



## **REPORT ON PERFORMANCE AGAINST MINIMUM SERVICE STANDARDS AND COMPLIANCE WITH GUARANTEED SERVICE LEVELS BY ENERGEX AND ERGON ENERGY**

**FOR THE 2009-10 FINANCIAL YEAR**

### **Minimum Service Standards**

The Queensland Electricity Industry Code (the Code) sets minimum service standards (MSS) to be met by distributors, Energex and Ergon Energy.

The MSS relate to the frequency and duration of interruptions to distribution services. The purpose of the MSS is to provide a set of standards against which the performance of Energex and Ergon Energy can be assessed. The MSS also enable year-on-year comparisons of performance.

The MSS are different for Energex and Ergon Energy, reflecting differences in their distribution networks and the environment in which they operate.

The MSS generally require slight improvements in the annual performance of each distributor over time. If a distributor does not meet its MSS, the Code requires that it provides reasons for any failures and a proposal to improve its performance.

The Code requires Energex and Ergon Energy to report their performance against the MSS within two months of the end of each quarter. However, because the MSS are annual targets, it is not until the distributors present their June quarterly reports that it can be confirmed whether they have met their MSS.

This report details the performance of Energex and Ergon Energy against the MSS for the 2009-10 financial year.

### **Guaranteed Service Levels**

The Code also sets guaranteed service levels (GSL) that Energex and Ergon Energy must meet. The GSL relate to the quality of service received by individual customers. For example, the GSL set timeframes in which certain services should be provided to customers and limits on the number and duration of interruptions allowed to affect premises in a year.

In certain circumstances, if the distributor fails to comply with the GSL, the customer will be eligible for a GSL payment. However, GSL payments are not intended to be a measure of the compensation deserved by a customer for poor distributor performance. Rather, GSL payments are intended to provide a financial incentive for a distributor to maintain an appropriate level of service quality.

The Code requires Energex and Ergon Energy to report their compliance with the GSL provisions within two months of the end of each quarter, including any GSL payments made to customers within the quarter.

This report details the compliance of Energex and Ergon Energy with the GSL for the 2009-10 financial year.

## Distributors' Networks

The MSS and GSL reports received by the Authority are not intended to enable performance comparisons to be made between Energex and Ergon Energy. This is because Energex and Ergon Energy operate in very different environments.

Energex operates a distribution network that is located in the urban area of South East Queensland. Ergon Energy operates a distribution network spread across the remainder of the State. As a result, it is to be expected that the performance of each distributor will vary significantly. However, the MSS will support year-on-year comparisons of the performance of each distributor.

Table 1 provides some key measures that illustrate the differences between the two distributors' networks.

**Table 1. Energex and Ergon Energy Networks**

<i>Network Descriptor</i>	<i>Energex</i>	<i>Ergon Energy</i>
Network service area	25,064 sq km	1,698,100 sq km
Number of customers	1,298,790	648,228
Number of distribution transformers	45,456	86,838
Energy delivered	22,025 GWh	14,257 GWh
Maximum demand of network	4,817 MVA	2,608 MVA
Asset utilisation <sup>a</sup>	26.30 %	19.33 %
Distribution losses	5.50 %	5.33%

*Source: Energex and Ergon Energy, September 2010.*

*a Sub-transmission transformer utilisation factor. Electricity throughput (MWh) expressed as a percentage of sub-transformer capacity (MVA) multiplied by the number of hours per year.*

## The MSS and GSL in operation

### *Operation of the MSS*

The MSS relate to the frequency and duration of interruptions to the distribution services provided by Energex and Ergon Energy. An interruption includes any temporary unavailability of electricity supply to a customer associated with an outage of the electricity supply network. It includes outages affecting single premises but it does not include disconnections.

The MSS are based on average measures of performance across the entire distribution network, net of the impact of excluded events such as severe storms. To meet the MSS, a distributor must aim to achieve average performance higher than the MSS in order to ensure a low statistical probability of not exceeding their MSS in a particular year.

Under the Code, there are six MSS for each distributor. Three MSS relate to the average *duration* of service interruptions (SAIDI) while the other three relate to the average *frequency* of service interruptions (SAIFI).

SAIDI (System Average Interruption Duration Index) is the sum of the duration of each interruption (measured in minutes) divided by the total number of customers (averaged over the financial year) for each distributor.

SAIFI (System Average Interruption Frequency Index) is the total number of interruptions, divided by the total number of customers (averaged over the financial year) for each distributor.

The MSS for each financial year are specified in Schedule 1 of the Code. The MSS generally reduce over time, requiring slight improvements in the performance of each distributor. The MSS are different for Energex and Ergon Energy, reflecting the differences in their distribution networks.

Some interruptions (such as severe storms) are excluded when measuring the performance of the distributors against the MSS. Other exclusions include interruptions of one minute or less (momentary interruptions), interruptions resulting from a failure of the shared transmission grid and interruptions caused by the failure of a customer's electrical installation. Interruptions caused by a direction by a police officer or other authorised person who is exercising powers in relation to public safety are also excluded. The list of excluded interruptions is defined under clause 2.4.3 of the Code.

#### *Operation of the GSL*

The GSL relate to the quality of service received by individual customers. In certain circumstances, if Energex and Ergon Energy fail to comply with the GSL, an affected customer will be eligible for compensation in the form of a GSL payment.

The Code specifies the following GSL and GSL payments:

- (a) wrongful disconnection of a customer – \$100 GSL payment;
- (b) late connection of a customer – \$40 GSL payment per day late;
- (c) late reconnection of a customer – \$40 GSL payment per day late;
- (d) late response to an inquiry regarding loss of hot water – \$40 GSL payment per day late;
- (e) failure to attend a scheduled appointment with a customer – \$40 GSL payment; and
- (f) failure to give proper notice of a planned interruption – \$20 GSL payment to small residential customers and \$50 GSL payment to small business customers.

The Code also specifies some GSL related to reliability. These focus on the duration and frequency of interruptions. If an interruption lasts longer than eight hours for CBD feeders, 18 hours for urban or short rural feeders and 24 hours for long rural feeders, the customer is eligible for an \$80 GSL payment.

If the frequency of interruptions to the electricity supply to a customer is too high, the customer is also eligible for an \$80 GSL payment. The Code sets the maximum allowable number of interruptions for Energex and Ergon Energy, depending on the feeder type in question.

Some interruptions are excluded when measuring the compliance of Energex and Ergon Energy against the GSL that relate to reliability. For example, the impact of natural disasters is excluded. Interruptions of one minute or less are also excluded (momentary interruptions to supply). Other exclusions include any failure of the shared transmission grid and any failure of a customer's electrical installation. Interruptions

due to a direction by a police officer or other authorised person who is exercising powers in relation to public safety are also excluded.

There are limits on the number of GSL payments that can be made to an individual customer. There is also a cap of \$320 on the value of GSL payments that any customer can receive in any financial year. This cap excludes GSL payments for wrongful disconnection.

*The Authority's enforcement responsibilities*

If a distributor fails to meet the MSS or comply with the GSL, it may amount to a contravention of the Code. The Authority has responsibility for enforcing contraventions of the Code under the *Electricity Act 1994* (Qld) (the Act).

If the Authority believes that a material contravention has occurred, or is likely to occur, the Act provides the Authority with three potential stages of enforcement. These stages include:

- (a) issuing warning notices;
- (b) issuing Code contravention notices; and
- (c) instituting Supreme Court proceedings.

If the conduct of an electricity entity is likely to result in a material contravention of the Code, the Act also permits the Authority to refer the matter to the Queensland Energy Regulator, who is responsible for the licensing of electricity entities.

## Summary of Energex Performance

### Performance against the MSS

Energex's underlying performance in relation to duration (SAIDI) and frequency (SAIFI) of interruption by feeder type against its MSS targets for 2009-10 are presented in Tables 2 and 3.

In 2009-10, Energex met all six of its MSS targets. However, Energex's SAIFI performance for its short rural feeders was close to exceeding the MSS - see Table 3.

#### *Performance against the SAIDI Limits*

**Table 2. Energex SAIDI performance (minutes)**

<i>Measure</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>SAIDI MSS 2009-10</i>
<i>Total incl. exclusions and major event days</i>				
CBD feeder type	4.05	3.15	1.19	
Urban feeder type	89.08	181.47	98.82	
Short rural feeder type	245.51	415.19	276.44	
<i>Total net of exclusions and major event days</i>				
CBD feeder type	3.97	3.15	1.19	20
Urban feeder type	84.67	91.24	88.48	110
Short rural feeder type	242.10	227.76	215.73	220

#### *Performance against the SAIFI Limits*

**Table 3. Energex SAIFI performance (number of events)**

<i>Measure</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>SAIFI MSS 2009-10</i>
<i>Total incl exclusions and major event days</i>				
CBD feeder type	0.04	0.06	0.08	
Urban feeder type	1.12	1.29	1.37	
Short rural feeder type	2.76	3.06	2.88	
<i>Total net of exclusions and major event days</i>				
CBD feeder type	0.04	0.06	0.08	0.33
Urban feeder type	1.05	1.05	1.20	1.32
Short rural feeder type	2.71	2.56	2.41	2.50

*Details of excluded interruptions*

Table 4 details the interruptions that were excluded in determining the performance of Energex against its SAIDI and SAIFI Limits.

**Table 4. Exclusions from MSS -2009-10**

<i>Cause of event</i>	<i>Excluded from SAIDI (minutes)</i>	<i>Excluded from SAIFI (events)</i>
<i>Generation or transmission related</i>		
CBD feeder type	0	0
Urban feeder type	1.23	0.12
Short rural feeder type	2.94	0.20
<i>NEMMCO direction</i>		
CBD feeder type	0	0
Urban feeder type	0	0
Short rural feeder type	0	0
<i>Automatic load shedding by distributor</i>		
CBD feeder type	0	0
Urban feeder type	0	0
Short rural feeder type	0	0
<i>Customer installation caused interruptions</i>		
CBD feeder type	0	0
Urban feeder type	0.11	0
Short rural feeder type	0.33	0
<i>Authorised interruption for public safety</i>		
CBD feeder type	0	0
Urban feeder type	0.18	0
Short rural feeder type	4.09	0.01
<i>Interruption which commences on a Major Event Day</i>		
CBD feeder type	0	0
Urban feeder type	8.82	0.06
Short rural feeder type	53.35	0.26
<i>Total exclusions</i>		
CBD feeder type	0	0
Urban feeder type	10.34	0.18
Short rural feeder type	60.71	0.47

The most common type of interruption that was excluded by Energex was in relation to Major Event Days due to severe weather conditions affecting Energex's distribution area. Other (relatively minor) interruptions excluded by Energex related to failure of the transmission grid and shortfalls in generation, failure of customer electricity installations and complying with directions for public safety.

### *Details of Major Event Days*

Major Event Days are excluded when assessing the performance of distributors against the MSS as the scheme is aimed at measuring the underlying performance of their networks. Major Event Days include days where severe storms impact substantially on system reliability. A Major Event Day is one where the minutes off-supply (the daily SAIDI value) exceeds a certain threshold, which is based on the distributor's historical reliability data.

Energex reported three Major Event Days in 2009-10 as a result of severe storms, as follows:

- (a) 13 October;
- (b) 29 November; and
- (c) 22 December 2009.

### **Compliance with the GSL**

Table 5 provides details of the GSL payments made by Energex during 2009-10.

**Table 5. Energex GSL payments -2009-10**

<i>GSL description</i>	<i>Number of payments made</i>	<i>Value of payments(\$)</i>
Failure to properly notify small business customer of planned interruption (GSL = \$50)	2	100
Failure to properly notify residential customer of planned interruption (GSL = \$20)	26	520
Late new connection (GSL = \$40 / day)	138	22,800
Wrongful disconnection (GSL = \$100)	293	29,300
Late reconnection (GSL = \$40 / day)	482	37,720
Late response to complaint relating to loss of hot water (GSL = \$40 / day)	0	0
Failure to attend a scheduled appointment with a customer (GSL = \$40)	15	600
Reliability – duration – period of an interruption is too long (GSL = \$80)	2	160
Reliability – frequency – too many interruptions over the financial year (GSL = \$80)	0	0
<b>Total number of GSL payments</b>	<b>958</b>	<b>91,200</b>

Energex reported that it made 958 GSL payments to customers in 2009-10, totalling \$91,200. This is the best result recorded since reporting began in 2007-08 and a significant decrease (down 75%) from the number of payments made in 2008-09 (3,843 GSL payments totalling \$718,420).

The improvement in performance in 2009-10 was due to Energex resolving a Code contravention issue related to the late completion of 3,238 standard service orders for new connections that occurred in 2008-09.

The majority of Energex’s GSL payments made during 2009-10 were caused by a failure to reconnect on time (50.3%). Other significant causes included wrongful disconnection (30.6%) and failure to complete new connections on time (14.4%).

*The number and type of GSL claims rejected*

During 2009-10, Energex rejected 38 GSL claims, down from 114 claims rejected the previous year. More than half (21) of the GSL claims rejected related to failure to properly notify small residential customers of planned interruptions where Energex had provided the required notification.

Table 6 provides details of the number of GSL claims rejected by Energex during 2009-10.

**Table 6. Energex: GSL claims rejected - 2009-10**

<i>GSL description</i>	<i>Claims rejected</i>
Failure to properly notify small business customer of planned interruption (GSL = \$50)	2
Failure to properly notify residential customer of planned interruption (GSL = \$20)	21
Late new connection (GSL = \$40 / day)	0
Wrongful disconnection (GSL = \$100)	4
Late reconnection (GSL = \$40 / day)	1
Late response to complaint relating to loss of hot water (GSL = \$40/day)	0
Failure to attend a scheduled appointment with a customer (GSL = \$40)	0
Reliability – duration – period of an interruption is too long (GSL = \$80)	7
Reliability – frequency – too many interruptions over the financial year (GSL = \$80)	3
<b>Total</b>	<b>38</b>



## Summary of Ergon Energy Performance

### Performance against the MSS

In 2009-10, while Ergon Energy improved its performance in five out of six MSS measures (all except SAIDI urban) it only managed to meet a single MSS (for SAIFI long rural) in 2009-10. Ergon Energy failed to meet the same five out of its six MSS targets as it did in 2008-09.

Ergon Energy's underlying performance in relation to duration (SAIDI) and frequency (SAIFI) of interruption by feeder type against its MSS targets for 2009-10 are presented in Tables 7 and 8.

### Performance against the SAIDI Limits

**Table 7. Ergon Energy performance SAIDI (minutes)**

<i>Measure</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>SAIDI MSS 2009-10</i>
<i>Total incl exclusions and major event days</i>				
Urban feeder type	262.40	317.45	517.68	
Short rural feeder type	583.38	684.11	1031.26	
Long rural feeder type	1,188.78	1,254.20	1154.76	
<i>Total net of exclusions and major event days</i>				
Urban feeder type	177.83	216.85	221.74	150
Short rural feeder type	453.87	608.54	542.89	430
Long rural feeder type	1,010.78	1,107.96	995.19	980

### Performance against the SAIFI Limits

**Table 8. Performance of Ergon Energy against SAIFI (number of events)**

<i>Measure</i>	<i>2007-08</i>	<i>2008-09</i>	<i>2009-10</i>	<i>SAIFI MSS 2009-10</i>
<i>Total incl exclusions and major event days</i>				
Urban feeder type	2.52	3.50	2.62	
Short rural feeder type	4.23	5.78	5.05	
Long rural feeder type	7.17	8.49	7.53	
<i>Total net of exclusions and major event days</i>				
Urban feeder type	1.85	2.33	2.25	2.00
Short rural feeder type	3.49	4.93	4.58	4.00
Long rural feeder type	6.39	7.73	7.19	7.50

Ergon Energy advised that, despite its best endeavours, two key operational factors that affected its performance in 2008-09 continued to significantly impact its reliability performance for 2009-10, namely:

- (a) planned work practices being affected by the safety initiated suspension of live line work (from February 2009); and
- (b) operating restrictions being placed on particular makes and types of air break switches (ABSs) in 2008 as a result of union related action.

Ergon Energy also identified a number of other (lesser) factors that contributed to its failure to achieve its MSS targets again in 2009-10. These include:

- (a) a new national clearance standard, prohibiting certain tasks that were previously undertaken using live line techniques;
- (b) Tropical Cyclone Ului remediation works in the March quarter; and
- (c) the reinstatement of bans on substation ABSs due to an operational failure that occurred on 30 March 2010.

In its Network Management Plan for 2010-11 to 2014-15, Ergon Energy included an explanation of the causes of its poor performance, the actions it had undertaken to mitigate these issues and the strategies it proposed to implement to improve its future performance.

In summary, the live line work issue resulted in Ergon Energy reviewing and implementing a revised 'safe system of work' for live line including standards, procedures, equipment usage, training, authorisations and governance arrangements, with a view to rebuilding the system for live line works. In relation to the operational limits on ABSs, Ergon Energy has expedited its ABS replacement strategy by replacing 65 substation switches and 600 of the 1,500 ABSs targeted for replacement by 2013 in 2010-11.

To improve overall network reliability performance, Ergon Energy has adopted a number of operational and asset performance improvement initiatives including:

- (a) delivery chain analysis and management to make informed decisions on investing in performance improvement;
- (b) data and reporting system upgrades and consolidated reporting processes to make more informed decisions regarding investment, planning and operational issues; and
- (c) planned and unplanned outage management strategies such as reviewing vegetation management practices, improved remote control initiatives and data acquisition to better manage the duration and impact of outages.

In spite of these proposals, Ergon Energy highlighted that its ability to meet its MSS in 2010-11 will be strongly influenced by the limitations on ABS operation and prevailing weather conditions during the upcoming summer storm season.

*Details of excluded interruptions*

Table 9 provides details of the interruptions that were excluded in determining the performance of Ergon Energy against its SAIDI and SAIFI Limits.

**Table 9. Exclusions from Minimum Service Standards - 2009-10**

<i>Cause of event</i>	<i>Excluded from SAIDI (minutes)</i>	<i>Excluded from SAIFI (events)</i>
<i>Generation or transmission related</i>		
Urban feeder type	9.42	0.09
Short rural feeder type	5.18	0.12
Long rural feeder type	13.65	0.16
<i>NEMMCO direction</i>		
Urban feeder type	0	0
Short rural feeder type	0	0
Long rural feeder type	0	0
<i>Automatic load shedding</i>		
Urban feeder type	0	0
Short rural feeder type	0	0
Long rural feeder type	0	0
<i>Customer installation caused interruptions</i>		
Urban feeder type	2.67	0.02
Short rural feeder type	6.81	0.03
Long rural feeder type	7.16	0.03
<i>Authorised interruption for public safety</i>		
Urban feeder type	0	0
Short rural feeder type	0.61	0
Long rural feeder type	3.39	0
<i>Interruption which commences on a Major Event Day</i>		
Urban feeder type	283.85	0.25
Short rural feeder type	475.77	0.34
Long rural feeder type	135.38	0.16
<i>Total exclusions</i>		
Urban feeder type	295.94	0.37
Short rural feeder type	488.36	0.47
Long rural feeder type	159.57	0.34

The most common type of interruption that was excluded by Ergon Energy was in relation to Major Event Days, due mainly to Tropical Cycle Ului hitting the Mackay/Proserpine area late in the March quarter 2010. Other (relatively minor) interruptions excluded by Ergon Energy related to failure of the

transmission grid and shortfalls in generation, failure of customer electricity installations and complying with directions for public safety.

#### *Details of Major Event Days*

During the March quarter 2010, heavy rains and serious floods affected a large geographical area of Ergon Energy's service area. Also, Tropical Cyclone Ului caused major damage when it crossed the central Queensland coast as a category three cyclone that brought gale force winds to the Mackay and Whitsundays region in March 2010. As a result, a large amount of priority repair work was carried out between March and May, reflecting the high level of interruptions for Major Event Days.

As a result, Ergon Energy reported a record seven Major Event Days in 2009-10, as follows:

- (a) 30 January 2010;
- (b) 2 March 2010;
- (c) 5 March 2010;
- (d) 20 March 2010;
- (e) 21 March 2010;
- (f) 22 March 2010; and
- (g) 23 March 2010.

#### **Compliance with the GSL**

Ergon Energy reported that it made 800 GSL payments to customers in 2009-10, totalling \$47,230. This is the best result recorded since reporting began in 2007-08 and a significant decrease (down 36.6%) from the results recorded in 2008-09 (1,262 GSL payments totalling \$83,930).

The majority of Ergon Energy's GSL payments were due to its failure to properly notify residential customers of planned interruptions (42.8%). Other significant causes included wrongful disconnections (28.9%) and failure to complete new connections on time (10.6%). That the majority of Ergon Energy's GSL payments were interruption-related aligns with its poor performance against the MSS.

Table 10 provides details of GSL payments made by Ergon Energy during 2009-10.

**Table 10. Ergon Energy GSL payments – 2009-10**

<i>GSL description</i>	<i>Number of payments made</i>	<i>Value of payments made (\$)</i>
Failure to properly notify small business customer of planned interruption (GSL = \$50)	22	1,100
Failure to properly notify residential customer of planned interruption (GSL = \$20)	342	6,840
Late new connection (GSL = \$40 / day)	85	9,270
Wrongful disconnection (GSL = \$100)	231	23,100
Late reconnection (GSL = \$40 / day)	36	1,600
Late response to complaint relating to loss of hot water (GSL = \$40 / day)	2	360
Failure to attend a scheduled appointment with a customer (GSL = \$40)	40	1,600
Reliability – duration – period of an interruption is too long (GSL = \$80)	10	800
Reliability – frequency – too many interruptions over the financial year (GSL = \$80)	32	2,560
<b>Total number of GSL payments</b>	<b>800</b>	<b>47,230</b>

*The number and type of GSL claims rejected*

During 2009-10, Ergon Energy rejected 363 GSL claims, an increase of 43.5% from the previous year's 205 GSL claims rejected. The majority of rejections were related to claims for failure to properly notify residential customers of planned interruptions (25.3%), too many interruptions over the financial year (23.1%) and wrongful disconnections (19.8%).

Table 11 provides details of the number of GSL claims rejected by Ergon Energy during 2009-10.

**Table 11. Ergon Energy: GSL claims rejected - 2009-10**

<i>GSL description</i>	<i>Claims rejected</i>
Failure to properly notify small business customer of planned interruption (GSL = \$50)	18
Failure to properly notify residential customer of planned interruption (GSL = \$20)	92
Late new connection (GSL = \$40 / day)	37
Wrongful disconnection (GSL = \$100)	72
Late reconnection (GSL = \$40 / day)	17
Late response to complaint relating to loss of hot water (GSL = \$40 / day)	6
Failure to attend a scheduled appointment with a customer (GSL = \$40)	11
Reliability – duration – period of an interruption is too long (GSL = \$80)	26
Reliability – frequency – too many interruptions over the financial year (GSL = \$80)	84
<b>Total</b>	<b>363</b>