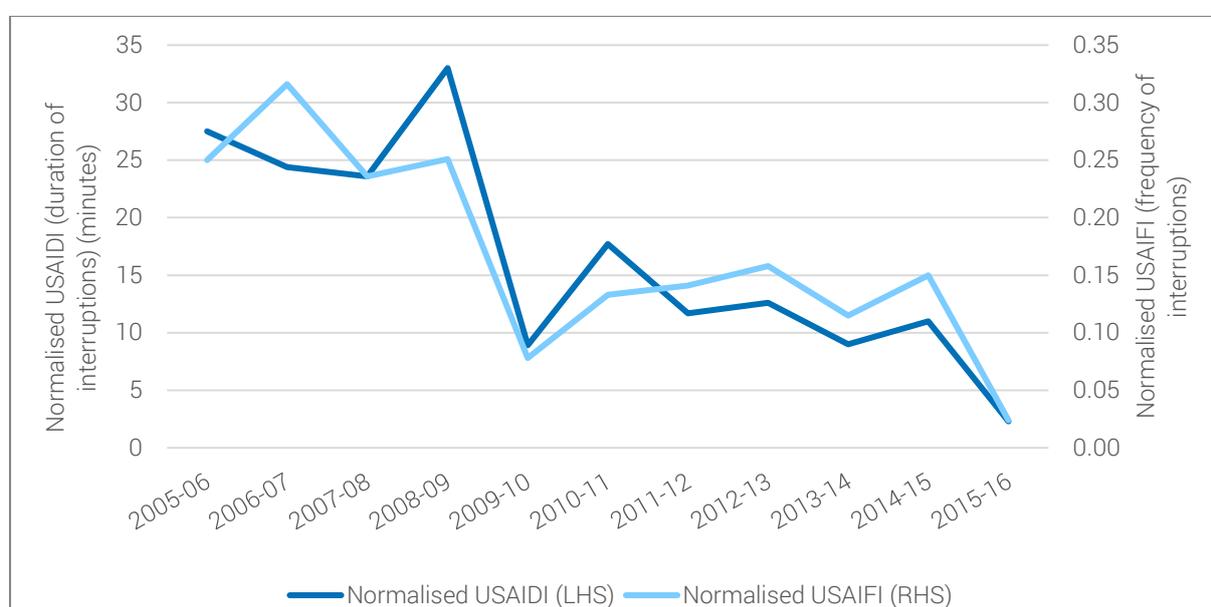


Figure 3 – **Urban feeder category** normalised duration of interruptions and frequency of interruptions performance over the last 11 years

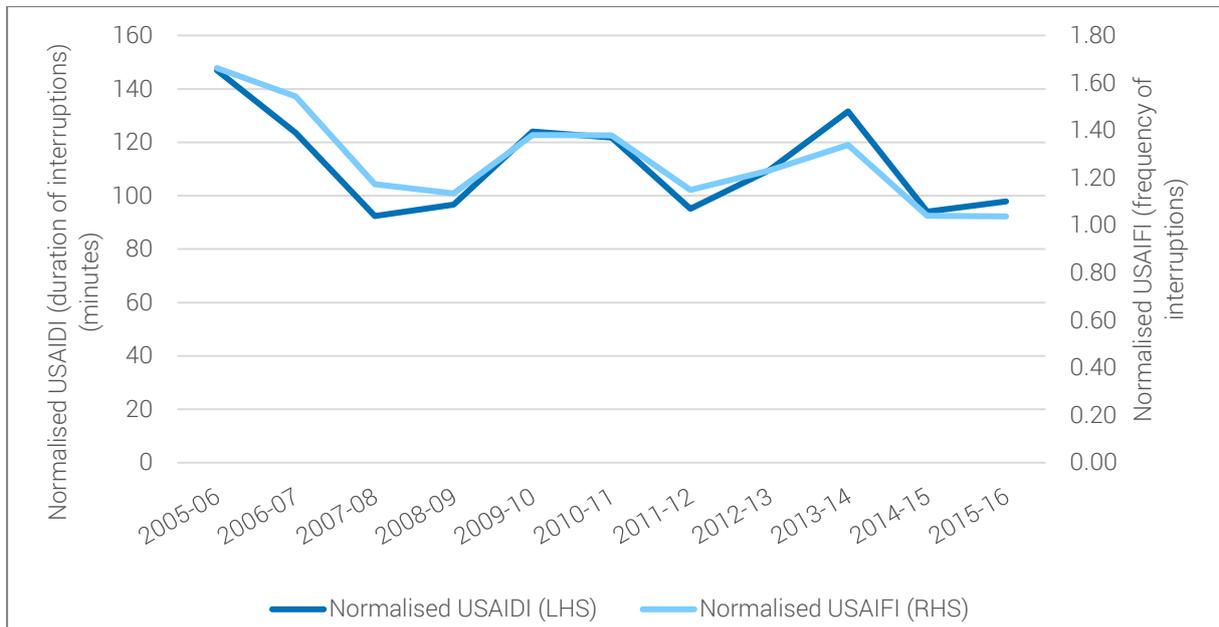


Figure 4 – **Rural short feeder category** normalised duration of interruptions and frequency of interruptions performance over the last 11 years

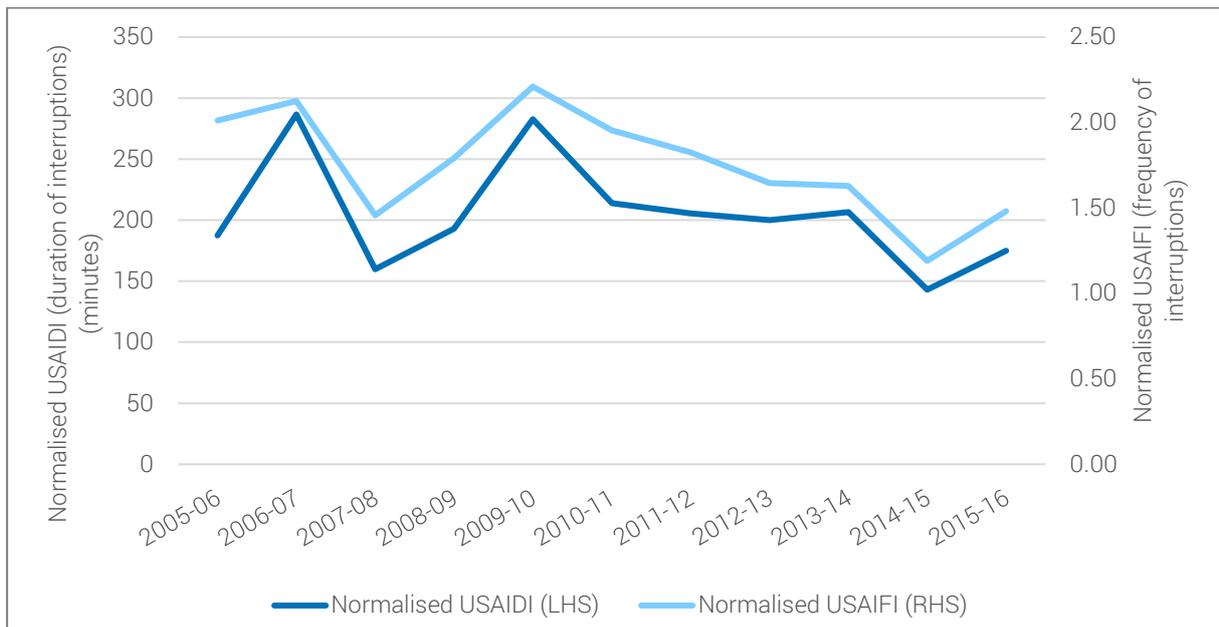
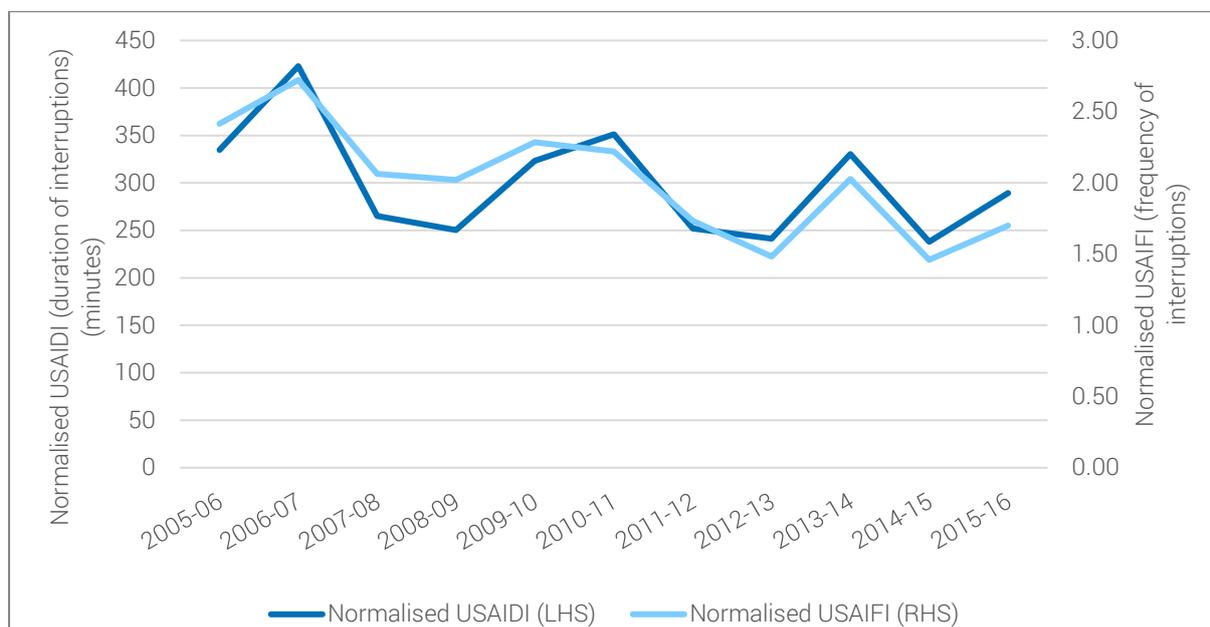


Figure 5 – Rural long feeder category normalised duration of interruptions and frequency of interruptions performance over the last 11 years



2.4.2.2 Causes of interruptions

Table 4 summarises the causes of interruptions to customers in 2015-16, by reference to the contribution to state-wide normalised duration of interruptions of each cause. Note that the impact of MEDs is excluded and therefore the table shows the underlying causes of interruptions.¹¹

Table 4: Interruption causes contribution to state-wide normalised duration of interruptions (excluding MEDs) in 2015-16

Interruption cause	Normalised duration of interruptions	Proportion of normalised duration of interruptions	Average for last six years
Weather	42	20%	22%
Equipment failure	47	22%	23%
Planned	78	36%	32%
Other (unplanned)	50	22%	23%

The split of causes is generally consistent with the average over the last six years. As noted in section 2.4.1, the service standards for duration and frequency of interruptions are for unplanned interruptions only, noting that the Electricity Distribution Code requires SA Power Networks to use its best endeavours to minimise interruptions or limitations to supply caused by planned interruptions.

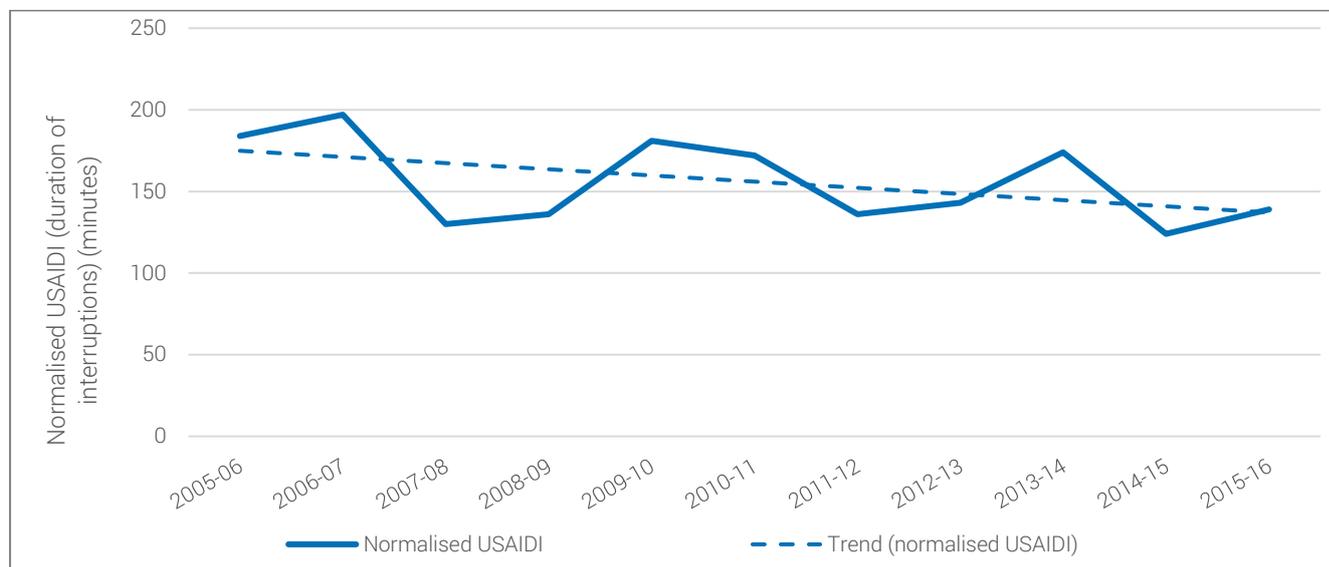
It is expected that there will be some variability in non-weather impacted performance from year to year, and the best endeavours framework allows individual events and circumstances to be analysed when assessing whether or not service standards have been met.

¹¹ In prior Regulatory Performance Reports, data did not exclude MEDs.

2.4.2.3 Long term normalised performance

Figure 6 shows state-wide normalised average duration of interruptions between 2005-06 and 2015-16. The effect of MEDs has been removed for each year so that underlying performance over time can be assessed.

Figure 6 – Normalised state-wide duration of interruptions performance over the last 11 years¹²



State-wide normalised average duration of interruptions in 2015-16 was lower than the average observed over the last 10 years. State-wide normalised average frequency of interruptions was also lower in 2015-16 than the average over the 10 year period.

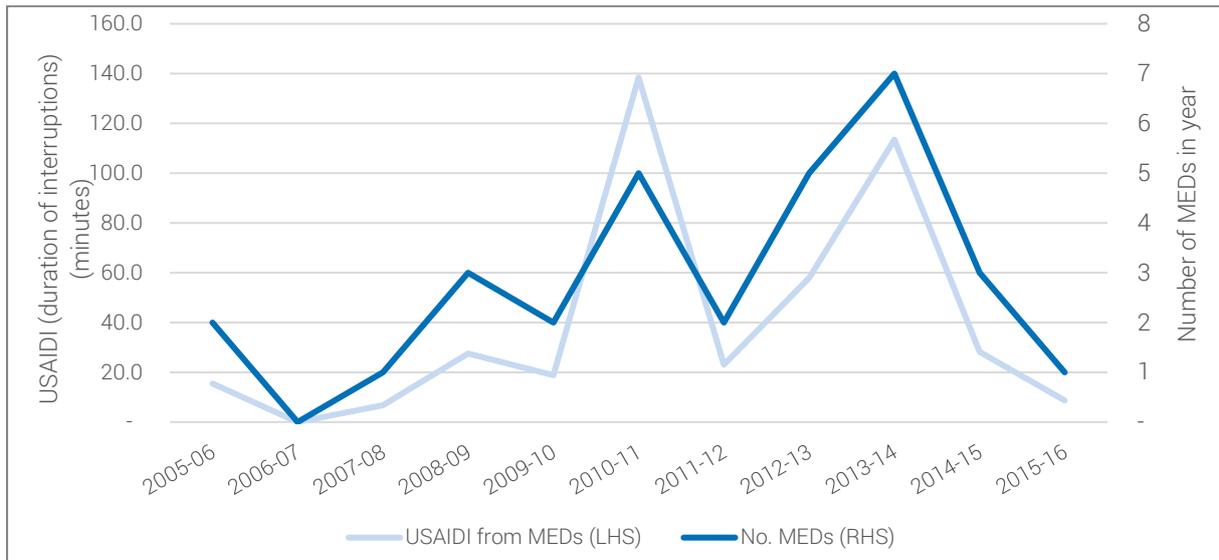
2.4.2.4 Severe weather impacts in 2015-16

Severe weather events can vary significantly in their strength and can have differing effects on the distribution network, depending on their location and their duration. Though not evident during 2015-16, the increasing impact of severe weather events on the network over time appears to be caused by a combination of greater severity and greater asset damage resulting from each event.

In 2015-16, there was one MED (9 May 2016) which contributed 8.7 minutes to duration of interruptions, compared to the average of 3.0 MEDs per annum over the ten-year period 1 July 2005 to 30 June 2015, contributing an annual average 43 minutes to duration of interruptions. This was the lowest contribution to interruptions from MEDs since 2007-08 (Figure 7).

¹² Duration of interruptions between 2006-07 to 2009-10 are for the high voltage network only. From 2010-11 includes duration of interruptions on the low voltage network.

Figure 7 – MEDs and State-wide impact of MEDS on duration of interruptions performance over the last 11 years



2.4.2.5 Restoration of supply following MEDs

In assessing the performance of SA Power Networks in restoring customer supply following a MED, factors that the Commission considers include the time taken to restore supply (considering the relative severity of the event) and the contribution of equipment failure to the duration of the interruption.

SA Power Networks categorises MEDs by the severity of the impact to the distribution network, that is, the duration of interruptions (USAIDI) of the MED. Category 1 events are those with a maximum daily duration of interruptions (USAIDI) of less than nine minutes. The event on 9 May 2016 was therefore a Category 1 event.

Since 2005-06 there have been 31 MEDs, of which 17 were Category 1. The average restoration time (using the Unplanned Customer Average Interruption Duration Index) for Category 1 events has been approximately 180 minutes, with most MEDs having an Unplanned Customer Average Interruption Duration Index of between 150 and 210 minutes. For the event on 9 May 2016, SA Power Networks' restoration performance is within the normal range and SA Power Networks' Unplanned Customer Average Interruption Duration Index performance has been relatively stable over the last 11 years.

The proportion of duration of interruptions (USAIDI) contribution from 'equipment failure' during the MED was also broadly consistent with that for other MEDs over the last 11 years.

2.4.2.6 Performance by region

The sections below provide a summary of the reliability performance outcomes in the seven geographic regions for which service standard targets existed prior to the 2015-16 regulatory reporting period. The focus of the Commission's analysis is on identifying whether SA Power Networks' performance appears to be departing from longer term average performance in each region.

The Commission continues to monitor both duration and frequency of interruptions, but the analysis in this section largely reports on duration of interruptions as the best single indicator to demonstrate the impact of network performance on customers (frequency of interruptions regional performance data is available on the Commission's website).

Consistent with the Commission's approach to setting the feeder category service standards, monitoring of regional performance is primarily focused on normalised performance, where the impact of severe weather events have been removed. Exclusion of the impact of MEDs from regional

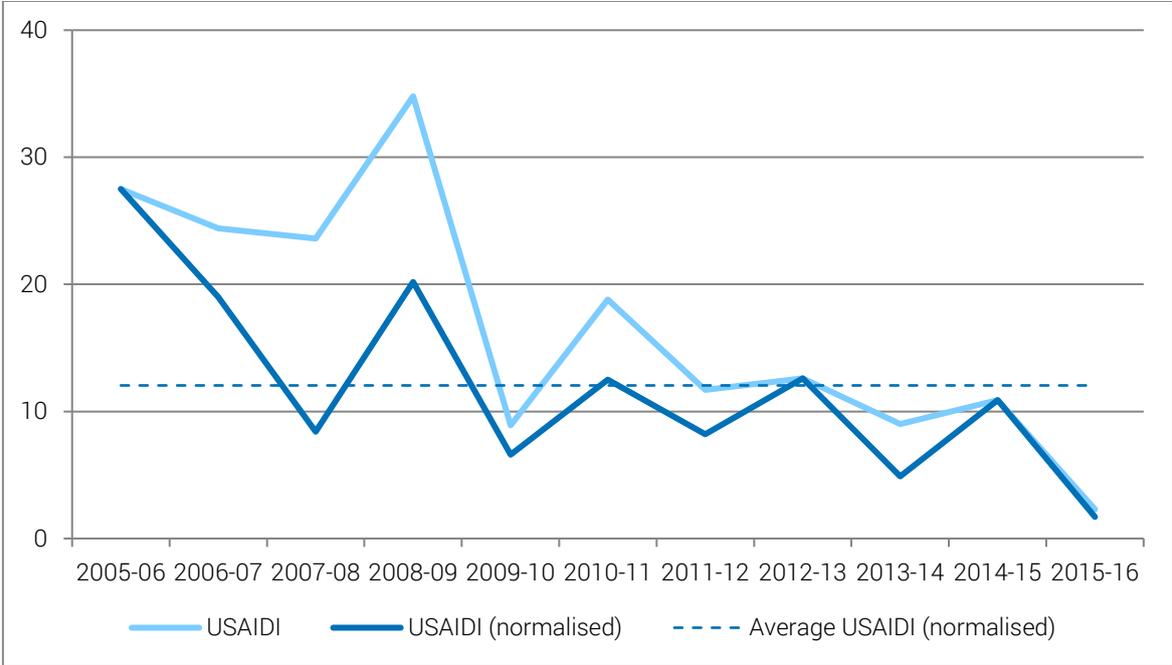
performance does not effectively remove the annual variations in a region’s reliability performance that result from localised, Bureau of Meteorology verified, severe weather events. It is therefore more useful to ‘normalise’ regional performance by removing localised major severe weather events. However, where necessary, the Commission considers the performance of SA Power Networks in responding to localised (non-MED) events.

2.4.2.6.1 Adelaide Business Area

The Adelaide Business Area covers Adelaide CBD bordered within the parklands. The region accounts for 0.6 percent of SA Power Networks’ customers and comprises 0.4 percent of the distribution system by length. The distribution network is about 90 percent underground and is therefore not normally affected by severe weather.

Figure 8 shows that the duration of interruptions (USAIDI) in the Adelaide Business Area in 2015-16 was lower than the long term average.

Figure 8 - Adelaide Business Area duration of interruptions performance (minutes)

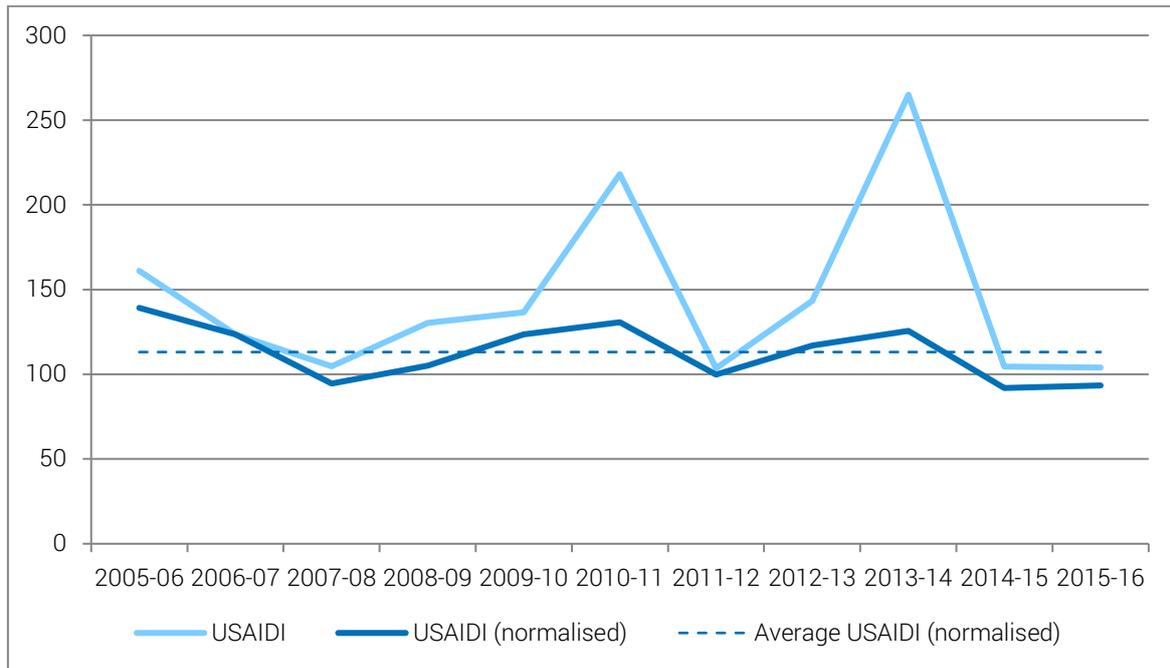


2.4.2.6.2 Major Metropolitan Areas

The Major Metropolitan Areas region supplies 70 percent of SA Power Networks’ customers and comprises 31 percent of the distribution system by length, including most of the Adelaide region and other major centres outside of the Adelaide region. Approximately 40 percent of the distribution network in this region is underground.

Figure 9 shows that the duration of interruptions (USAIDI) in the Major Metropolitan Area in 2015-16 was lower than the long term average.

Figure 9 - Major Metropolitan Areas duration of interruptions performance (minutes)

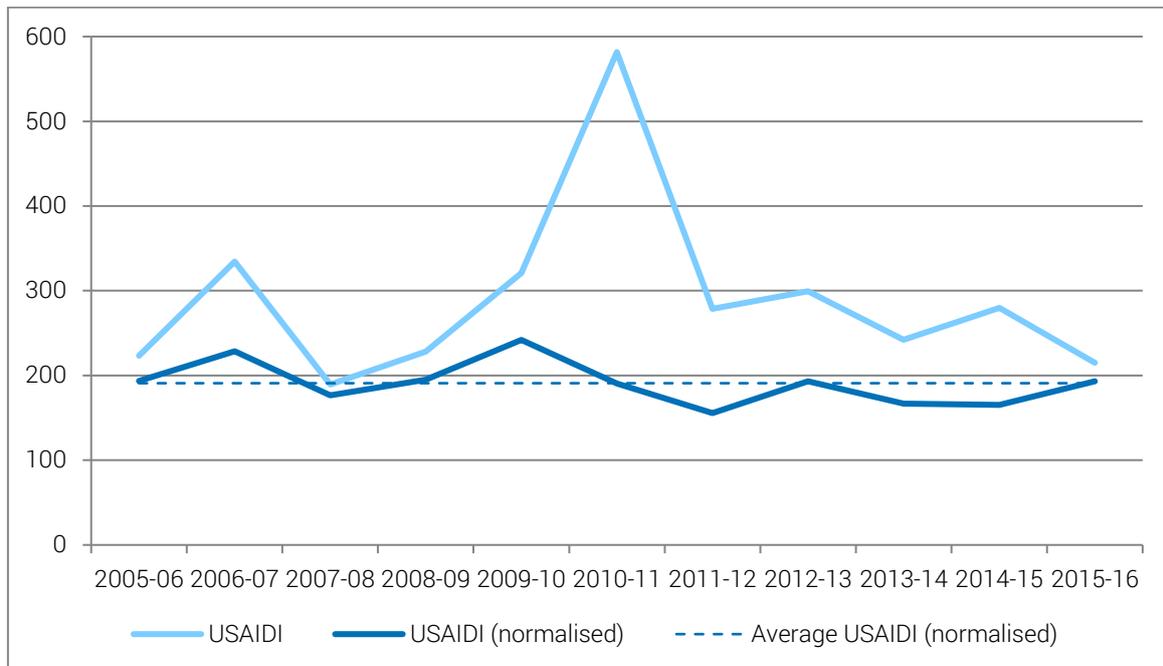


2.4.2.6.3 Central region

The Central region covers the Barossa, Mid-North, Riverland and Murraylands. The region accounts for 12 percent of SA Power Networks' customers but comprises 29 percent of the distribution system by length. The distribution network in the Central region is nine percent underground.

Figure 10 shows that the duration of interruptions (USAIDI) in the Central region in 2015-16 was broadly in line with the long term average.

Figure 10 – Central region duration of interruptions performance (minutes)

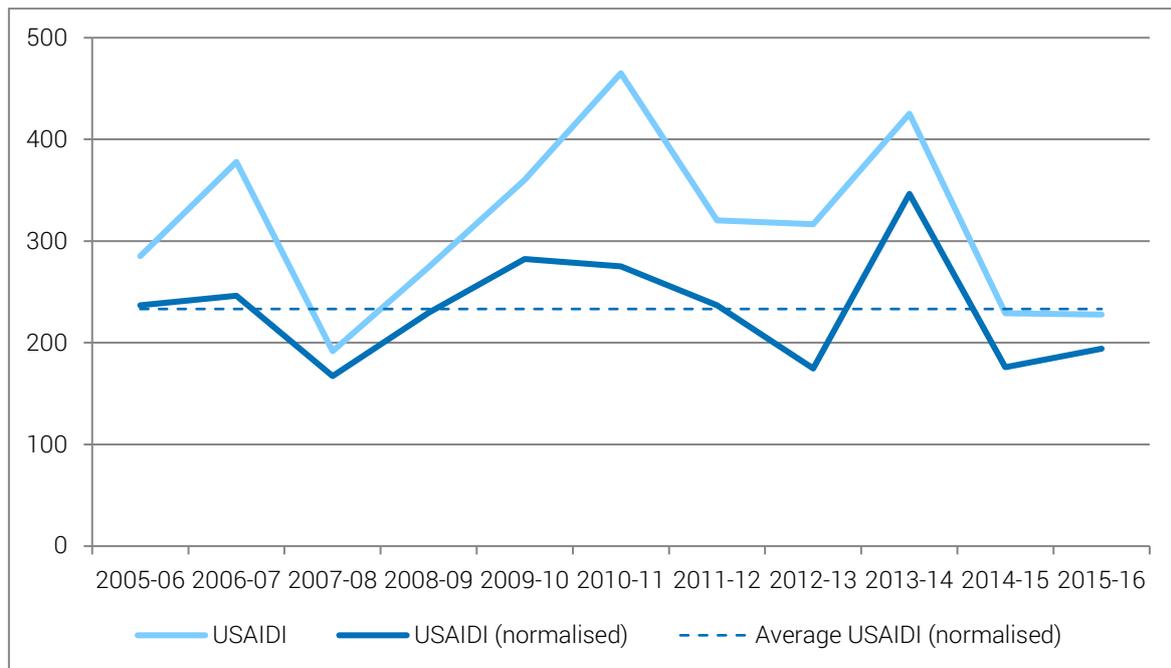


2.4.2.6.4 Eastern Hills/Fleurieu Peninsula

The Eastern Hills/Fleurieu Peninsula supplies nine percent of SA Power Networks' customers and comprises nine percent of the distribution system by length. The distribution network is 21 percent underground.

Figure 11 shows that the duration of interruptions (USAIDI) in the Eastern Hills/Fleurieu Peninsula in 2015-16 was lower than the long term average.

Figure 11 - Eastern Hills/Fleurieu Peninsula duration of interruptions performance (minutes)

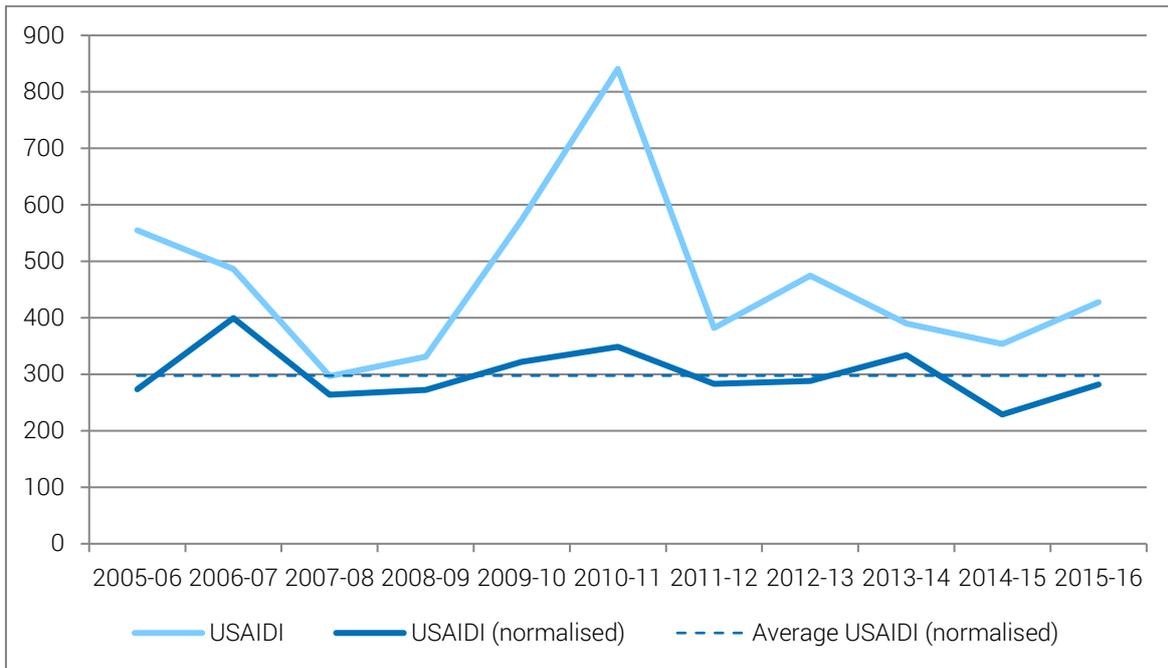


2.4.2.6.5 Upper North/Eyre Peninsula

The Upper North/Eyre Peninsula region accounts for five percent of SA Power Networks' customers but comprises 19 percent of the distribution system by length. The distribution network is only four percent underground.

Figure 12 shows that the duration of interruptions (USAIDI) in the Upper North/Eyre Peninsula region in 2015-16 was broadly in line with the long term average.

Figure 12 - Upper North/Eyre Peninsula duration of interruptions performance (minutes)

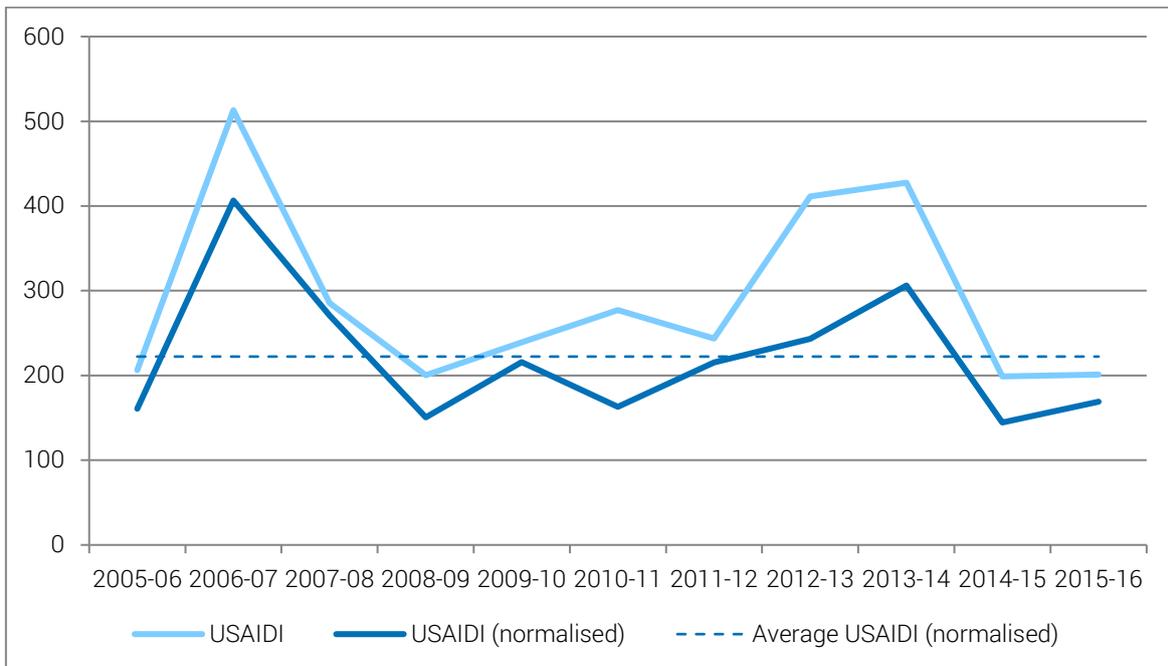


2.4.2.6.6 South East

The South East region supplies four percent of SA Power Networks' customers but comprises 11 percent of the distribution system by length. The distribution network is only six percent underground.

Figure 13 shows that the duration of interruptions (USAIDI) in the South East region in 2015-16 was lower than the long term average.

Figure 13 - South East duration of interruptions performance (minutes)

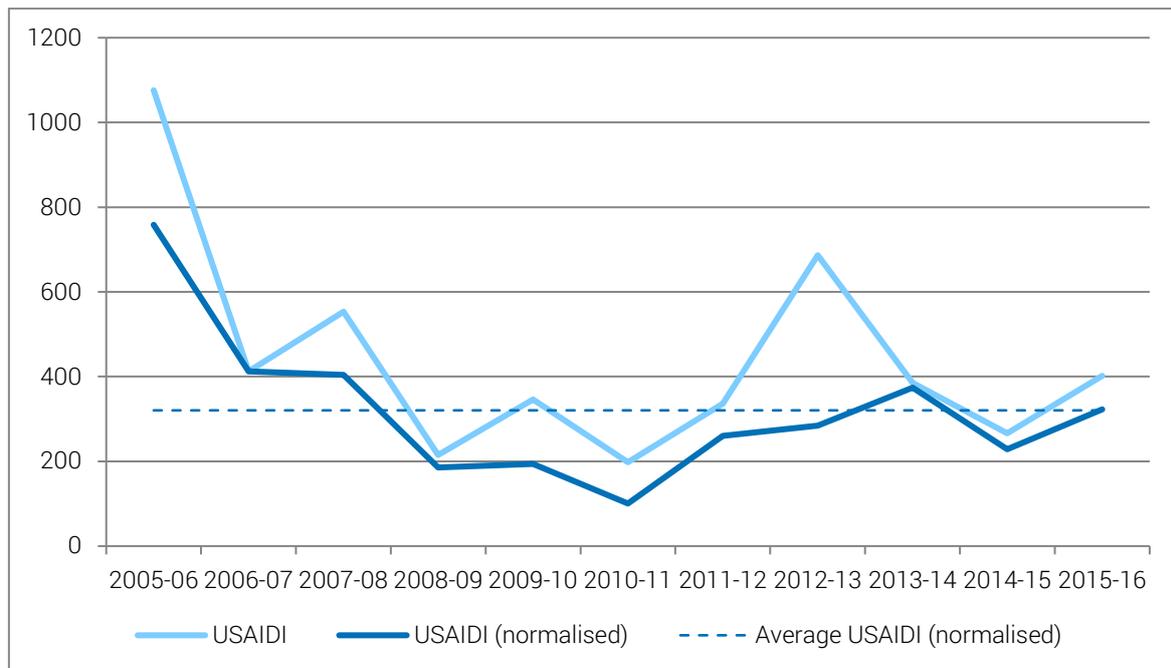


2.4.2.6.7 Kangaroo Island

The Kangaroo Island network supplies 0.5 percent of SA Power Networks' customers and comprises 1.7 percent of the distribution system by length. The distribution network is only eight percent underground.

Figure 14 shows that the duration of interruptions (USAIDI) on Kangaroo Island in 2015-16 was broadly in line with the long term average.

Figure 14 - Kangaroo Island duration of interruptions performance (minutes)



2.4.2.7 Low reliability distribution feeders

In assessing performance, the Commission reviews the number of Low Reliability Distribution Feeders and customers affected in any given year. The review process focuses on individual feeder performance (including during MEDs) in poorly served parts of the network over two or more consecutive years, thus reducing the variability impact of individual events in any one year (for example, storms or abnormal incidents).

In 2015-16, there were 71 feeders that qualified as Low Reliability Distribution Feeders affecting 18,032 customers (two percent of the customer base), compared to 108 feeders affecting 23,611 customers in 2014-15 (Table 5 and Table 6). The decrease in the number of Low Reliability Distribution Feeders in 2015-16 was largely due to the reduced effect of severe weather events during the year, particular on rural long feeders in the Central, Easter Hills/Fleurieu Peninsula and Upper North and Eyre Peninsula regions.

Table 5 : Low reliability performing feeders in 2012-13 to 2015-16 (by feeder category)

Feeder category	2012-13		2013-14		2014-15		2015-16	
	No. of feeders	No. of customers						
CBD	0	0	2	195	0	0	1	7
Urban	8	8,461	18	25,309	10	12,450	11	12,388
Rural short	20	4,439	24	4,733	10	1,872	8	1,688
Rural long	83	7,740	101	11,539	88	9,289	51	3,949
State-wide	111	20,640	145	41,776	108	23,611	71	18,032

Table 6: Low reliability performing feeders in 2012-13 to 2015-16 (by region)

Region	2012-13		2013-14		2014-15		2015-16	
	No. of feeders	No. of customers						
Adelaide Business Area	0	0	2	195	0	0	1	7
Major Metropolitan Areas	14	9,074	24	26,269	15	12,763	11	12,388
Central	49	5,271	42	4,149	41	4,483	18	1,444
Easter Hills/Fleurieu Peninsula	9	2,022	19	5,624	12	3,414	4	1,729
Upper North and Eyre Peninsula	23	1,623	36	2,492	30	2,073	32	1,857
South East	13	2,340	19	2,755	8	669	4	490
Kangaroo Island	3	310	3	292	2	209	1	117
State-wide	111	20,640	145	41,776	108	23,611	71	18,032

Three feeders, supplying 115 customers, have been classed as Low Reliability Distribution Feeders for five or more consecutive years, and a further six feeders, supplying 473 customers, have been classed as Low Reliability Distribution Feeders for four or more consecutive years (Table 7). Of those nine feeders, three demonstrated a poorer performance in 2015-16 than in 2014-15. Seven feeders, that were Low Reliability Distribution Feeders for the four previous years, were no longer categorised as Low Reliability Distribution Feeders in 2015-16.

Table 7: Number of feeders classed as low reliability distribution feeders for consecutive years

Year	Number of feeders - consecutive years as Low Reliability Distribution Feeder				
	2 Years	3 Years	4 Years	5 Years	6 Years
2015-16	14	6	6	2	1
2014-15	28	12	5	5	not applicable
2013-14	31	13	15	not applicable	not applicable
2012-13	25	31	not applicable	not applicable	not applicable

2.5 Guaranteed Service Level (GSL) payments

2.5.1 What are GSL payments?

Under the Electricity Distribution Code, SA Power Networks is required to make payments to customers who have received service that is worse than a pre-determined threshold.

While GSL payments are directed at individual customers, they also provide a financial incentive for SA Power Networks to assess the trade-off between making GSL payments and undertaking capital and/or operating expenditure to address poor performance.

GSL payments are made in recognition of the inconvenience caused to customers, rather than attempting to reflect the full (and different) costs incurred by individual customers in response to a long interruption. SA Power Networks administers a separate customer compensation scheme for damage or losses resulting from an incident associated with its electricity distribution network where SA Power Networks is negligent.

The categories of GSL payments are: timeliness of appointments; promptness of new connections; timeliness of street light repairs; duration of supply interruption,¹³ and frequency of supply interruption. From 2015-16, a new long duration supply interruption GSL payment of \$605 for single interruptions in excess of 48 hours was introduced. To maintain the value of GSL payments, the GSL payment amounts for the 2015-2020 regulatory period were increased to reflect movements in the Consumer Price Index since the GSL regime was first established in 2005.

Most GSL payments relate to the duration of interruptions during major severe weather events. Table 8 details the duration of interruptions, GSL thresholds and levels of payments.

Table 8: Duration of interruption GSL thresholds and payment amounts

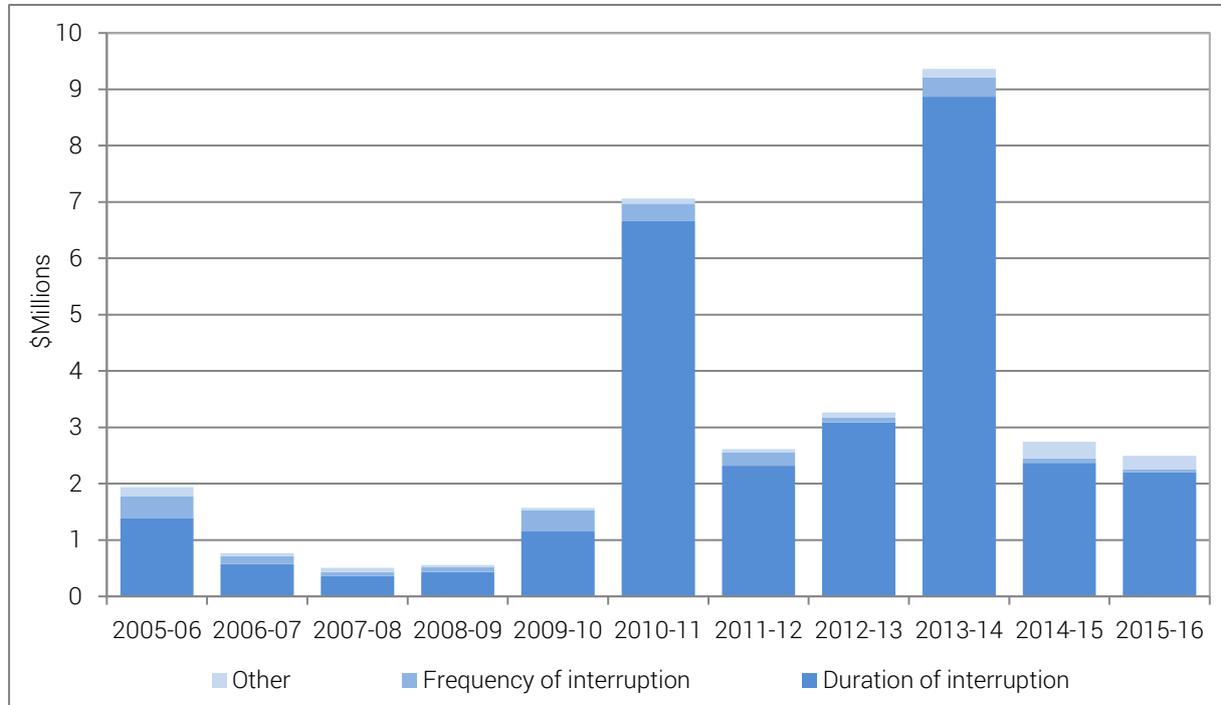
	Threshold 1	Threshold 2	Threshold 3	Threshold 4	Threshold 5
Duration of interruption (hours)	>12≤ 15	>15≤ 18	>18≤ 24	>24≤ 48	>48
Payment	\$100	\$150	\$200	\$405	\$605

¹³ While SA Power Networks' reliability targets exclude performance during severe or abnormal weather events that qualify as MEDs, GSL payments are made to customers that experience interruptions during MED excluded events.

2.5.2 GSL payments in 2015-16

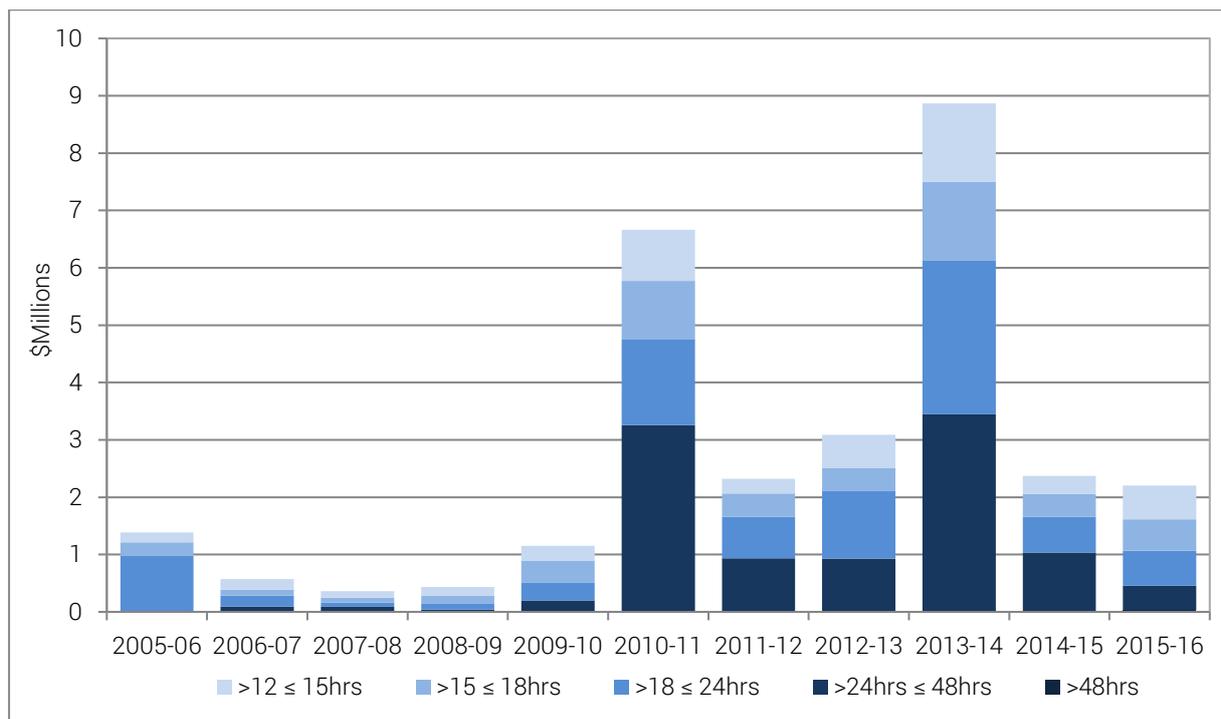
The total level of GSL payments made in 2015-16 was slightly lower than in 2014-15. A total of \$2.5 million (Figure 15) was paid to customers. The majority of GSL payments (88 percent) were for duration of interruptions, usually resulting from protracted outages following severe weather events.

Figure 15 - GSL payments by category



There were increases in the GSL payments for interruptions lasting up to 18 hrs, but GSLs paid for longer interruptions (> 18hrs) were lower than in 2014-15 (Figure 16).

Figure 16 - GSL duration payments 2005-06 to 2014-15



2.5.3 Street light repairs

SA Power Networks is obliged to use its best endeavours to repair faulty street lights for which it is responsible, within five business days in major metropolitan and major regional centres and within 10 business days in regional areas.

The proportion of street lights SA Power Networks repaired within these timeframes in 2015-16 was similar to the historical average. Ninety-six percent of street light faults in the major metropolitan and major regional centres were repaired within five working days. In regional areas, over 99 percent of street light faults were repaired within 10 working days. However, in major metropolitan and major regional centres the length of time taken to repair those street lights not fixed within five business days has increased over the last four years. This suggests that a small number of street lights are remaining broken for extended periods. As a result, SA Power Networks paid \$190,650 in GSL payments to individuals who reported the faulty street light where it did not complete repairs within the required time.

2.6 Compliance

It is a condition of all electricity licences that licensees comply with all applicable laws including, but not limited to the Electricity Act and regulations under that Act.

2.6.1 SA Power Networks compliance issues in 2015-16

Details of the key compliance issues reported by SA Power Networks in 2015-16 are outlined in the following sections. Compliance issues already reported on by another regulator, such as the AER, are not included.

2.6.1.1 Asset inspections

Clause 8 of SA Power Networks' Electricity Distribution Licence specifies obligations relating to its Safety, Reliability, Maintenance and Technical Management Plan. SA Power Networks is behind in its asset inspections for non-bushfire risk areas and is implementing a multi-year plan to ensure all inspections are up to date by 31 December 2018. As part of its asset inspections, SA Power Networks has reported that it is collecting additional data that is helping it to better prioritise maintenance work to attend to the highest risk defects, such as potential fire start and public safety defects.

3 Electricity transmission

3.1 South Australian electricity transmission network

ElectraNet is the monopoly service provider of NEM transmission services in South Australia.

The electricity transmission network in South Australia extends across approximately 200,000 square kilometres, and includes 88 high voltage substations and 5,600 route kilometres of transmission lines. The transmission network transports electricity from generators at voltages of 275 kV and 132 kV to the State's lower-voltage distribution network (owned and operated by SA Power Networks) and to some large industrial customers.

3.2 Regulatory regime

The Commission, as a part of its licensing function, is able to set certain regulatory obligations, including transmission network reliability standards, through the Electricity Transmission Code. As a condition of its licence, ElectraNet must comply with the Electricity Transmission Code.

As a monopoly service provider, ElectraNet is subject to economic regulation in respect of the revenue it is permitted to earn from South Australian consumers. The AER is responsible for administering that regulatory regime under the NER.

The Electricity Transmission Code forms a part of the broader regulatory scheme for electricity transmission in the NEM. The NER establish technical standards, dealing with matters such as network frequency, system stability, voltage quality and fault clearance. The Commission's role is confined to the development and administration of reliability standards, which are jurisdictional standards that align with, and complement, the NER technical standards. These reliability standards, set for the 2013-2018 regulatory period, are set out in the Electricity Transmission Code.

In 2016-17, the Commission will release its Final Determination on the regulatory obligations, including transmission network reliability standards, to apply to ElectraNet for the 2018-2023 regulatory period.

3.3 Network reliability

3.3.1 How performance is measured

3.3.1.1 Mandated exit point reliability standards

The Commission sets service standards, in the Electricity Transmission Code, for mandated exit point reliability, the obligation to restore supply within specified timeframes in the event of an outage and the requirement to provide redundant capacity so that supply is continuous even if one part of the network fails. Each exit point category has specific reliability and supply restoration standards. Exit points are the connections between ElectraNet's transmission network and its customers, such as SA Power Networks or, in a small number of cases, directly connected customers.

Category 1 has the lowest reliability and supply restoration requirements and Category 5 has the highest requirements. The standards require, in effect, a level of security (also referred to as redundancy) to be built into ElectraNet's transmission system so that it can, in most cases, maintain a continuous electricity supply. Further, when network elements fail, the standards require remediation within specified timeframes. The categorisation of exit points is based on periodic assessments as to whether or not the costs of augmenting each exit point are outweighed by the value to customers of the increased reliability that would result.

3.3.1.2 Other reliability metrics

The Commission monitors other transmission network reliability metrics that impact South Australian customers, notably:

- ▶ number of power system incidents – where the transmission network supply is interrupted, usually as a result of a power line tripping.
- ▶ System Minutes Off Supply (SMOS) attributed to power system incidents - a measure of transmission network unavailability. It is an indicator of the service level of the transmission network in supplying energy to network customers.

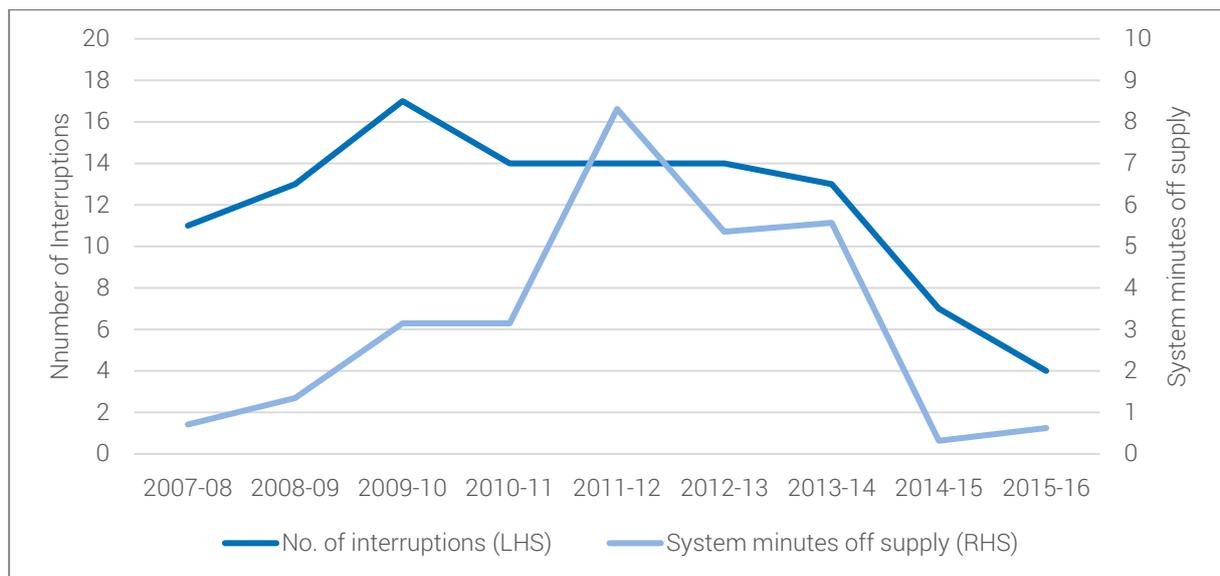
3.3.2 Network performance in 2015-16

3.3.2.1 Supply interruptions

There was one transmission line failure in 2015-16, occurring on the Davenport – Leigh Creek 132kV line on 7 December 2015, due to storm activity. ElectraNet restored line capacity within the exit point reliability standard timeframe specified in the Electricity Transmission Code. There were no transformer failures in the year.

There were two power system interruptions with SMOS attributed to ElectraNet in 2015-16 (Figure 17), significantly fewer than in prior years. None of these events resulted in protracted interruptions affecting large numbers of customers.

Figure 17 - Number of transmission supply interruptions per annum and associated minutes off supply



3.3.3 Heywood and Murraylink Interconnectors

The Commission licenses and monitors compliance with licence requirements for the two regulated interconnectors between the South Australian and Victorian regions of the NEM; the Heywood interconnector, of which the South Australia section is operated by ElectraNet, and the Murraylink interconnector, operated by the Murraylink Transmission Company.

ElectraNet and the Murraylink Transmission Company did not report any non-compliances with their licence requirements in 2015-16.

The Australian Energy Market Operator (**AEMO**) provides information regarding the historic energy flows across the two interconnectors.¹⁴

3.4 Compliance

It is a condition of all electricity licences that licensees comply with all applicable laws including, but not limited to, the Electricity Act and regulations under that Act.

3.4.1 ElectraNet compliance issues in 2015-16

There were no reported compliance issues during the year.

¹⁴ Refer <http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Congestion-information/Network-status-and-capability> for links regarding interconnector capability performance.

4 Gas distribution

4.1 South Australian gas distribution network

Australian Gas Networks (**AGN**) distributes natural gas to consumers through its gas distribution network.

The South Australian gas distribution network, which comprises 8,110 km of gas mains, serves over 435,000 customers. AGN distributed over 31,000 terajoules (**TJ**) of gas to customers in 2015-16.

4.2 Regulatory regime

The Commission's powers and functions in relation to AGN are contained in the Gas Act and the ESC Act, and the Commission's regulatory requirements for AGN are set out in the terms and conditions of the gas distribution licence held by AGN, the Gas Distribution Code and Gas Guideline No. 1 - Distribution.

AGN is required to meet service standards relating to minimising gas leaks. These service standards were set for the 2011 to 2016 regulatory period. The Gas Distribution Code also requires AGN to maintain gas pressure in the system, maintain the capability of the distribution system, and to maintain a Gas Measurement Management Plan and a Safety, Reliability, Maintenance and Technical Management Plan.

As a monopoly service provider, AGN is subject to economic regulation in respect of the revenues it is permitted to earn from South Australian consumers. The AER is responsible for administering that regulatory regime. The five-year regulatory determination period ended on 30 June 2016, and a new five-year regulatory period commenced on 1 July 2016.

4.3 Network reliability

4.3.1 How performance is measured

4.3.1.1 Minimising gas leaks

The Commission has set a requirement in the Gas Distribution Code that AGNs' Safety, Reliability, Maintenance and Technical Management Plan must include an Unaccounted for Gas (**UAFG**) plan, covering leakage management, asset management and mains replacement. AGN is required to use its best endeavours to achieve a level of UAFG for its distribution system of no more than 1,626 TJ by the end of 2015-16, and to reduce the levels of unaccounted for gas in each year of the regulatory period until 30 June 2016.

The level of UAFG is the difference between the measured quantities of gas entering the AGN distribution network and the measured quantities of gas billed to end-user customers. AEMO is responsible for calculating UAFG.

4.3.1.2 Other reliability metrics

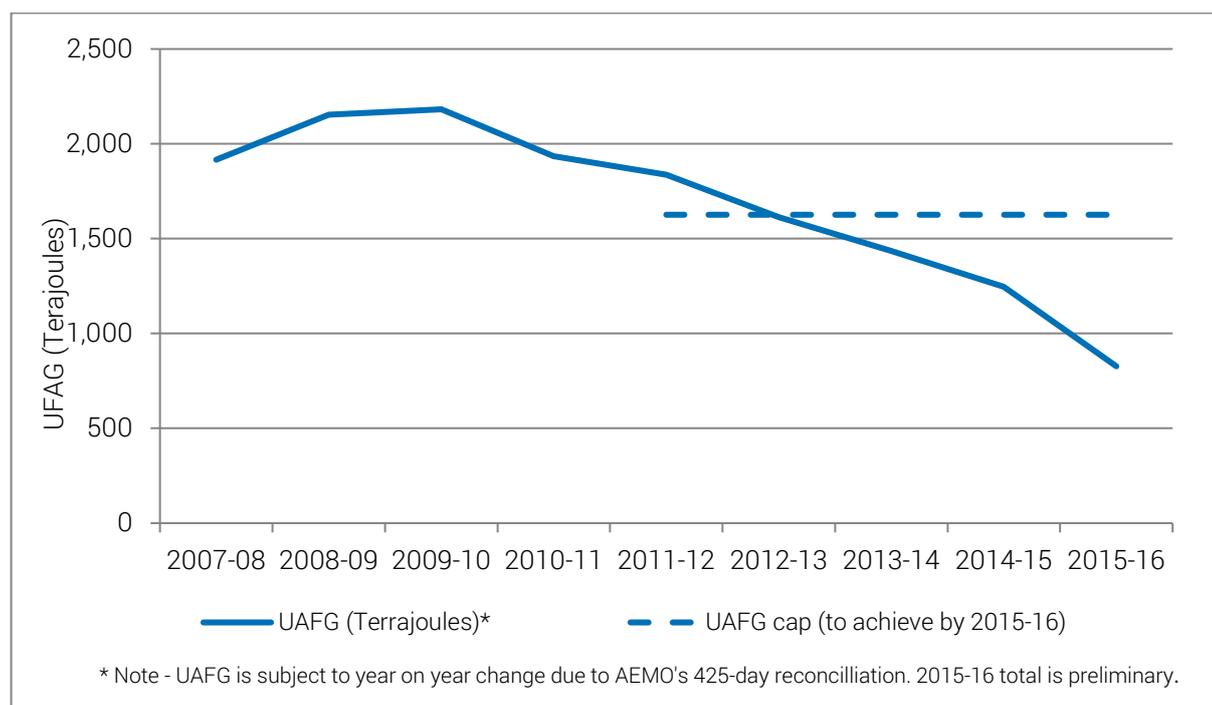
The Commission monitors unplanned supply interruptions, including the numbers of customers affected and the duration of the interruptions. The Commission has not set service standards for responsiveness to potential gas leaks nor timeliness to restore supply after an interruption.

4.3.2 Network performance in 2015-16

4.3.2.1 Unaccounted for gas (UAFG)

AGN met the service standards in the Gas Distribution Code relating to UAFG. UAFG in the AGN network fell 34 percent in 2015-16 to 827 TJ (Figure 18), against the final 2014-15 value of 1,246 TJ. The 2015-16 UAFG amount is 49 percent below the cap of 1,626 TJ set in the Gas Distribution Code. The 2015-16 UAFG is approximately 2.6 percent of gas entering the gas distribution network.

Figure 18 - UAFG and mains replaced (cast iron and unprotected steel mains)



4.3.2.2 Supply interruptions

AGN reported 20 unplanned interruptions in 2015-16 affecting the supply of gas to five or more customers in which a total of 426 customers were affected. The longest interruption was when supply was lost to 25 customers for 17 hours in Seaton on 10 August 2015 following the intrusion of water into a gas pipeline.

4.4 Compliance

It is a condition of all gas licences that licensees comply with all applicable laws including, but not limited to the Gas Act and regulations under that Act.

4.4.1 Australian Gas Networks compliance issues in 2015-16

4.4.1.1 Low gas pressure

The Gas Distribution Code requires AGN to maintain gas pressure at the outlet of the meter in low pressure mains at between 1 kilopascal (kPa) and 3 kPa, and in medium or high pressure mains, at between 2.75 kPa and 3.25 kPa. AGN reported that instances occurred during 2015-16, where the pressure in parts of the network was below these minimum requirements. These were mainly caused by third-party damage to mains and water ingress into low pressure mains after heavy rain. AGN has reported the same non-compliance for the last five years.

AGN is undertaking a long term mains replacement program to eliminate water ingress into low pressure mains, and the number of such incidents is falling. The Commission appreciates that third-party damage to mains is largely beyond the control of AGN. The Commission is satisfied by the remedial action being undertaken by AGN in addressing these compliance issues.

5 Off-grid electricity networks

5.1 South Australian off-grid electricity networks

Many remote locations not connected to the national electricity grid are provided with electricity through off-grid networks. The Commission regulates these services through the licensing and consumer protection regime under the Electricity Act.

Approximately 5,800 customers in South Australia are supplied through off-grid electricity networks (Table 9).

Table 9: Off-grid electricity networks

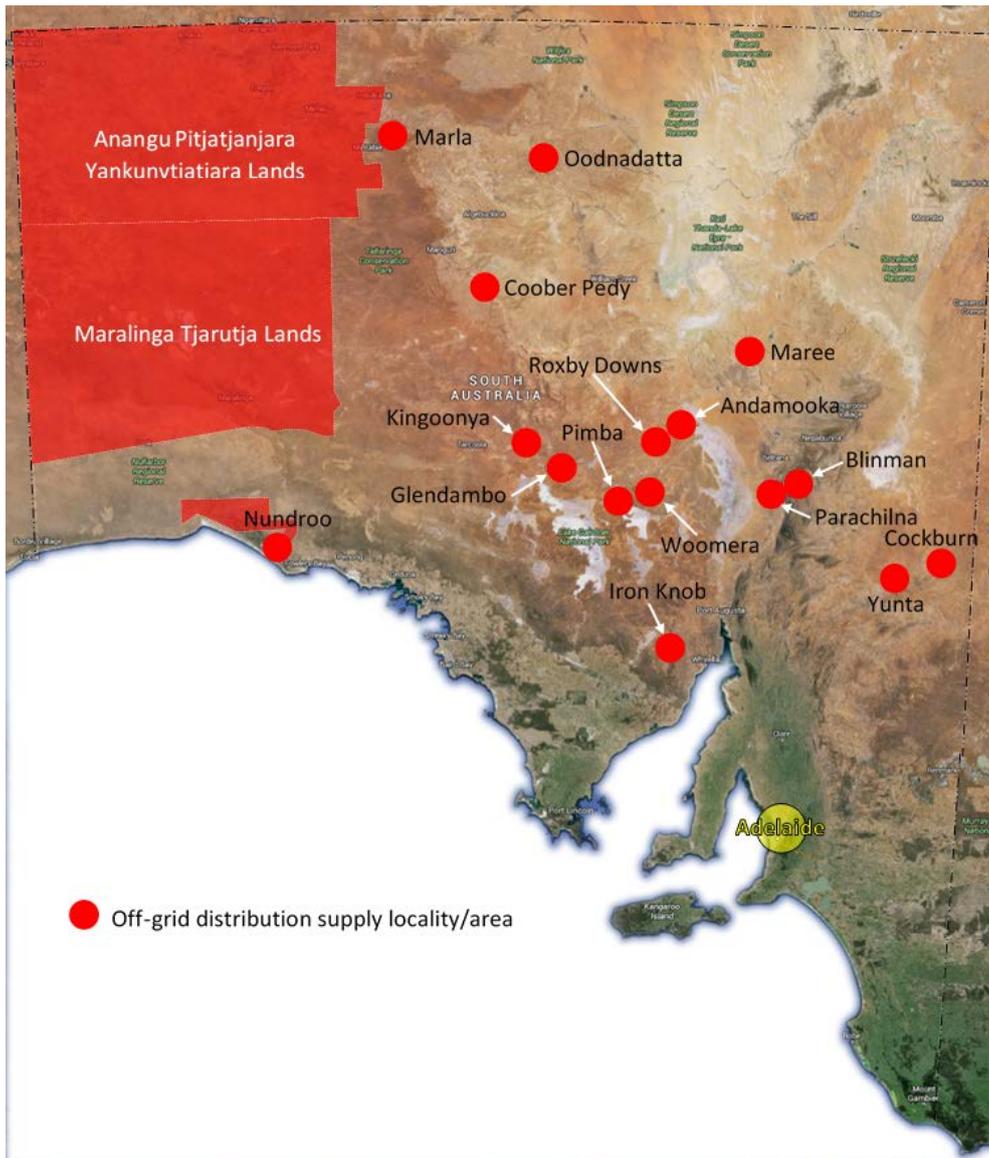
Location	Number of connections	Retail licensee	Distribution licensee	Grid connection
Anangu Pitjantjatara Yunkunytjarara (APY) lands, Maralinga Tjarutja lands, Marla, Oodnadatta, Maree, Nundroo, Kingoonya, Glendambo, Parachilna, Blinman, Cockburn	1,470	Cowell Electric Supply Pty Ltd	Cowell Electric Supply Pty Ltd	No
Andamooka	463	Jeril Enterprises Pty Ltd	Jeril Enterprises Pty Ltd	No
Cooper Pedy	1,503	District Council of Cooper Pedy	District Council of Cooper Pedy	No
Yunta	64	Dalfoam Pty Ltd	Dalfoam Pty Ltd	No
Iron Knob, Pimba, Woomera,	164	Exempt ^a	Cowell Electric Supply Pty Ltd	Via OneSteel at Iron Knob
Iron Knob, Iron Barron, Iron Lake	21	Exempt ^a	OneSteel Manufacturing Pty Ltd	Yes
Roxby Downs	2,062	Exempt ^a	Municipal Council of Roxby Downs	Via Olympic Dam
Olympic Dam	35	Exempt ^a	BHP Billiton Olympic Dam Corporation Pty Ltd	Yes

^a National Energy Retail Law exemption.

Note that the Commission also regulates electricity generators through its licensing regime. All generation licences are available on the Commission's website.

Figure 19 shows the location of the off-grid electricity businesses licensed to operate in South Australia.

Figure 19 - Locations provided with electricity through off-grid networks



5.2 Regulatory regime

The Commission licences all participants in the electricity supply industry where those participants engage in the generation of electricity, operation of a transmission or distribution network, power system control or the retailing of electricity (off-grid energy retailers only).

Licensees are required to operate in accordance with specified licence requirements. Off-grid licensees providing retail and distribution services have licence requirements broadly covering:

- ▶ Technical requirements – such as development of a Safety, Reliability, Maintenance and Technical Management Plan, a connections policy and a metering plan (if applicable).
- ▶ Consumer protections – behavioural standards and minimum requirements to be complied with by retailers when dealing with their customers, including reliability of supply requirements.
- ▶ Reporting requirements and administrative matters.

During 2016-17, the Commission will be undertaking an Inquiry into the regulatory arrangements for small-scale and off-grid water, electricity and gas services.

5.2.1 Consumer protections

Customers of off-grid electricity retailers are afforded similar consumer protections to customers of on-grid energy retailers. Off-grid licensees' obligations to their customers, as set out in their licences, relate to:

- ▶ Customer supply contracts – requirement to develop standard terms and conditions on which it will connect customers' supply and sell and supply electricity.
- ▶ Customer dispute resolution procedures – requirement to have procedures in place, based on AS ISO 10002-2006 'Customer Satisfaction - Guidelines for Complaints Handling in Organisations'.
- ▶ Supply obligations
 - maintain the quality of supply and minimise interruptions
 - provide notice for planned interruptions, and
 - connect customers within agreed timeframes.
- ▶ Customer service obligations
 - provision of regular bills and information to be included on the bill
 - conduct regular meter readings
 - dealing with billing disputes (including undercharging and overcharging)
 - minimum payment methods, and
 - offering flexible payment arrangements rules for security deposits.
- ▶ Disconnections and restoration of supply
 - retailer obligations around disconnecting customer supply for non-payment
 - prohibitions on disconnection, and
 - timeliness for restoration of supply.

5.3 Off-grid licensee performance

5.3.1 How performance is measured

The Commission has identified key metrics to monitor the performance over time of off-grid licensees. These include:

- ▶ the number of disconnections for non-payment of a bill made by each off-grid retailer
- ▶ the number and duration of interruptions of supply for each off-grid distributor, and
- ▶ licensees' compliance with their licence requirements.

Over time this assists the Commission in assessing the adequacy of licensee performance and whether the consumer protections are appropriate.

5.3.2 Off-grid performance in 2015-16

Off-grid retailers reported that 36 customers were disconnected for non-payment of a bill in 2015-16. There were 71 reported unplanned interruptions that impacted on residential customers in 2015-16; an

increase to the 26 reported for 2014-15 (but unplanned interruptions were not reported for the locations in the APY lands in 2014-15). The majority of the unplanned interruptions in 2015-16 (around 68 percent) were reported in areas now operated by Cowell Electric in the APY lands and surrounding locations, and were caused by lightning and switching issues. Off-grid licensees did not report any non-compliances with applicable laws (including, but not limited to the Electricity Act and regulations under that Act) in 2015-16.

6 LPG networks

6.1 South Australian LPG networks

There are three licensed distributors and retailers of LPG through reticulated networks in South Australia (Table 10). The Commission regulates these services through the licensing and consumer protection regime under the Gas Act.

Reticulated LPG networks exist in various locations and supply gas to approximately 3,200 connections.

Table 10 : LPG networks

Location	Number of connections	Retail licensee	Distributor licensee
Roxby Downs, Victor Harbor, Renmark, Port Lincoln, Wallaroo and Cape Jaffa.	2,391	Origin Energy	Origin Energy
Mount Barker	498	Elgas Limited	Environmental Land Services (Aust) Pty Ltd
Clare (Hanlins Rise)	61	Elgas Limited	Elgas Limited

6.2 Regulatory regime

Those who engage in the activity of distributing and retailing LPG through reticulated networks in South Australia are required to be licensed by the Commission. It is a licence condition that LPG licensees comply with the Reticulated LPG Industry Code. The Reticulated LPG Industry Code contains provisions relating to the sale and supply of reticulated LPG to small customers (customers consuming less than 1TJ of LPG annually).

Retailer licences and the Reticulated LPG Industry Code set the following broad obligations for licensees:

- ▶ Technical requirements – such as development of a Safety, Reliability, Maintenance and Technical Management Plan, a connections policy and a metering plan (if applicable).
- ▶ Consumer protections – behavioural standards and minimum requirements to be complied with by retailers when dealing with their customers, including reliability of supply requirements.
- ▶ Reporting requirements and administrative matters.

During 2016-17, the Commission will be undertaking an Inquiry into the regulatory arrangements for small-scale and off-grid water, electricity and gas services.

6.2.1 Consumer protections

Customers receiving reticulated LPG are afforded similar consumer protections to customers of on-grid energy retailers. LPG licensees' obligations to their customers, as set out in the Reticulated LPG Industry Code, relate to:

- ▶ Customer supply contracts – requirement to develop standard terms and conditions, and provide contractual information disclosure, on which it will connect customers' supply, and sell and supply LPG.
- ▶ Customer dispute resolution procedures – requirement to have procedures in place, in accordance with AS ISO 10002-2006 'Customer Satisfaction - Guidelines for Complaints Handling in Organisations'.
- ▶ Supply obligations – maintain the quality of supply and minimise interruptions; provide notice for planned interruptions; connect customers within agreed timeframes.
- ▶ Customer service obligations
 - provision of regular bills and information to be included on the bill
 - conduct regular meter readings
 - dealing with billing disputes (including undercharging and overcharging)
 - minimum payment methods
 - offering flexible payment arrangements
 - rules for security deposits
 - publishing fees and charges
 - rules for changing tariffs, and
 - methods of communication with customers.
- ▶ Disconnections and restoration of supply
 - retailer obligations around disconnecting customer supply for non-payment prohibitions on disconnection, and
 - timeliness for restoration of supply.

6.3 LPG licensee performance

6.3.1 How performance is measured

The Commission has identified key metrics to monitor the performance over time of LPG licensees. These include:

- ▶ the number of disconnections for non-payment of a bill made by each off-grid retailer
- ▶ the number of quality of supply complaints for each LPG retailer
- ▶ the number and duration of interruptions of supply for each off-grid distributor, and
- ▶ licensees' compliance with their licence requirements.

Over time this assists the Commission in assessing the adequacy of licensee performance and whether the consumer protections are appropriate.

6.3.2 LPG licensee performance in 2015-16

One customer was disconnected for non-payment of a bill and one reported distribution system interruption, which occurred on the Wallaroo LPG network.

There were no reported compliance issues during the reporting year.

