



Key messages

- ▶ In 2017-18, SA Power Networks met both customer service standards for telephone and written responses.
- ▶ SA Power Networks met 6 out of 8 reliability and restoration service standards targets. SA Power Networks did not meet the duration and frequency of interruption targets for the CBD feeder category.
- ▶ SA Power Networks have published a CBD performance fact sheet to explain the reason behind the CBD feeder category not meeting the standard targets.
- ▶ There were 85,560 Guaranteed Service Level (GSL) payments made totalling \$1.34 million, the lowest amount since 2008-09. Eighty percent of GSL payments were made for duration of interruptions. The average value of payments per year since the scheme's introduction has been \$4.82 million.

The Essential Services Commission (**Commission**) establishes certain state-based customer service and reliability standards for SA Power Networks. Those standards are prescribed in the Electricity Distribution Code (**Code**) made and administered by the Commission. One of the Commission's key regulatory functions is to monitor and publicly report on the performance of energy distribution network businesses.

This report covers the key performance indicators for the 2017-18 financial year for SA Power Networks – the monopoly service provider of electricity distribution network services to the majority of South Australian customers.

As a condition of its licence, SA Power Networks is required to comply with operational service standards set by the Commission.

How SA Power Networks responded to its customers

The Electricity Distribution Code (**Code**) places obligations on SA Power Networks relating to customer responsiveness and enquiries.

In 2017-18, SA Power Networks received 393,806 telephone calls and 2,237 written enquiries.

SA Power Networks responded to the majority of telephone calls and written enquiries in a timely manner, and met both of the customer service standards (refer Table 1).

Table 1: SA Power Networks' 2017-18 performance against customer service standards

Standard	Target	2017-18 performance
Telephone calls answered within 30 seconds	85%	90%
Written enquiries answered within five business days	95%	98%

Further information on SA Power Networks' customer service-related regulatory obligations and service standards can be found here <http://bit.ly/electricity-regulatoryperformancereports>.

Reliability of SA Power Networks' electricity distribution network services

The Code places obligations on SA Power Networks deliver reliable electricity supply to customers.

In 2017-18, SA Power Networks met all eight of the reliability service standards (refer Table 2 and 3).

In doing so, it did not meet two service standard targets for reliability performance in the Central Business District (CBD). If a target is not met this does not necessarily mean a standard is not met. An investigation of will be undertaken to see if there are acceptable reason(s) for the missed target occurring. This was the case for the two targets for the CBD feeder category and the reasons are summarised in the next column.

Table 2: SA Power Networks' 2017-18 performance against reliability service standards (as measured by duration of interruptions¹)

Feeder category	Duration of interruptions (minutes/customer/year)	
	Target	2017-18 result
CBD	15	43
Urban	120	96
Rural short	220	155
Rural long	300	269
Overall State (implied target)	165	132

Table 3: SA Power Networks' 2017-18 performance against reliability service standards (as measured by frequency of interruptions²)

Feeder category	Frequency of interruptions (minutes/customer/year)	
	Target	2017-18 result
CBD	0.15	0.41
Urban	1.30	1.06
Rural short	1.85	1.20
Rural long	1.95	1.48
Overall State (implied target)	1.50	1.14

Further information on SA Power Networks' reliability-related regulatory obligations and service standards can be found here <http://bit.ly/electricity-regulatoryperformancereports>.

SA Power Networks' distribution network services were generally reliable

Over the past 12 years, SA Power Networks reliability performance (as measured by the average duration and frequency outages) has shown an overall downward trend based on the four feeder categories of SA Power Networks' electricity distribution network (refer Figures 1 to 4). As a result, customers experienced less outages (on average).

An exception for 2017-18 was in relation to performance in the CBD. SA Power Networks did not meet the CBD service standard targets for the frequency and duration of outages. Six major faults in the second half of 2017, causing the target to be exceeded. Performance in the CBD returned to expected levels in the first half of 2018.

In response, the Commission initiated an investigation into SA Power Networks' performance in the CBD. The Commission considered a broad range of evidence and determined that SA Power Networks acted in accordance with its licence obligations. It was found that:

- ▶ the outages were not systematic and were of a random nature
- ▶ SA Power Networks adopts a "fix on fail" approach, which is consistent with industry practice in relation to the asset management of underground cables, and
- ▶ the response times by SA Power Networks to individual outages were appropriate.

SA Power Networks has separately carried out an investigation into the CBD underperformance. Refer to the CBD performance fact sheet <http://bit.ly/SAPN-reliable-electricitysupply-Adelaide> published on SA Power Networks' website.

¹ Unplanned System Average Interruption Duration Index (USAIDI) – measuring the average annual duration (in minutes) of supply interruptions per customer.

² Unplanned System Average Interruption Frequency Index (USAIFI) – measuring the average annual number of supply interruptions per customer.

Figure 1: CBD feeder category normalised USAIDI and USAIFI performance since 2005-6

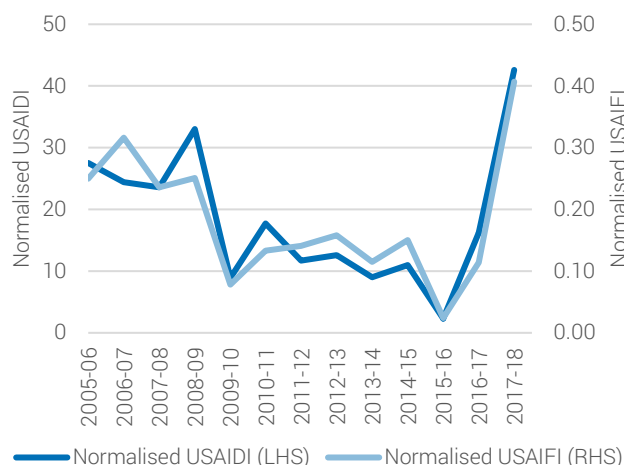


Figure 2: Urban feeder category normalised USAIDI and USAIFI performance since 2005-6

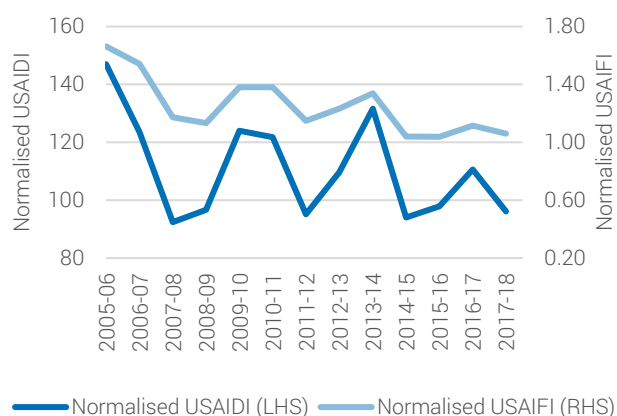


Figure 3: Rural Short feeder category normalised USAIDI and USAIFI performance since 2005-6

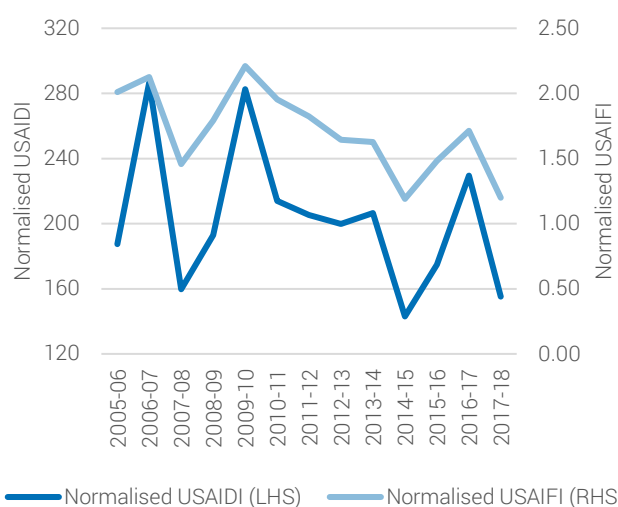
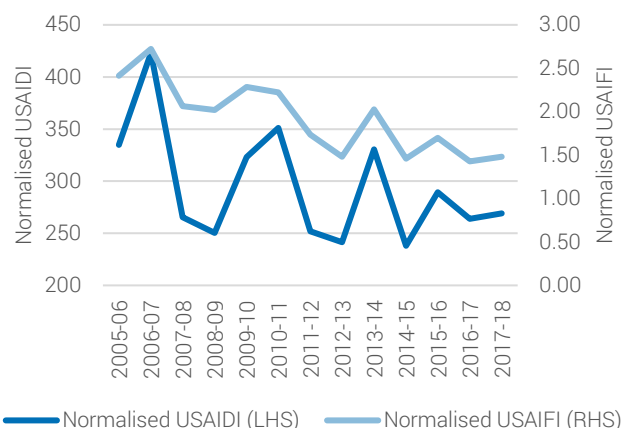


Figure 4: Rural Long feeder category normalised USAIDI and USAIFI performance since 2005-6



Causes of interruptions were consistent with causes in previous years

Table 4 summarises the causes of interruptions to customers in 2017-18, by reference to the contribution to state-wide normalised duration of interruptions (USAIDI) of each cause. The impact of Major Event Days is excluded and therefore the table shows the underlying causes of interruptions.³

The split of causes is generally consistent with the average over the previous six years, prior to 2017-18, with planned interruptions accounting for the largest proportion (32 percent).

Table 4: Interruption causes contributing to state-wide USAIDI (excluding MEDs) in 2017-18

Interruption cause	Proportion of USAIDI	Average for last six years
Weather	22%	28%
Equipment failure	23%	20%
Planned	32%	30%
Other (unplanned)	23%	23%

Regional performance (normalised) is consistent with previous years, except for the Adelaide Business Area

Table 5 (next page) shows the reliability performance in 2017-18 for the seven geographic regions of the State covered by the reporting

³ In prior Regulatory Performance Reports, data did not exclude MEDs.

regime (noting that standards are not set for regions).

The Adelaide Business Area is reported on by SA Power Networks', on the same basis as the CBD feeder category (see Figure 1 previous page). Because 97 percent of the distribution network for the Adelaide Business Area is underground, it is not normally affected by severe weather.

Table 5: USAIDI and USAIFI in 2017-18 (by geographical region)

Interruption cause	USAIDI	USAIFI
Adelaide Business Area	42.6	0.407
Major Metropolitan Area	96.1	1.070
Central region	148.6	0.986
South East	304.3	2.057
Eastern Hills/Fleurieu Peninsula	205.3	1.363
Upper North/Eyre Peninsula	357.6	1.618
Kangaroo Island	205.9	0.912

Further information on the seven geographical regions used by the Commission to monitor SA Power Networks' reliability performance can be found here <http://bit.ly/electricity-regulatoryperformancereports>.

Figures 5 to 9 summarises the performance over time.

Figure 5: Major Metropolitan Area's duration of interruptions performance (minutes)

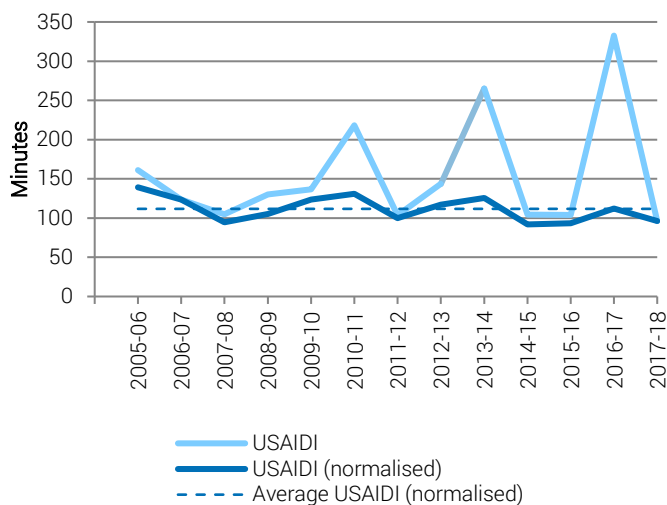


Figure 6: Central region duration of interruptions performance (minutes)

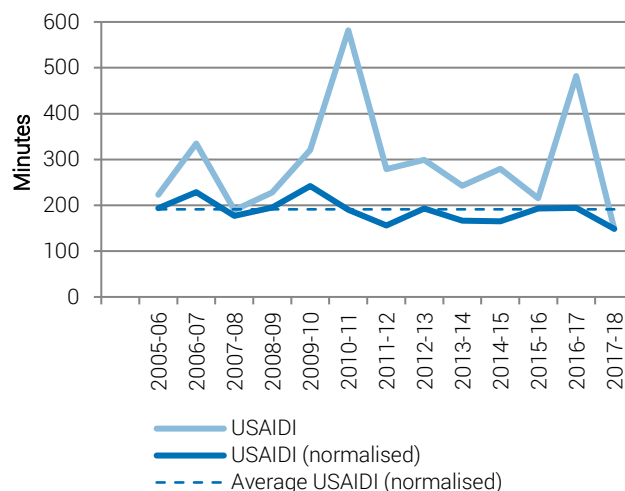


Figure 7: South East duration of interruptions performance (minutes)

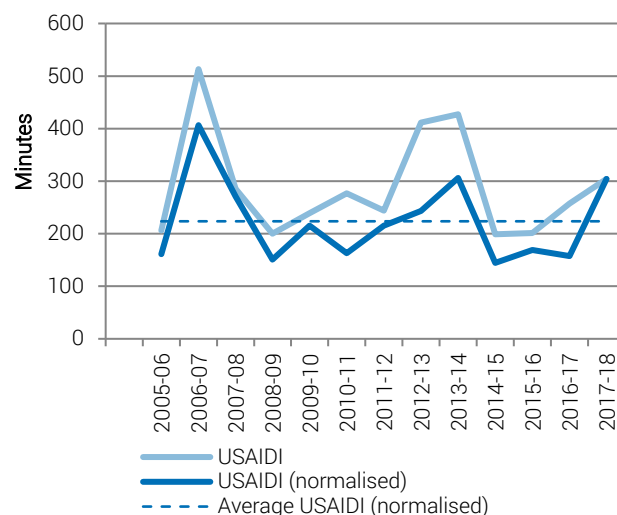


Figure 8: Eastern Hills/Fleurieu Peninsula duration of interruptions performance (minutes)

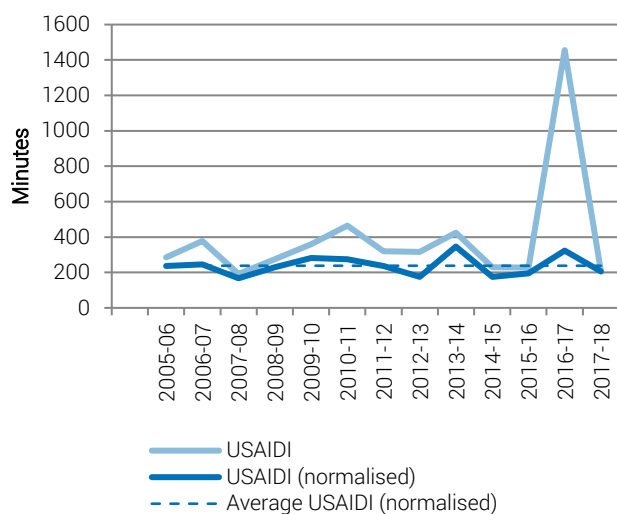
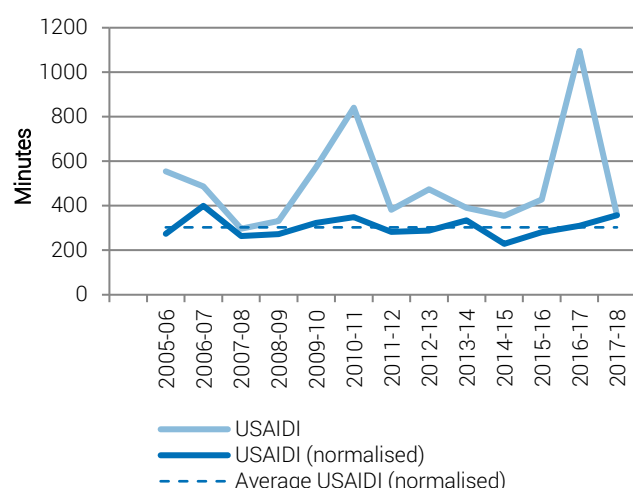


Figure 9: Upper North/Eyre Peninsula duration of interruptions performance (minutes)



SA Power Networks reported a decline in the number of low reliability distribution feeders

In assessing performance, the Commission reviews the number of Low Reliability Distribution Feeders (LRDF) 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 2017-18, there were 73 feeders that qualified as LRDFs affecting 18,504 customers (approximately two percent of the customer base), compared to 91 feeders affecting 23,394 customers in 2016-17 (Table 6). The decrease in the number of LRDFs in 2017-18 was largely due to the lack of effects of severe weather events during the year.

Table 6: Low reliability performing feeders in 2016-17 and 2017-18 (by feeder category)

Feeder category	2016-17		2017-18	
	No. of feeders	No. of customers	No. of feeders	No. of customers
CBD	0	0	2	222
Urban	12	13,585	9	9,837
Rural Short	23	5,180	15	4,293
Rural Long	56	4,692	47	4,152
State-wide	91	23,394	73	18,504

SA Power Networks made the lowest level of GSL payments since 2008-09

Under the Code, SA Power Networks is required to make Guaranteed Service Level (GSL) payments to customers who have received service that is worse than a pre-determined duration outage threshold.

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, which relate to loss due to negligence or bad faith.

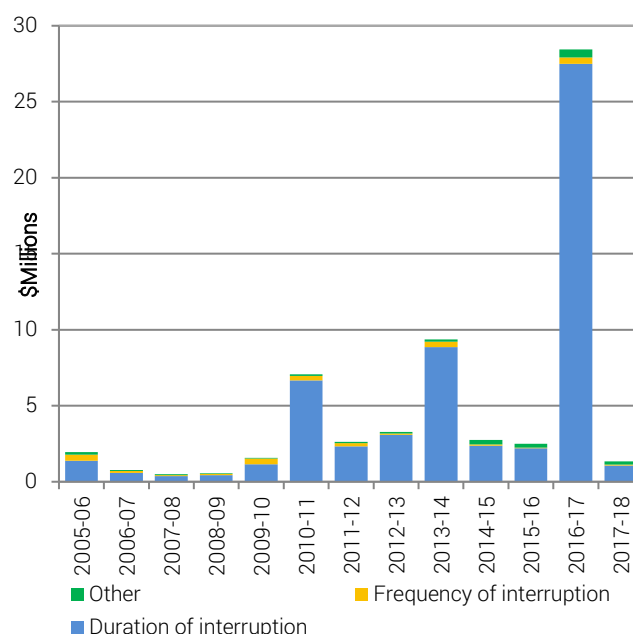
Further information on the GSL scheme can be found here <http://bit.ly/SAPN-ServiceLevelPayments>.

SA Power Networks made fewer GSL payments in 2017-18

In 2017-18 there were 8,560 GSL payments made totalling \$1.34 million. That was the lowest amount since 2008-09.

Eighty percent of GSL payments (figure 10) were made for duration of interruptions. The average total annual payment (prior to 2017-18) since the scheme's introduction has been \$5.11 million.

Figure 10: GSL payments by category



Street light repair performance is in-line with previous annual results in major metropolitan and regional areas

SA Power Networks is obliged to use its best endeavours to repair faulty street lights for which it is responsible. The timeframe is 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 is in line with previous annual performance, 96 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.

SA Power Networks paid \$156,535 in GSL payments to customers where it did not complete repairs within the required time.

Further information

The complete time series performance data for SA Power Networks can be found here: <https://www.escosa.sa.gov.au/industry/electricity/regulatory-reporting/regulatory-performance-reports>.

The Essential Services Commission is an independent statutory authority with functions in a range of essential services including water, sewerage, electricity, gas, rail and maritime services, and also has a general advisory function on economic matters. For more information, visit www.escosa.sa.gov.au.

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