



PERFORMANCE OF ETSA UTILITIES DURING THE SEVERE WEATHER EVENT OF JULY 2010

INFORMATION PAPER

July 2010

ELECTRICITY

INFORMATION ABOUT ESCOSA'S ACTIVITIES

Information about the role and activities of the Essential Services Commission, including copies of latest reports and submissions, can be found on the Commission's website at www.escosa.sa.gov.au.

TABLE OF CONTENTS

Information about ESCOSA's Activities	b
Glossary of Terms	ii
1 INTRODUCTION	1
1.1 Background	1
1.2 Purpose and scope	1
2 DESCRIPTION OF WEATHER EVENT	3
2.1 Overview of Severe Weather Event	3
2.2 Wind Strength	4
2.3 Warnings	4
3 RELIABILITY PERFORMANCE	5
3.1 Assessment of Performance	5
3.1.1 Overall performance statistics	5
3.1.2 Number of interruptions	6
3.1.3 Number of customers affected	7
3.1.4 Cause of interruptions	7
3.1.5 Average restoration times	8
3.1.6 Preparations for the severe weather event	8
4 CUSTOMER CALL CENTRE PERFORMANCE	10
4.1 ETSA Utilities' call centres	10
4.2 Telephone responsiveness standards	10
4.3 Performance during severe weather event	10
5 GUARANTEED SERVICE LEVEL PAYMENTS	13
6 COMMENTARY	14
7 NEXT STEPS	17



GLOSSARY OF TERMS

AER	Australian Energy Regulator
Bureau	Bureau of Meteorology
COMMISSION	Essential Services Commission of South Australia
EDC	Electricity Distribution Code
GSL	Guaranteed Service Level
HV	High Voltage
IVR	Interactive Voice Response
KI	Kangaroo Island
LV	Low Voltage
MED	Major Event Day
MW	Mega Watt
OMS	Outage Management System
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SES	State Emergency Service
STPIS	Service Target Performance Incentive Scheme

1 INTRODUCTION

1.1 *Background*

From the evening of Friday 9 July 2010 and across the following weekend, severe weather conditions were experienced in South Australia, with extended periods of rain and strong wind in many centres across the state. One impact of those severe weather conditions was widespread power outages across the electricity distribution network operated by ETSA Utilities, affecting up to 130,000 customers state-wide.

The prevailing conditions caused difficulties for ETSA Utilities in restoring supply to those affected by the outages. In addition, the significant nature of the outages lead to a very large number of customers contacting ETSA Utilities' customer call centre.

It is recognised that unlike a heatwave, where faults on the network are more readily identified (as the network elements which are more likely to fail are transformers or fuses), outages during storm conditions have a broader range of causes and those causes are more difficult to detect.

Nevertheless, given the magnitude of the weather event, the associated power outages and the number of customer calls made to ETSA Utilities' call centre, it is important that the Commission review ETSA Utilities' performance and provide independent public advice on that performance.

1.2 *Purpose and scope*

The Commission's decision to undertake this review is not unusual; it routinely monitors the reliability performance of the distribution network but does pay particular attention to events, such as this one, that may have resulted in a significant number of customers experiencing outages for extended periods of time.

The reliability performance of an electricity distribution network, and the customer service performance of the distributor, is under greatest pressure at times of severe weather events, such as widespread storms and heatwaves.

While it may be technically possible to design a network that continues to operate without failures no matter how violent a weather event, building, operating and maintaining such a network would be extremely costly and would require customers to pay prices many times higher than they do now if such a standard was required of ETSA Utilities' distribution network. Thus, as with any performance review, the Commission's review of this event will attempt to determine whether ETSA Utilities' preparation and supply restoration



performance, and customer service performance were at levels expected within the overall nature of the electricity distribution system it operates.

The purpose of this report, therefore, is to present information and commentary on the reliability performance of the ETSA Utilities' distribution network during that severe weather event (henceforth referred to as the 'July 2010 severe weather event')¹. The report also discusses the customer service performance of ETSA Utilities during the event.

Of note, while the July 2010 severe weather event had far-reaching impacts, there were also several subsequent weather events experienced in the days immediately following the weekend of 10 and 11 July. The impacts of those subsequent events were not as severe, however, and at this stage the Commission does not propose to include the impacts of those events in its analysis and will concentrate on the defined severe weather event.

Performance data reported here has been provided to the Commission by ETSA Utilities. In assessing both reliability and customer service performance during the July 2010 severe weather event, the method adopted by the Commission has been to compare key performance measures for this event with those from previous extreme weather events.

Given the preliminary nature of the data available at this point in time, the Commission has confined itself to providing a credible and independent data set and initial analysis and observations. While the preliminary outage and restoration data received from ETSA Utilities only relates to Saturday 10 July 2010, this was the key day for assessing performance.

The Commission has not determined at this time whether the performance of ETSA Utilities in relation to the July 2010 severe weather event was consistent with "good electricity industry practice" as defined by the National Electricity Rules, or whether ETSA Utilities has complied with its regulatory obligations.

¹ ETSA advises that the first interruption of the severe weather event occurred at about 8:00pm on 9 July (Friday) and the last interruption commenced at about 1:40am on 11 July (Sunday). Supply was restored to all customers affected by the severe weather event at about 3pm on 11 July 2010.

2 DESCRIPTION OF WEATHER EVENT

The Commission engaged the Bureau of Meteorology (Bureau) to prepare a special weather review for the July 2010 severe weather event, to provide a factual summary of the relevant weather event.² This section summarises the review provided by the Bureau.

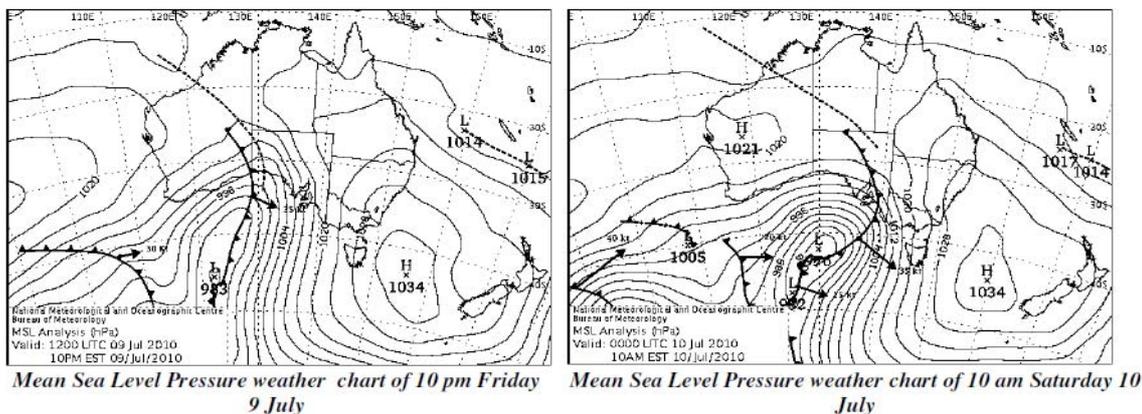
2.1 Overview of Severe Weather Event

The Bureau describes the event as:

“A deep low pressure system located well to the south of Australia extended a cold front and associated rain band across South Australia during July 9th and 10th 2010. The vigorous frontal system moved eastwards across South Australia during the evening of Friday 9th July and the morning of Saturday 10th July.

Due to the strong surface pressure gradient associated with the frontal system, strong to gale force north to northeast winds were experienced ahead of the front across a broad area of the State. Winds then shifted northwest and only very gradually eased following the passage of the front. Areas of rain and, in some southern areas, isolated thunderstorms, developed with the system and eventually cleared the northeast corner of South Australia during Saturday night. While the event produced widespread damaging winds, detected lightning activity was confined to southern Eyre Peninsula and the western end of Kangaroo Island and in small amounts, and rainfall totals from the event were not significant enough to produce flooding.”

Figure 1 – Weather Charts



² The Bureau prepares regular Monthly Weather Review reports but these are not usually released before the 23rd day of the following month, which would be late August for this event.



Figure 1 shows the pattern and movement of the system during the key period of the July 2010 severe weather event.

2.2 Wind Strength

The Bureau recorded damaging winds (10 minute mean wind speeds of 63 km/h or greater or wind gusts of 90 km/h or greater) at numerous locations across South Australia during this event. The Bureau reports that the July 2010 severe weather event saw both prolonged damaging ‘mean’ winds both ahead of and after the passage of the front, and damaging wind gusts in the hours prior to the passage of the cold front. The highest recorded wind gust in South Australia was 126km/h at Cape Willoughby on Kangaroo Island, while in the Mount Lofty Ranges and Adelaide region the highest recorded wind gust was 111km/h at Mount Crawford.

The Bureau also provides some commentary on the nature of the event:

“In terms of the widespread nature of this event, similar widespread wind events occur once or twice on average each winter over South Australia. That this event was the first major severe weather event this winter, and that strong winds persisted for an extended period, and from a more northerly direction rather than the more usual westerly direction seen with this type of event, may have contributed to the overall impact of the event.”

2.3 Warnings

A summary of the Bureau’s warnings issued during the event is as follows:

“The first Severe Weather Warning for damaging winds was issued for this event at 4:00 pm Friday 9th July This gave a warning lead time of about 6 hours for the first affected area (West Coast district) and a lead time of about 9 hours for the Adelaide area. The warning area initially covered the Adelaide and Mount Lofty Ranges, Lower Eyre Peninsula, Eastern Eyre Peninsula, Yorke Peninsula, Kangaroo Island, Mid North and parts of the West Coast and Lower South East districts. During the course of the event the warning area was contracted across western parts and extended further into eastern districts to include the Murraylands, Flinders, Upper South East and Lower South East districts. The Severe Weather Warning was then cancelled at 3:20 pm Saturday 10th July.”

The State Emergency Service (SES) received some prior briefing on the potential for damaging winds for the event, including on the morning of Thursday, 8th July 2010.

3 RELIABILITY PERFORMANCE

This section of the report assesses the reliability performance of ETSA Utilities during the July 2010 severe weather event.

3.1 Assessment of Performance

The key measures chosen for this assessment concern those areas of performance that were considered to be most problematic when ETSA Utilities' distribution network and resources are under stress – supply restoration times and timeliness of response to call centre queries.

The measures are as follows:

- ▲ Network Interruptions (HV & LV)
 - ▲ Number of interruptions
 - ▲ Number of customers affected
 - ▲ Cause of interruptions
 - ▲ Average restoration times
 - ▲ Customers affected for > 8 hours
- ▲ Call Centre Responsiveness
 - ▲ Number of calls
 - ▲ Calls answered within 30 secs
 - ▲ Average wait time to talk to an operator

Section 4 of this report deals with call centre responsiveness performance.

3.1.1 Overall performance statistics

Given the preliminary nature of the data provided by ETSA Utilities, the Commission will base its assessment of ETSA Utilities' reliability performance on Saturday 10 July, when the major impacts of the weather event occurred. It should be noted that this event is classed as a Major Event Day (MED) as determined in ETSA Utilities' Service Target Performance Incentive Scheme (STPIS)³ with the Australian Energy Regulator (AER).

Table 1 shows basic reliability performance data for specific regions in the ETSA Utilities' network and for the total network for 10 July. The regions in Table 1 are

³ As such, 10 July 2010 will be excluded from the data in assessing the performance incentive for ETSA Utilities by the AER as it exceeds the MED SAIDI threshold of 4.369 minutes.



those used in the Commission's Electricity Distribution Code (EDC)⁴ for defining reliability performance targets to be met by ETSA Utilities.

On Saturday 10 July, the overall network-wide impact on the System Average Interruption Duration Index (SAIDI) was 49 minutes and on the System Average Interruption Frequency Index (SAIFI) was 0.16 interruptions (refer Table 1 below). This means that, on average, each customer connected to the network experienced an interruption of 49 minutes duration and 0.16 interruptions as a result of the storm.

Although from a reliability perspective, many customers experienced significant interruptions, ETSA Utilities' performance targets for SAIDI and SAIFI as specified in the EDC are annual targets. The total network contribution to SAIDI from this event alone represents approximately 25% of the implied annual target of approximately 180 minutes for this measure - in just the first month of the 12-month regulatory period. This indicates the impact the storm event will have on ETSA Utilities' overall performance for the year.

Table 1 – Performance data – Saturday 10 July 2010

Reliability Impact - HV & LV Interruptions						
ESCOSA Region	Total Customers	Customers Affected	SAIDI (minutes)	SAIFI	Restoration Times (minutes)	No. of Events
Adelaide Business Area	4,800	0	0	0	0	0
Central	102,008	10,512	27.99	0.103	272	24
Major Metropolitan Areas	593,299	96,581	48.20	0.163	296	157
Eastern Hills/Fleurieu Peninsula	59,949	14,726	88.52	0.246	360	46
Kangaroo Island	3,815	3,953	243.12	1.036	235	5
South East	28,899	2	0.01	0.000	201	2
Upper North/Eyre Peninsula	38,907	4,492	75.70	0.115	656	14
Totals	831,677	130,266	48.85	0.157	312	248

3.1.2 Number of interruptions

There were a total of 248 HV and LV interruptions on the network on 10 July. 63% of interruptions occurred in the Major Metropolitan region. 19% of the interruptions occurred in the Eastern Hills and Fleurieu region. It is estimated that 95 of the total interruptions resulted in Guaranteed Service Level Payments (GSL), i.e. where customers were interrupted for more than 12 hours.

⁴ A copy of the Electricity Distribution Code can be located on the Commission's website at <http://www.escosa.sa.gov.au/library/100701-ElectricityDistributionCode-EDC08.pdf>.

On average, ETSA Utilities experiences less than 10 High Voltage (HV) interruptions daily. On 10 July there were 119 interruptions on the HV network and 129 interruptions on the Low Voltage (LV) network. Interruptions that occur on the HV network will also interrupt the LV network associated with the interruption. These LV interruptions are included with the HV interruptions and not counted separately.

3.1.3 Number of customers affected

ETSA Utilities' preliminary data reported that 130,266 customers were affected by the storm. Notably the Adelaide Business area was unaffected and the South East region felt little impact, whereas interruptions on Kangaroo Island (KI) appear to have impacted on the total customer base. It is unclear as to the cause and location of the widespread interruption on KI which, ETSA Utilities reported, emanated from the mainland 33kV supply. As can be seen by the number of customers affected, some KI customers may have experienced multiple interruptions. This would be the case for all regions.

In the Major Metropolitan region 16% of customers experienced interruptions whereas 25% of the Eastern Hills & Fleurieu Peninsula region's customers were affected which, except for KI represents the greatest proportion of customers on a regional basis.

3.1.4 Cause of interruptions

Table 2 details the percentage of customer minutes by cause. 81% of the customer outage time was related to 'Weather' and 'Unknown' causes and 19% due to 'Equipment Failure' (of which the majority was related to the storm event). An interruption is listed as 'Unknown' where there is no cause evident.

Table 2- Cause of interruptions – Saturday 10 July 2010

Cause Category	%
Equipment Failure	19%
Operational	0%
Other	0%
Third Party	1%
Unknown	31%
Weather	50%
	100%

The Commission notes that, during weather events such as that experienced on 10 July, interruptions may be caused by flying debris or vegetation which will have cleared itself by the time an asset inspection takes place. Nonetheless a complete inspection of the affected feeder is required to be undertaken by ETSA Utilities.

The majority of asset damage occurred in the Adelaide Hills and metropolitan area and was caused by trees and debris contacting the power lines.

3.1.5 Average restoration times

The average restoration time for all interruptions on 10 July was 5 hours and 12 minutes. The major contributing factors to the duration of the outages were the number of interruptions and the extent of the damage that was caused by the storm (eg trees or limbs falling on network infrastructure); this presented obvious problems for ETSA Utilities' work crews.

There were approximately 380 reports of "wires down" during the event which had to be investigated as a matter of priority (ie took precedence over restoring supply). There were a total of about 1,000 jobs associated with outages as a result of the storm.

Average restoration time in the Upper North & Eyre Peninsula region was double that of the Metropolitan region. This of itself is not abnormal as it is representative of the performance targets outlined in the EDC. Damage to the network in the Upper North & Eyre Peninsula region, particularly on Eyre Peninsula, was widespread with long distances involved in patrolling and restoration work.

3.1.6 Preparations for the severe weather event

Following the implementation of programs established as a result of the findings of the January 2006 Heatwave Inquiry, ETSA Utilities has demonstrated a degree of success in its preparedness for heatwave events. It is expected that ETSA Utilities' preparations for any significant weather event should follow these established procedures especially in using its links with the Bureau of Meteorology in anticipating a storm event, and the media, for the provision of information to customers.

ETSA Utilities asserts it did not receive advice of the severity of the storm until the BoM issued a severe weather warning at 4pm on Friday 9 July 2010. Until that time, the storm was forecast but at a lower intensity.

As ETSA Utilities' crews had mostly gone home, it undertook the following immediate actions in response to the reassessment of the intensity of the impending storm:

- ▲ additional line crews were placed on standby;
- ▲ additional job dispatchers were rostered to work during the event;

- ▲ linespersons were requested to advise their availability to work if required; and
- ▲ contractors were advised and their crews/resources were used during the event.

ETSA Utilities had begun these activities in some measure in expectation of a storm of less intensity.

ETSA Utilities reported that the storm event was managed in a similar manner to a heatwave event in that the event was declared as an Emergency Response Level 2 and all actions were then taken in accordance with the declaration of ERL2. (Emergency Response Levels (ERL) are graded from ERL1 to ERL3, where 3 is the most critical).

The Commission notes that the ERL2 was declared at 2.30am on the Saturday (10 July). ETSA Utilities advised that an ERL2 is only called when the event has happened or happening (i.e. thresholds have been reached) rather than in anticipation of an event. This may have impacted on the level of preparation undertaken by ETSA Utilities prior to the event. As discussed elsewhere in this report, the extent to which ETSA Utilities receives notice of the intensity of a storm would be a key determinant in its preparedness.

ETSA Utilities dispatched line crews from its Keswick control centre and from local depots throughout the State during the event.



4 CUSTOMER CALL CENTRE PERFORMANCE

A key measure of the customer service performance of an electricity distributor during a period of widespread supply interruptions is its ability to effectively respond to telephone queries from customers wishing to report, and to establish the likely duration of, outages. As is shown below, the extent of customer contact during the July 2010 severe weather event was significant, with approximately 40,000 calls received.

4.1 ETSA Utilities' call centres

ETSA Utilities operates a call centre of up to 67 operators (depending on events), based in Bendigo, for this purpose.⁵ It also has the capacity to establish, at short notice, additional or satellite call centres of 46 staff in Adelaide and 13 staff in Melbourne to deal with large numbers of customer queries that might arise due to widespread interruptions. Use of the satellite call centres is rare.

The Adelaide satellite call centre operated on Saturday 10 July 2010 between 8:30am and 5.00pm.

4.2 Telephone responsiveness standards

The Commission has established a telephone responsiveness service standard required to be met by ETSA Utilities. As specified in the Electricity Distribution Code, ETSA Utilities is required to use its best endeavours to ensure that at least 85% of telephone queries received within each financial year are answered within 30 seconds.

During any 12 month period, ETSA Utilities' call centre receives about 450,000 telephone queries from customers (daily average about 1,200 calls). Calls may be answered either by a sophisticated interactive voice response (IVR) system or an operator (if requested by the customer).

Over the past few years, the annual telephone responsiveness rate achieved by ETSA Utilities has been in the range 85 – 90%.

4.3 Performance during severe weather event

Table 3 presents telephone responsiveness data for ETSA Utilities for the July 2010 severe weather event.

⁵ The Bendigo call centre is shared with the Victorian distributors, Powercor and Citipower, which are related companies to ETSA Utilities. The satellite call centre action was established as a result of outcomes of the Inquiry into the January 2006 heatwave.

Table 3: Call Centre data, July 2010 severe weather event⁶

Date	No. calls Received	No. calls Abandoned	No. calls answered by IVR	No. calls answered by operator	No of calls unanswered	Av. wait time m:s	Calls answered in 30 sec
9/07/2010	1,221	17	837	367	0	00:09	94.2%
10/07/2010	34,565	1,612	29,338	3,615	0	01:11	87.0%
11/07/2010	2,661	205	1,576	880	0	02:11	81.5%
	38,447	1,834	31,751	4,862	0	01:13	86.8%

During the three days of the July 2010 severe weather event, ETSA Utilities' call centre received 38,447 calls, of which 82% were answered through the IVR system, 13% by an operator, and a further 5% of calls were abandoned by the customer before being answered by an operator.

Over the July 2010 severe weather event period, 87% of calls were answered within 30 seconds (compared with the standard of 85%). It should be noted that the standard is an annual measure, and a lower result from a single event may not reflect poor overall performance. The average wait time of one minute and 13 seconds includes the IVR responses where callers receive an instant response. Excluding IVR responses, the average wait time to talk to an operator during the July 2010 severe weather event was eight minutes and 30 seconds.

Table 4. Comparison between July 2010 severe weather event, January 2006, March 2008 and January 2009 heatwaves

	January 2006 4 days heatwave	January 2009 9 days heatwave	January 2010 5 days heatwave	July 2010 3 days severe weather event
Number of telephone calls	39,755 (9,940/day)	85,649 (9,520/day)	20,469 (4,090/day)	38,447 (12,815/day)
Calls answered within 30 seconds	66%	80.4%	88.0%	86.8%
Ave wait time to talk to an operator	10 minutes 33 seconds	5 minutes 2 seconds	2 minutes 9 seconds	8 minutes 30 seconds

⁶ The telephone calls are for the whole day not just for the storm event. That is, the telephone calls for 9 July cover the whole day, not just from the beginning of the event (8pm).



Table 4 provides a comparison of customer call centre performance during the July 2010 severe weather event period with the performance recorded for selected heatwave events, noting that heatwave events can result in similar pressures being placed on repair crews and customer call centre performance.

Over the three-day period of the July 2010 severe weather event, the number of calls averaged 12,815 per day, 87% of calls answered within 30 seconds. The average wait time to talk to an operator was 8 minutes and 30 seconds.

In comparison, the average number of calls received per day during the 5-day January 2010 heatwave was 4,090 (20,469 in total). Over the 9-day period of the January 2009 heatwave, the number of calls averaged 9,520 per day. During the 4-day January 2006 heatwave, ETSA Utilities received an average of 9,940 telephone calls per day (39,755 in total), with only 66% of calls being answered within 30 seconds. The average wait time to talk to an operator was 10 minutes and 33 seconds.

The bulk of the telephone calls received during the July 2010 severe weather event were on the Saturday (10 July 2010) where 34,565 calls were received. In comparison, the peak call days for the selected heatwave events averaged 16,593⁷ (January 2006), 29,775⁸ (January 2009) and 10,156⁹ (January 2010).

ETSA Utilities has advised that the comparison in Table 4 underrates the extent of telephone calls received during the July 2010 severe weather event, as the preliminary data provided for the storm was based on calls to the faults and emergencies (F&E) line only, whereas the data for the 2009 heatwave was for ETSA Utilities' 5 call lines. The peak total number of calls received by the F&E line in January 2010 was 25,992. Hence ETSA Utilities received 8,500 more calls during the storm, a 33% increase in the call volume, using a direct comparison.

⁷ On 22 January 2006. 15,059 calls were received on 21 January.

⁸ On 29 January 2009. 19,547 calls were received on 28 January and 16,608 calls received on 30 January.

⁹ On the last day of the heatwave (11 January 2010).

5 GUARANTEED SERVICE LEVEL PAYMENTS

Under the regulatory structure established by the Commission, customers may be entitled to certain payments arising from a severe weather event.¹⁰

Clause 5.3 of standard connection and supply contract contained within Part B of the Electricity Distribution Code provides for a Guaranteed Service Level (GSL) regime. Under that regime, if ETSA Utilities breaches a GSL, that breach triggers the making of a payment to the affected customer. The GSLs relate to timeliness of certain actions by ETSA Utilities.

Of most relevance to a severe weather event is the GSL relating to duration of supply interruptions (5.3(d)) – requiring GSL payments to be made in accordance with the following table:

Table 5: Current thresholds and payment amounts – duration of a single interruption

	THRESHOLD 1	THRESHOLD 2	THRESHOLD 3	THRESHOLD 4
Duration (hrs)	>12 and ≤15	>15 and ≤18	>18 and ≤24	>24
Payment	\$90	\$140	\$185	\$370

In each case, ETSA Utilities will forward a cheque to the customer for the specified amount if the minimum standard of customer service is not met.

The GSL payments are neither compensatory nor of a best endeavours nature. Rather the making of a payment for a breach of a GSL is a contractual obligation that ETSA Utilities has with individual customers. If a GSL is not met (and the concept of best endeavours is not relevant to that assessment), then the amount must be paid for breach of the contract.

ETSA Utilities' current estimate is that 6,657 customers will be eligible for GSL duration payments, totalling about \$1.2 million.

¹⁰ Clause 6 of standard connection and supply contract contained within Part B of the Electricity Distribution Code defines the basis on which ETSA Utilities may be liable to pay compensation for any losses suffered by customers. Whether or not an individual customer has a claim will depend on the facts in each case. Unlike GSL payments, this is not an automatic entitlement and requires proof of associated loss or damage.

6 COMMENTARY

Given the preliminary nature of the data provided by ETSA Utilities at this point in time for the July 2010 severe weather event,¹¹ the Commission has confined itself to providing a credible and independent data set and initial analysis and observations.¹² The Commission has not determined at this time whether the performance of ETSA Utilities in relation to the July 2010 severe weather event was consistent with “good electricity industry practice” as defined by the National Electricity Rules, or whether ETSA Utilities has complied with its regulatory obligations. The Commission will consider these matters when ETSA Utilities has been able to provide final data for the event.

The report provided by the Bureau of Meteorology confirms that this was a severe weather event. Wind gusts exceeded 90 km/h in many South Australian centres during the July 2010 severe weather event, with the highest recorded wind gust of 126km/h at Cape Willoughby on Kangaroo Island, while in the Mount Lofty Ranges and Adelaide region the highest recorded wind gust was 111km/h at Mount Crawford.

While it may be technically possible to design a network that continues to operate without failures no matter how violent a weather event, building, operating and maintaining such a network would be extremely costly and the existing network represents a balance between a level of reliability and the cost to achieve it.

The Commission’s role is to attempt to determine whether ETSA Utilities’ preparation and supply restoration performance, and customer service performance were at levels expected within the overall nature of the electricity distribution system it operates in South Australia.

Unlike some previous extreme weather events, in particular the heatwave which occurred in January 2006, it does not initially appear that there were any systemic operational issues which impacted on ETSA Utilities’ ability to deal with outages in an orderly way or to respond to customers’ calls.

Around 130,000 customers were affected by power outages, representing around 16% of ETSA Utilities’ customer base. The longest outage duration was 38.9 hours.¹³ The GSL regime is designed to minimise the extent of long duration outages and there is some evidence that it was successful in this instance. ETSA Utilities’ expects that around 6,700 customers will be entitled to some level of GSL payment, representing 5.1% of the total

¹¹ The event covers the period from 8:00pm on 9 July (Friday) to when supply was restored to all customers affected by the severe weather event at about 3pm on 11 July 2010 (Sunday). The last power interruption commenced around 1:40am on 11 July.

¹² For example, it is expected to take at least a week for the Outage Management System (OMS) data to be available for the High Voltage (HV) component of the network, with HV estimates used in this report derived from the Network Operations Log.

¹³ This incident was initially logged as a single customer experiencing an outage, with incidents involving safety and high customer numbers receiving higher priority. The cause of the incident in this case was a faulty transformer.

number customers affected by the event.¹⁴ The estimated number of customers affected by outages of more than 24 hours was 1,262 (1% of the total number of affected customers).

The Commission does not take issue with the broad priority setting that ETSA Utilities' advises was used in this event to restore power to customers, namely first priority given to safety (e.g. reports of fallen wires)¹⁵, then outages on High Voltage lines (to maximise the number of customers able to have power restored) and then outages on Low Voltage lines.

The Commission also does not have reason to dispute ETSA Utilities' advice that it had an appropriate number of crews available in the field to restore power, noting the need to manage its crews to ensure sufficient manpower was available to handle any extended period for the event. The Commission notes advice from ETSA Utilities that the event was managed in a similar manner to a heatwave event in that the event was declared an Emergency Response Level 2 (ERL2), and actions were taken in response to that declaration.¹⁶ The Commission notes that the ERL2 was not declared until 2.30am on the Saturday. While the timing of the declaration of such events may impact on the level of preparation undertaken, the extent to which ETSA Utilities receives notice of the intensity of a storm would be a key determinant in its preparedness.

One criticism with ETSA Utilities' response to the January 2006 heatwave was the manner in which crews were dispatched. For the July 2010 severe weather event crews were dispatched both centrally and from local depots during the event, but the dispatch of all crews was overseen by the command centre set up in ETSA Utilities' Keswick headquarters.

The fact that restoration times in the Upper North & Eyre Peninsula region were double that of the Metropolitan region is not of concern in itself as it is representative of the performance targets outlined in the Electricity Distribution Code. Damage to the network in the Upper North & Eyre Peninsula region, particularly on Eyre Peninsula, was widespread with long distances involved in patrolling and restoration work.

The Commission notes that the SES was receiving initial briefings from the Bureau on the potential for damaging winds for the Friday evening 9th July 2010, and Saturday morning 10th July 2010 prior to the initial Severe Weather Warning having been issued at 4.00pm on the Friday. Given the critical nature of the distribution network the Commission considers it important that ETSA Utilities comes to an arrangement with the Bureau so

¹⁴ Which means that these customers faced an outage of at least 12 hours duration.

¹⁵ There were around 380 reports of "wires down" during the event which had to be investigated as a matter of priority.

¹⁶ Emergency Response Level 3 is the highest level, which is directed at responding to the most severe events such as bushfires.



that it receives as much prior warning as possible of the potential for damaging winds to affect its network.

On the basis of most of the telephone responsiveness performance measures the call centre performed well during the July 2010 severe weather event. The only measure of concern was in relation to those customers seeking to speak directly to an operator as opposed to being satisfied with the information provided via the automatic IVR system. The average wait time to talk to an operator was 8 minutes and 30 seconds, which whilst better than the performance achieved in the January 2006 heatwave, was not as good as the performance achieved during recent heatwave events.

Nevertheless, ETSA Utilities faced its highest peak day telephone call volume experienced. Despite that, ETSA Utilities managed to achieve a standard equivalent to its annual telephone responsiveness service standard (85% of calls answered within 30 seconds) on average for the event, albeit not during the last day (81.5%). Also, ETSA Utilities operated the emergency Adelaide satellite call centre on Saturday 10 July 2010 in an effort to manage the large demand.

7 NEXT STEPS

The Commission will further review ETSA Utilities' performance in relation to the July 2010 severe weather event when it has received finalised data relating to the event. Should this final data result in the Commission forming a view that ETSA Utilities has not met any of its regulatory obligations in this instance then the Commission may release a further report.

As noted in the Commentary section, the Commission has not identified at this time any systemic operational issues which impacted on ETSA Utilities' ability to deal with outages in an orderly way or to respond to customers' calls.

The Commission will continue to monitor network interruptions and report on notable events such as heatwaves and storms that impact severely on the distribution network and customers.