

Queensland Floods Commission of Inquiry

Ergon Energy Corporation Limited

Supplementary Report - December 2010-January 2011 flood events

21 April 2011

everything in our power



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1.0 Introduction

1.1 At paragraph 5.12 of its Submission on Flood Preparedness dated 11 March 2011 (**First Ergon Energy Submission**), Ergon Energy Corporation Limited (**Ergon Energy**) noted that:

"To assist the Commission in understanding the nature and the extent of the outages experienced during the course of the flood events, Ergon Energy will produce and provide to the Commission a summary document identifying the affected areas, the extent of the outages, and Ergon Energy's response to those outages in each area".

1.2 By email to Ergon Energy's solicitors (Clayton Utz) dated 8 March 2011; the Commission of Inquiry (**Commission**) identified the relevant "areas" of interest to the Commission as:

Alpha
Bundaberg
Condamine
Emerald
Gayndah
Gin Gin
Goondiwindi
Gympie
Jericho
Maryborough
Mundubbera
Rockhampton
Rolleston
St. George
Surat
Tara
Warwick

Chinchilla, Dalby, Toowoomba, Withcott and Lockyer Valley (including Spring Bluff, Postmans Ridge, Murphys Creek, Helidon and Gratham).

1.3 With regard to the areas identified by the Commission, Ergon Energy does not own and operate the electrical distribution network for the following areas. The relevant network provider for each area is identified:

- (a) Goondiwindi - County Energy, New South Wales
- (b) Gympie - Energex
- (c) Withcott - Energex

- (d) Lockyer Valley (including Spring Bluff, Postmans Ridgee, Murphys Creek, Helidon and Gratham) - Energex.

1.4 With regard to the remaining areas identified by the Commission, additional information as to the impact of the 2010-2011 flood events on the provision by Ergon Energy of electricity for each area is contained in the attached:

- (a) Network Performance report (Schedule 1); and
- (b) Operations report (Schedule 2).

1.5 These reports have been prepared specifically for the purpose of providing this further submission to the Commission, and are not among the reports generated or produced by Ergon Energy as part of its usual reporting processes. A more detailed description of the information contained in these two reports is set out in sections 4 and 5 below.

1.6 The Commission has also requested information as to the procedure that is applied by Ergon Energy in relation to the de-energising of electricity supply during an emergency event, with particular reference to a flood event.

2.0 Electricity Supply to Consumers

- 2.1 It may be of assistance to the Commission, in understanding the impact of the 2010-2011 flood events on the Ergon Energy electricity supply network, to provide a high level overview of the network. This overview is also relevant to the information detailed in the enclosed "Network Performance" and "Operations" reports.
- 2.2 The electricity supply system has three interconnected components - generation, transmission and distribution.
- 2.3 In Queensland, generators operate power stations that generate electricity. These generators include government owned corporations (for example Tarong Energy Corporation Limited and Stanwell Corporation Limited) and private corporations (for example Intergen (Australia) Pty Ltd as the owner of the Millmerran Power Station).
- 2.4 The electricity generated at power stations is fed into the high voltage transmission network and transported by high voltage power lines to the distribution networks. In Queensland the only transmission network service provider is Powerlink, a government owned corporation.
- 2.5 Electricity is distributed from the transmission network to consumers along power lines of various voltages by Distribution Network Service Providers (DNSP). As noted in paragraph 3.2 of the First Ergon Energy Submission, Ergon Energy is the DNSP responsible for the distribution of electricity across regional Queensland, being a network area of 1.7 million square kilometres, representing approximately 97% of Queensland.
- 2.6 The voltage of the electricity is progressively reduced by Ergon Energy through a series of sub-stations and transformers throughout the network from 111kV (or higher) to 33kV and so on until the electricity is at its final voltage of 240V for supply to homes and businesses. Paragraph 3.7 of the First Ergon Energy Submission provides a summary of the infrastructure located throughout Queensland comprising the Ergon Energy distribution network.
- 2.7 The 240V electricity is typically received by a home or business at what is known as the "point of attachment" or "service fuse". The line or cable connecting the home or business to the power pole on the footpath to the customer's property is called the "service line" or "customer service wire". The service line is typically connected from the pole on the footpath to a pole in the customer's property or directly onto the actual building. The part where the service line connects to the pole or to the building is the point of attachment. When the service line connects to the actual building, the point of attachment is usually located at the front of the house or building. The "fascia" is the board or the area where the point of attachment is usually mounted.

- 2.8** Disconnections of electricity supply to customers can be effected at a large number of points in the network, from a single customer at low voltage, at multiple low voltage disconnections, at a distribution sub-station, at high voltage switches and so on. The network has a large number of points from which disconnection can occur.
- 2.9** One means by which electricity supply to a customer can be disconnected or interrupted is at a network level, with de-energising of the electricity supply effected from the Ergon Energy control centre. From the control centre Ergon Energy has control over most power transformer circuit breakers, a significant proportion of the high voltage feeder circuit breakers and some of the distribution field circuit breakers. These disconnections are typically characterised as network disconnections.
- 2.10** However, at the other end of the scale, electricity supply to customers can also be physically disconnected on a house by house basis by an appropriately qualified field crew officer disconnecting supply to a property at the point of attachment. An officer may also disconnect the supply of low voltage electricity to a street or to part of a street by disconnecting power to that group of customers from a street mains or from a distribution transformer connection point. As noted in paragraph 2.8 above the network has a large number of points from which disconnection can be effected. These field crew disconnections are typically characterised as operational disconnections.
- 2.11** In the case of operational disconnections, electricity supply is still available from the network distributor to the consumer, but for safety reasons, for example, to enable a fault to be corrected, or in the case of a flood event, because the particular property has been inundated electricity supply to the particular property is physically disconnected by the field officer at the point of attachment or from the distribution transformer connection point.

3.0 Ergon Energy's approach to disconnection of electricity supply in an emergency

management context

- 3.1 Ergon Energy's electricity supply network faces significant exposure to events such as cyclones, storm surges, severe storms, floods and earthquakes. Damage to the network can result in significant public safety risks and interruptions to customers' electricity supply.
- 3.2 Ergon Energy is also conscious that its disaster and emergency responses are delivered in an environment of continually increasing needs and expectations, both from customers and other community stakeholders. Ergon Energy must respond to increasing customer dependency on electricity as technology and appliances become more sophisticated and economic aspirations heighten.
- 3.3 Ergon Energy's operational priorities, during an emergency management event, in order of importance are:
- **ensuring personal safety** - both public and Ergon Energy staff
 - **protecting equipment and infrastructure from damage**
 - **efficient supply restoration** - including meeting the communication requirements of customers and other emergency services
- 3.4 One of the key objectives of Ergon Energy's Network Operations Emergency Management Plan is to minimise the inconvenience to customers caused by an emergency event.
- 3.5 Against this background, Ergon Energy's overriding approach in an emergency event is to retain power supply to its customers for as long as possible. This is to assist in the orderly evacuation of any affected area where evacuation is required and to ensure that essential lighting, traffic control systems, storm water pumping, portable water pumping and sewerage system pumping remain in service for as long as possible. This also ensures that electricity supply to the affected community remains available for as long as possible.
- 3.6 In giving effect to this overriding approach during an emergency event, and against the background of the three operational priorities identified in paragraph 3.2 above:
- (a) so as to minimise the inconvenience to customers Ergon Energy will use its best endeavours, where it is feasible to do so in an emergency event, to isolate parts of the network at the smallest incremental level, and have field officers only disconnect or interrupt power supply at that level. As described in paragraph 2.9 above this may involve disconnecting or interrupting power supply to an individual

house or business, an individual street, or to the properties serviced by a particular distribution transformer.

The result of this approach is that, where feasible, the supply of electricity remains available to all of those properties on the supply network which are not directly impacted by the emergency event.

- (b) in the case of a flood event, as a safety measure, supply will be disconnected for all areas inundated or likely to be inundated by water. Carrying out such disconnection is consistent with Ergon Energy's statutory obligation pursuant to Section 209A of the Electrical Safety Regulation 2002 to isolate power lines from sources of electricity in an emergency (for example if there is a flood or fire) or to prevent an emergency from happening.
- (c) supply will also be discontinued, for safety reasons, where minimum statutory clearance levels, being the level between, for example, a roadway, bridge, river surface or building, and an overhead powerline energised at high or low voltage cannot be maintained. Such disconnection may, depending on the circumstances, be effected at a local operational level, or at a network management level.

3.7 As soon as it is safe to do so following an emergency event, field crews commence restoration of the electricity service. In some instances restoring the service can be delayed because of:

- (a) damage to critical Ergon Energy infrastructure, for example, the flooding of substations or transformers;
- (b) damage to electricity power lines; or
- (c) damage sustained by an individual customer, necessitating the carrying out of a safety inspection before electricity supply can be restored.

3.8 Initial customer restoration focus following an emergency event is, in order of priority:

- hospitals and hospices
- water supply
- evacuation centres
- essential services, police, fire brigade, and ambulance
- major sewage pumping stations
- telecommunication sites.

4.0 The Network Performance report - December 2010 to January 2011 flood events

4.1 The Network Performance report, for the period December 2010 - January 2011 identifies, for each of the areas nominated by the Commission as an area of interest:

- (a) a "Google Earth" map of the subject area representing geographically the Ergon Energy supply area;
- (b) a description of the supply network for that area;
- (c) a table detailing the Ergon Energy distribution network, including the number of supplied customers;
- (d) a table detailing supply outages initiated to preserve public safety by reference to the date the supply interruption commenced, the number of customers interrupted, and the approximate duration of the interruption event¹; and
- (e) a table detailing supply outages with extended restoration time frames as a result of flooding issues by reference to the date the supply interruption commenced, the number of customers interrupted and the approximate duration of the interruption event¹.

4.2 This report has been compiled from a detailed examination of the outage information contained in Ergon Energy's feederstat system. The feederstat software collects statistics and enables reporting by Ergon Energy in relation to planned, forced and unplanned outages².

4.3 The Network Performance report is not a "real time" report. It is a report compiled from data held in the feederstat system. Ergon Energy officers have undertaken a review of the free text commentary within the outage event record in feederstat to identify the initiating reason for the event. Where the initiating reason has been identified as:

- (a) an outage initiated to preserve public safety - these are typically outages identified as having been effected as a precautionary action, taken to avoid any public safety risk from flood waters encroaching clearances to the energised electricity network;
or

¹ Event durations of less than 1 hour have been excluded from the table.

² A forced outage occurs where an event "forces" Ergon Energy to isolate the network, for example, rising flood water may "force" the isolation of part of the network for safety reasons

- (b) an outage with an extended restoration time frame as a result of flooding issues - these are typically outages resulting from the failure of an Ergon Energy network asset with an extended response time as a direct result of flooding;

the relevant outage details have been extracted from the feederstat records, compiled for each area of interest, and included in the Network Performance report.

4.4 The majority, but not all of the outages recorded in the Network Performance report represent network outages initiated by Ergon Energy through an Ergon Energy control centre. Ergon Energy has two network control centres, located at Townsville and Rockhampton. The Ergon Energy supply network can be controlled from each of these centres. The majority of the outages recorded in the report represent instances where Ergon Energy has pro-actively initiated the outage from the control centre to protect public safety, or because of a flood related impact.

4.5 The Network Performance report will also typically (though not universally) record the de-energising of high voltage assets, for example, a clearance to high voltage power lines that has been or appears likely to be breached, or the inundation of a sub-station. This is because even where the de-energising of the high voltage asset has not been effected from a control centre, field crews will usually report the incident operationally, and it will be included in the feederstat records. The reporting of information by Ergon Energy field crews is discussed further in section 5 below.

4.6 However, the Network Performance report is less likely to record all low voltage disconnections effected by field crews at an individual house or street level. Whilst some such instances may be recorded in feederstat, and are captured in the Network Performance report (the circumstances in which this may occur are also further addressed in section 5 below), generally the data in relation to low voltage disconnections is captured in the Operations report and not in the Network Performance report.

4.7 Some particular features that should be noted in relation to the Network Performance report include:

- (a) the event duration is in many instances not solely the time taken to effect repair to or re-energising of the affected asset, but also includes the period of time that Ergon Energy is unable to access the particular asset to ensure that it is in a safe condition to be repaired or re-energised. Therefore, an event duration of, say, 144 hours (six days) could indicate that for five days Ergon Energy was unable to access the affected asset because of flood waters, and one additional day was then spent in addressing the particular issue so that the asset could be re-energised;

- (b) it is possible that some customers experienced more than one interruption to their power supply during the December 2010-January 2011 period. For example, in the case of Bundaberg, the report identifies that 2,007 customers experienced outages to preserve public safety between 20 December 2010 and 31 January 2011. It is possible that this figure of 2,007 includes some duplication, being customers who experienced more than one outage over this period; and
- (c) the "event duration" describes the time that elapsed between the commencement of the outage and the restoration of power to the last customer to be restored. For example, the second entry for Bundaberg identifies that on 28 December 2010, supply to 482 customers was interrupted, with an event duration of 217.1 hours (approximately 9 days).

However, Ergon Energy's records show that the average duration of this particular outage, per customer, was 12.4 hours. This demonstrates that most of the 482 affected customers had their power restored within approximately 12 hours. However, for at least one customer (the last customer or customers to be restored), the impact of the flood event was that power was unable to be restored to that customer for a period of approximately 9 days.

5.0 Operations report - December 2010 to January 2011 flood events

- 5.1** The Operations report, for the period December 2010-January 2011 identifies, for each of the areas identified by the Commission as an area of interest:
- (a) a "Google Earth" map representing geographically the Ergon Energy supply area, a description of the supply network for that area and a table detailing the Ergon Energy distribution network, including the number of supplied customers³; and
 - (b) a qualitative and quantitative summary of operations information provided by Ergon Energy field and operations officers in relation to the subject area during the period of the December 2010-January 2011 flood events.
- 5.2** This report is compiled from the qualitative and quantitative information reported by Ergon Energy field officers to operational managers. In that sense it is a report which details "real time" field information. The report is structured so as to detail this information, starting at the last date for which information is available (by which time the flood event had generally passed and the recovery phase was well under way) and then working backwards to the beginning of the event and the initial impact of the event.
- 5.3** The report generally represents supply interruption situations where a customer's installation has been disconnected by a field crew officer due to inundation or a pending threat of inundation of the customer's installation.
- 5.4** This disconnection will typically be initiated by Ergon Energy field crews at a house-by-house or street level (as opposed to a control centre or network level disconnection). In other words, the disconnections the subject of the Operations report are generally those disconnections occurring at the point of attachment to the premises where Ergon Energy's service line connects to the premises, rather than on Ergon Energy's side of the distribution network.
- 5.5** The Operations report also contains a daily summary of the results of Ergon Energy's efforts to restore power to customer premises following various outage events and highlight situations where supply to premises may remain available, but the customer is still without power due to damage inside their premises or delays associated with awaiting safety inspections and clearances by electricity contractors.
- 5.6** Some particular features that should be noted in relation to the Operations report include:

³ This information also appears in the Network Performance report, but is repeated in the Operations report for ease of reference

- (a) the report is prepared on the basis of feedback reported by field crews to operational managers. This information is gathered "in the field" by work crews who are typically very busy, especially during an emergency event. The information is usually provided at an aggregated level as part of Ergon Energy's daily operational reporting and is, by its very nature, unlikely to always be completely accurate and may be susceptible to some level of omission or "rounding" of outage details;
- (b) the operations information provided by field crews will usually not include network level outages, as these are not "operational" outages. However it is possible that some field crews will include details of network level outages in their daily reports;
- (c) the operations information provided by field crews will not always be captured in the feederstat data and is therefore not necessarily included in the Network Performance report. This is partly due to the fact that categorisation of these outages in feederstat is dependent on the level of detail supplied by the field crews initiating the necessary action and there may be situations where the event record may simply state that a "fault" has been recorded. However the daily operational reporting contains summary level feedback indicating where field crews have taken proactive action to disconnect premises due to rising flood waters to enable the information to be identified as flood related, and thereby included in the Operations report; and
- (d) for some areas, only very limited operations data is available (for example, Alpha and Jericho).

6.0 Conclusion

- 6.1 For the reasons set out in sections 4.0 and 5.0 above, the information contained for each area in the Network Performance report and in the Operations report is information produced from two different sources. For that reason it is not possible to reconcile the information in the two reports.
- 6.2 It is probable that some of the outage information contained in the Network Performance report is based on operational information provided by field officers and included in feederstat. It is also probable that some of the information contained in the Operations report relates to network level outages detailed in the field crew reports to operational managers. As a result there is likely to be some "overlap" in the information contained in the two reports, but in the time available for the preparation of the reports it has not been possible to identify the extent of any such overlap. To do so would be a very time consuming exercise.
- 6.3 Although the source data for the reports is different, Ergon Energy was concerned that to provide the Commission with only one of the reports would not tell the whole story and for that reason both reports are provided.
- 6.4 Ergon Energy expects that, from these two reports, the Commission will have, for each of the identified areas, a helpful high level overview of:
- (a) the Ergon Energy supply area;
 - (b) the Ergon Energy supply network;
 - (c) the number of supplied customers;
 - (d) the number of customers impacted by the flood events, and the duration of that impact; and
 - (e) the steps taken by Ergon Energy in response to the flood events.

**Queensland Floods Commission of
Inquiry**

**Ergon Energy - Network
Performance Report**

December 2010 to January 2011

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Network Performance Report – Flooding December 2010 to January 2011

Queensland Floods Commission of Inquiry

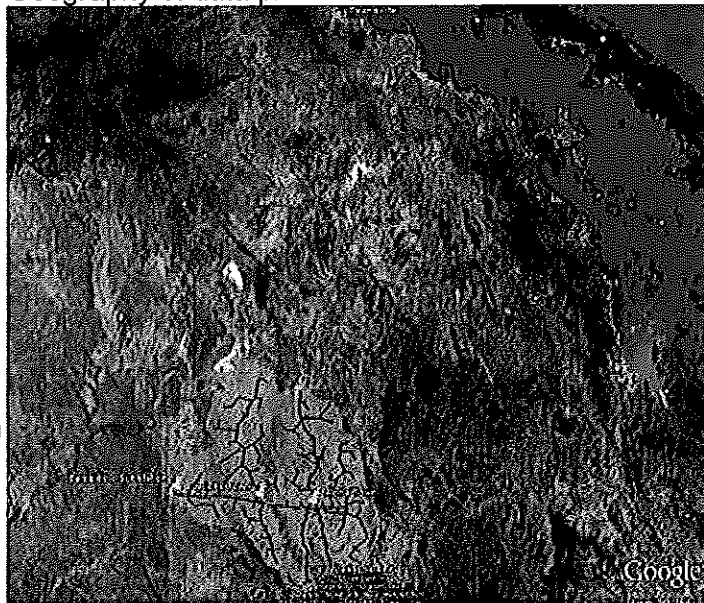
The areas that are the subject of this report are:

Alpha and Jericho
Bundaberg
Chinchilla
Condamine
Dalby
Emerald
Gayndah
Gin Gin
Maryborough
Mundubbera
Rockhampton
Rolleston
St. George
Surat
Tara
Toowoomba
Warwick



Alpha and Jericho

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Alpha Distribution Feeder supplied from the Barcaldine zone substation. This feeder supplies the townships and communities of:

Grant	Garfield	Alpha	Beaufort	Jericho
Dunrobin	Mexico	Drummond Slope	Peakvale	Port Wine
Hobartville	Pine Hill	Surbiton		

Distribution Feeder	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Alpha	673	6,036	1,926

Data for the period 1st December 2010 to 31st January 2011

Outages Initiated to Preserve Public Safety

Nil Reported

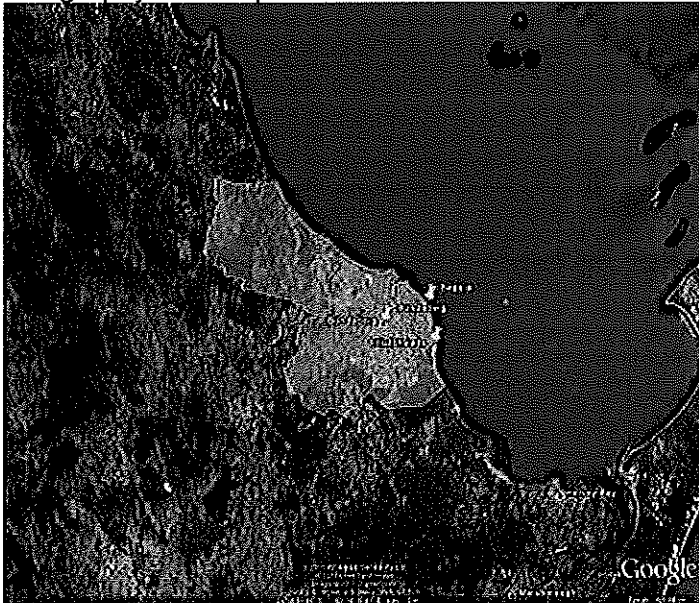
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
11/12/2010	16	6.3
18/12/2010	27	21.2
23/12/2010	1	22.3
27/12/2010	1	164.0
08/01/2011	1	64.3
Total	46	



Bundaberg

Geography of data presented



Supply Network Description

The data presented in this section is representative distribution network area serviced by the Bundaberg Depot.

Covering the townships and communities of:

Winfield	Miara	Fairymead	Electra	Millbank
Mullett Creek	Moore Park	Gooburru	Givelda	Kensington
Watalgan	Beech	Meadowvale	Pine Creek	Thabeban
Rosedale	Avondale	Sharon	South Bingera	Alloway
Yandaran	Moorland	South Kolan	North Gregory	Calavos
Avenell Heights	Welcome Creek	Qunaba	Branyan	Woongarra
Kepnock	Bundaberg West	Rubyanna	Avoca	Norville
Walkervale	Ashfield	Mon Repos	Innes Park	North Gregory
Svensson Heights	Windermere	Burnett Heads	Coral Cove	Pine Creek
Coonarr	Kalkie	Bargara	Elliott Heads	Kinkuna



Network Performance Report

The distribution network in the Bundaberg supply area has the following:
 9 x zone substations (West Bundaberg, Central Bundaberg, East Bundaberg, South Bundaberg, Bargara, South Kolan, Meadowvale, Gooburrum, Givelda)

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity	Supplied Line Length
Bundaberg Central	6	2559	unknown	unknown
Baragara	5	5994	40274	137
East Bundaberg	8	8060	59773	149
Givelda	3	234	5759	93
Gooburrum	3	1632	19464	458
Meadowvale	4	3627	24623	255
South Bundaberg	7	6975	60290	309
South Kolan	4	1669	19094	281
West Bundaberg	11	9014	93549	117
Total	51	39764	322826	1799

Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
20/12/2010	1	1.9
28/12/2010	482	217.1
28/12/2010	4	118.3
28/12/2010	1	5.65
28/12/2010	32	93.0
28/12/2010	543	67.2
29/12/2010	75	1.1
29/12/2010	28	30.0
29/12/2010	116	68.3
29/12/2010	22	70.2
29/12/2010	12	49.5
29/12/2010	53	46.2
29/12/2010	44	44.3
29/12/2010	87	65.6
29/12/2010	91	24.0
29/12/2010	9	139.3
29/12/2010	10	68.3
29/12/2010	1	217.3
29/12/2010	44	42.0
29/12/2010	1	133.1
30/12/2010	1	106.6
30/12/2010	2	47.2
31/12/2010	1	2.6
31/12/2010	1	3.4
27/12/2010	1	92.7
27/12/2010	1	92.7
27/12/2010	1	92.7



Network Performance Report

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
31/12/2010	1	1.4
29/12/2010	1	43.2
31/12/2010	1	3.4
27/12/2010	1	93.5
27/12/2010	1	94.6
27/12/2010	1	94.7
27/12/2010	1	94.7
27/12/2010	1	94.7
27/12/2010	1	95.1
31/12/2010	1	4.6
31/12/2010	1	2.5
31/12/2010	1	1.7
30/12/2010	1	29.4
31/12/2010	1	2.6
31/12/2010	1	4.6
31/12/2010	1	4.8
31/12/2010	1	4.8
31/12/2010	1	3.5
31/12/2010	1	1.6
30/12/2010	1	5.9
31/12/2010	1	2.4
28/12/2010	1	92.5
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
24/12/2010	1	192.9
27/12/2010	1	117.7
29/12/2010	1	84.0
29/12/2010	1	84.0
31/12/2010	1	28.4
29/12/2010	1	84.1
30/12/2010	1	59.4
30/12/2010	1	55.5
30/12/2010	1	55.5
2/01/2011	2	2.0
31/12/2010	1	50.1
28/12/2010	2	158.3
5/01/2011	1	3.0
6/01/2011	6	1.2
12/01/2011	283	186.1
12/01/2011	7	64.5
18/01/2011	1	237.2
18/01/2011	1	237.2



Network Performance Report

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
31/01/2011	1	1.7
	2007	

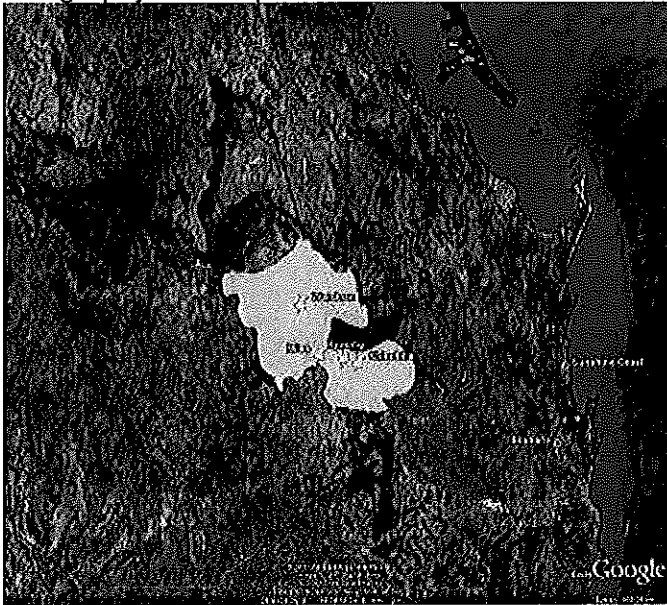
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
27/12/2010	4	20.5



Chinchilla

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Chinchilla area. This network supplies the townships and communities of:

Chinchilla	Darr Creek	Canaga	Warra	Brigalow
Jandowae	Jinghi	Wychie	Kogan	Burncluth
Columboola	Greenswamp	Drillham	Dulacca	Guluguba
Wandoan	Grosmont	Cockatoo	Taroom	Spring Creek
	Baroondah	Jackson	Moraby	

The distribution network in the Chinchilla supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Chinchilla Town	3	1924	24177	373
Chinchilla	3	999	22254	356
Miles	4	1249	9623	723
Wandoan	3	1095	11660	1766
Chinchilla Skid	1	1044	11215	30
Kogan Creek	1	67	230	27
Total	15	6378	79159	3275



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

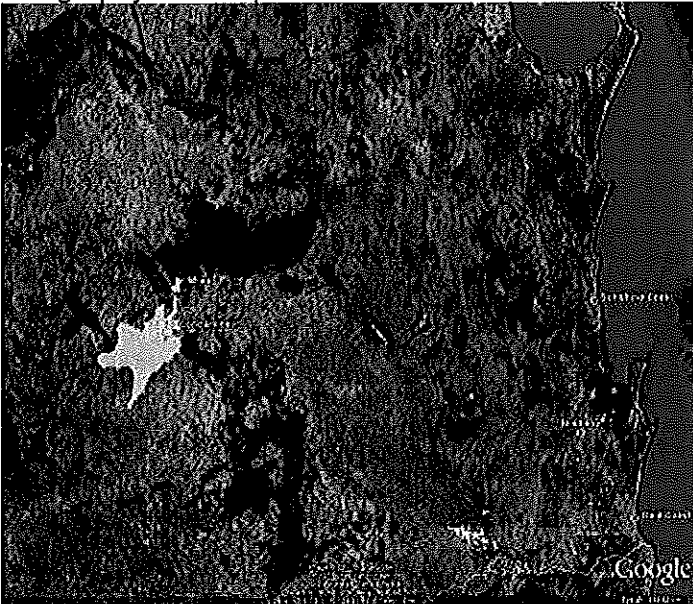
Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
28/12/2010	689	2.2
28/12/2010	7	48.9
28/12/2010	18	99.3
28/12/2010	2	240.6
29/12/2010	3	1176.2
30/12/2010	3	122.3
30/12/2010	29	667.5
30/12/2010	811	111.5
31/12/2010	3	76.5
7/01/2011	683	2.5
13/01/2011	39	138.7
14/01/2011	3	125.3
Total	2290	

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
6/01/2011	1	17.7
11/01/2011	1	32.5
12/01/2011	1	8.9
Total	3	

Condamine

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV Miles Distribution Feeder supplied from the Chinchilla zone substation and the 33kV Miles-Condamine Feeder supplied from the Miles substation. These feeders supply the townships and communities of:

Pine Hills Yulabilla Sunnyside Meandarra Condamine

The distribution network in the Condamine supply area is comprised of the following:

Distribution Feeder	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length 9km)
Miles	51	3170	153
Miles - Condamine	314	3938	373
Total	365	7108	526

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
31/12/2010	12	80.9
13/01/2011	12	121.7
30/12/2010	3	192.8
30/12/2010	3	192.8
Total	30	



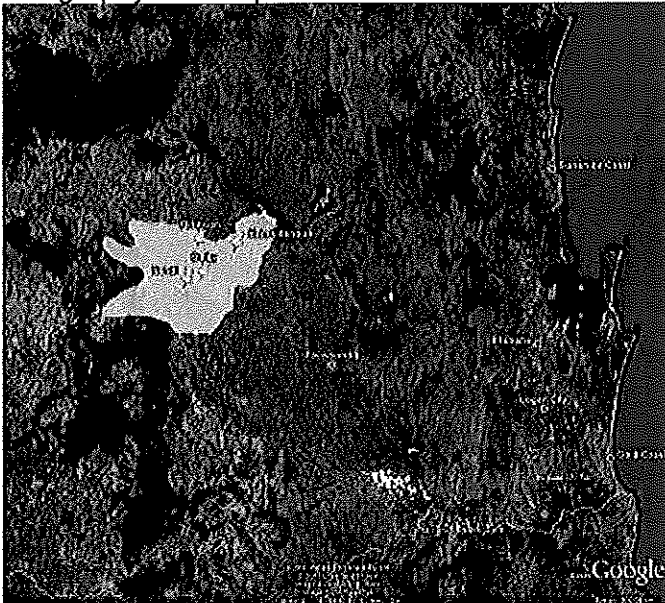
Network Performance Report

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
14/01/2011	1	70.9

Dalby

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Dalby area. This network supplies the townships and communities of:

Dalby	Bell	Karee	Ducklo	Macalister
Pirrinuan	Moola	Tipton	Kumbarilla	Warra
Kaimkillenbun	Mowbullun	Springvale	Ranges Bridge	Jimbour East
Blaxland	St Ruth	Nandi	Mirrabooka	Irvingdale

The distribution network in the Dalby supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Dalby Central	5	4228	24121	126
Dalby West	5	2358	37760	2035
Pirrinuan	3	260	5994	151
Nandi	2	116	7713	102
Kaimkillenbun	1	467	3913	219
Total	16	7429	79501	2633



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
20/12/2010	670	22.6
20/12/2010	8	18.7
20/12/2010	50	17.3
27/12/2010	674	77.7
27/12/2010	81	42.3
27/12/2010	8	51.6
27/12/2010	57	42.5
27/12/2010	13	38.9
27/12/2010	58	37.3
29/12/2010	14	90.5
29/12/2010	1	5.9
29/12/2010	1	5.9
11/01/2011	670	188.4
10/01/2011	5	78.5
10/01/2011	1	174.6
10/01/2011	8	72.5
10/01/2011	1334	28.3
10/01/2011	13	72.0
10/01/2011	56	50.7
10/01/2011	56	74.8
15/01/2011	1	2.4
14/01/2011	1	91.5
28/01/2011	1	2.1
Total	3781	

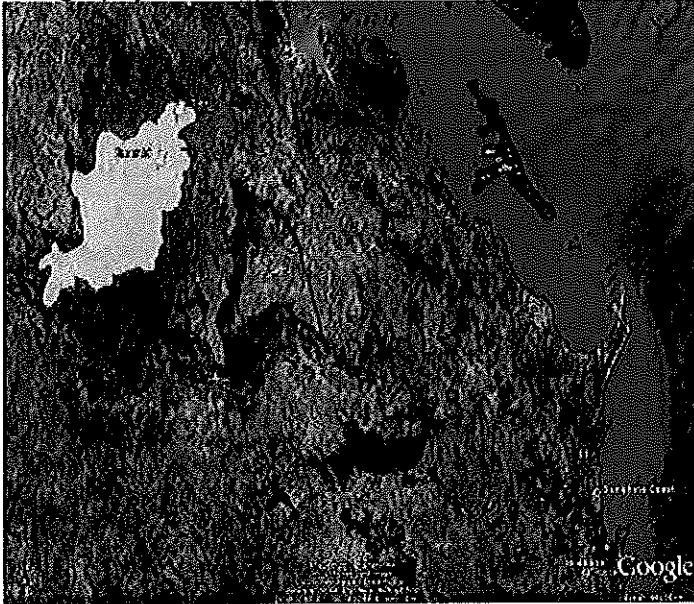
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
11/01/2011	44	150.2
13/01/2011	1357	6.0
13/01/2011	66	279.8
23/01/2011	1	51.4
Total	1468	



Emerald

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Distribution Network supplied by the Emerald and Tieri zone substations. This network supplies the townships and communities of:

Tieri	Gordonstone	Argyll	Wealwandangie	Carnarvon Park
Peak Downs	Wyuna	Willows	Cona Creek	Emerald
Crinum	Emerald	Gindie	Nandowrie	Capella
Chirnside	Central Highlands	Springsure	Mantuan Downs	The Gemfields
Cairdbeign				

The distribution network in the Emerald supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Tieri	2	588	6500	82
Emerald	8	9151	108554	2528
Total	10	9739	115054	2610



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

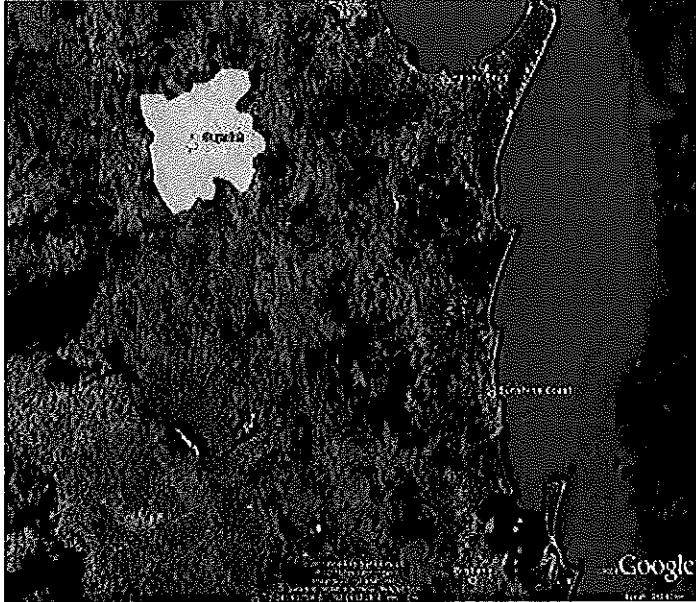
Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
30/12/2010	53	79.6
29/12/2010	14	94.3
31/12/2010	46	30.9
31/12/2010	26	50.0
03/01/2011	4	8.4
31/12/2010	39	46.6
31/12/2010	51	41.5
30/12/2010	1	54.5
10/01/2011	1	1.4
14/01/2011	1	1.9
17/01/2011	1	5.1
29/01/2011	1	1.1
Total	238	

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
30/12/2010	8	5.7

Gayndah

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network supplied by the Gayndah zone substations. This network supplies the townships and communities of:

Mount Steadman	Coalstoun Lakes	Ban Ban	Harriet	Dirnbir
Byrnestown	Gayndah	Ban Ban Springs	Reids Creek	Penwhaupell
Ideraway	Campbell Creek	Woodmillar	Binjour	

The distribution network in the Gayndah supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Gayndah	4	2061	19439	674

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
24/12/2010	5	2.9
27/12/2010	1	37.0
29/12/2010	1	4.9
30/12/2010	1	23.7
04/01/2011	1	3
06/01/2011	1	1.4
Total	10	



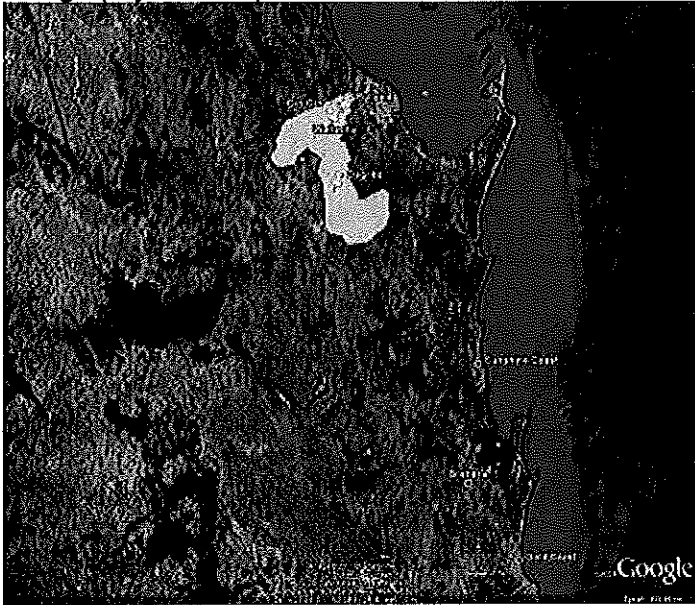
Network Performance Report

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
28/12/2010	268	48.25
30/12/2010	1	23.5
04/01/2011	1	1.9
Total	270	

Gin Gin

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Gin Gin area. This network is serviced by three zone substations, Degilbo, Wallaville and Bullyard and supplies the townships and communities of:

Bucca	Coalstoun Lakes	Damascus	Tirroan	Skyring Reserve
Bullyard	Gaydah	Delan	Redhill Farms	Dalysford
Maroondan	Campbell Creek	Drinan	Wallaville	Moolboolaman
Boolboonda	Mt Perry	Horse Camp	Booyal	New Moonta
Wonbah	St Kilda	Morganville	Dallarnil	North Aramara
Degilbo	Woowoonga	Boompa	Aramara	Brooweena
Biggenden	Lakeside			

The distribution network in the Gin Gin supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Wallaville	5	2680	28530	756
Bullyard	3	830	12193	187
Monduran Dam	1	194	1285	223
Degilbo	4	1191	7208	492
Total	13	4895	49216	1658



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
29/12/2010	280	27.8
29/12/2010	354	9.5
29/12/2010	356	9.5
29/12/2010	7	3.0
05/01/2011	1	23.5
12/01/2011	353	48.8
Total	1351	

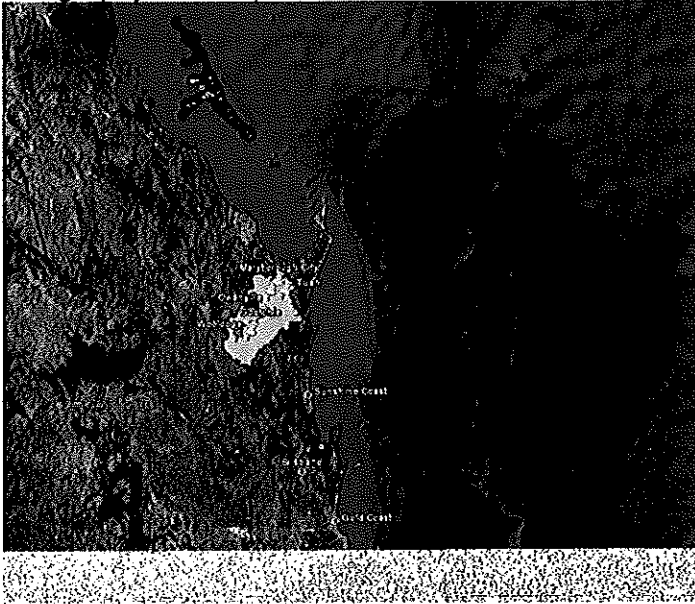
() Outages With Extended Restoration Timeframes as a Result of Flooding Issues:

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
17/12/2010	1	2.5
17/12/2010	1	7.2
17/12/2010	1	2.6
19/12/2010	1	22.7
22/12/2010	1	7.5
27/12/2010	42	21.0
28/12/2010	354	156.5
28/12/2010	202	100.9
28/12/2010	752	841.4
29/12/2010	101	695.6
29/12/2010	132	65.5
30/12/2010	1	1.7
Total	1589	



Maryborough

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Maryborough area. This network is serviced by three zone substations, Degilbo, Wallaville and Bullyard and supplies the townships and communities of:

Bucca	Damascus	Dalysford	Horse Camp	Biggenden
Bullyard	Delan	Moolboolaman	Morganville	Woowoonga
Maroondan	Drinan	New Moonta	Booyal	Lakeside
Bungadoo	Tirroan	Boolboonda	Dallarnil	Boompa
McIlwraith	Redhill Farms	Wonbah	Degilbo	Brooweena
Gin Gin	Wallaville	Mt Perry	North Aramara	Aramara
St Kilda	Skyring Reserve			

The distribution network in the Maryborough supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Woolooga	2	1646	9112	351
Rocky Street	6	8281	25555	183
Maryborough City	6	5787	32777	190
Tuan	1	1007	3132	65
Owanyilla	4	1906	20963	445
Gootchie	3	1868	10931	456
Kilkivan	4	665	4363	161
Total	26	21160	106833	1851



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
27/12/2010	2	3.3
7/01/2011	9	42.1
8/01/2011	1	158.4
8/01/2011	3	223.1
8/01/2011	1	270.1
8/01/2011	4	145.9
8/01/2011	3	70.8
8/01/2011	2	258.4
8/01/2011	1	9.4
9/01/2011	48	34.2
9/01/2011	3	120.2
8/01/2011	1	15.4
8/01/2011	1	56.5
11/01/2011	107	36.7
11/01/2011	10	2.6
12/01/2011	191	146.7
17/01/2011	18	1
Total	405	

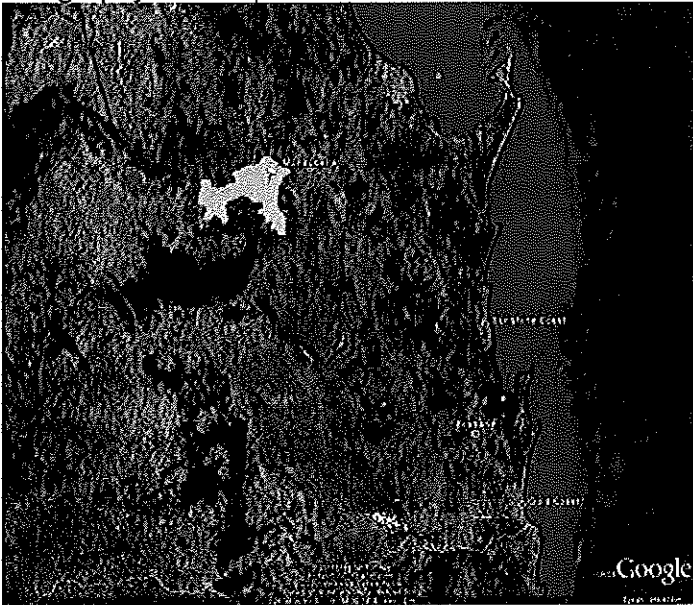
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
8/01/2011	39	23.8
9/01/2011	1	1
11/01/2011	48	35.7
12/01/2011	59	17.7
18/01/2011	1953	9.1
Total	2100	



Munduberra

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Munduberra area. This network supplies the townships and communities of:

Cattle Creek Munduberra Glenrae Beeron Riverleigh
Philpott Coonambula Dykehead Old Cooranga Mundowran

The distribution network in the Munduberra supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Munduberra	4	1515	34995	723



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
27/12/2010	182	68.4
27/12/2010	104	56.4
30/12/2010	1	1.9
30/12/2010	1	1.6
30/12/2010	2	1.4
29/12/2010	1	46.9
30/12/2010	1	126.3
30/12/2010	1	123.9
4/01/2011	1	20.2
4/01/2011	1	197
4/01/2011	1	19.2
5/01/2011	1	1.7
6/01/2011	7	3.1
24/01/2011	1	2.8
28/01/2011	1	144.8
Total	306	

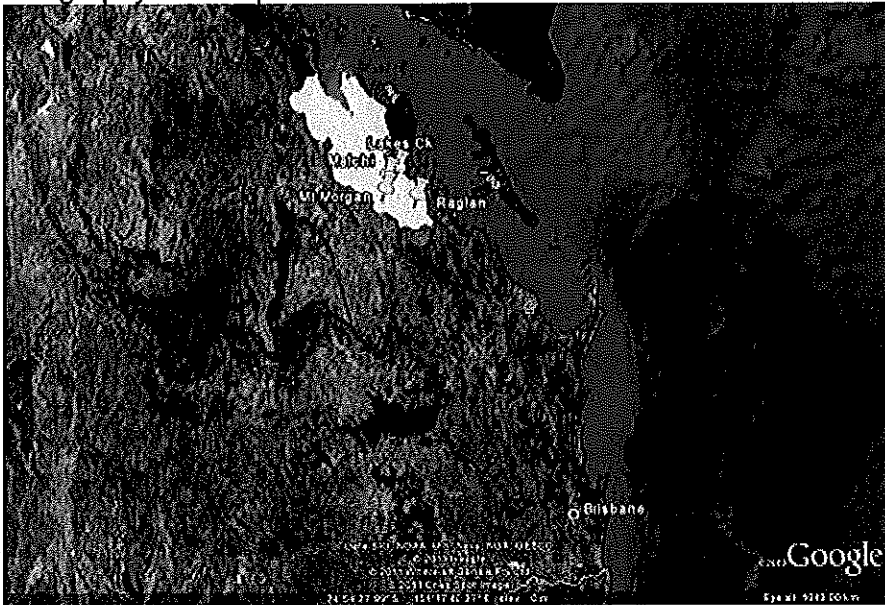
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
20/12/2010	6	8.3
23/12/2010	29	9.1
24/12/2010	10	17.2
25/12/2010	29	121.9
6/01/2011	29	19.6
7/01/2011	1	99.6
10/01/2011	1	70.9
Total	105	



Rockhampton

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV and 22kV Distribution Network in the Rockhampton area. This network supplies the townships and communities of:

Ogmore	Rossmoya	Garnant	Mount Chalmers	Rockhampton
Malborough	Milman	Pandoin	Ridgelands	Gracemere
Kunwarara	Yaamba	Glendale	Dalma	Kabra
Stanage	SouthYaamba	Alton Downs	Mornish	Kalapa
Canoona	Etna	Limestone Ck	Mornish South	Mt Chalmers
Jardine	The Caves	Ironpot	Glenroy	Nerimbera
Struck Oil	Port Alma	Darts Ck	Bracewell	Bouldercombe
Mt Morgan	Marmor	Ambrose	Mt Larcom	Leydens Hill
Bajool	Raglan			

The distribution network in the Rockhampton supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Malchi	4	4291	25247	489
Raglan	3	1035	17576	505
Pandoin	4	2392	25571	1587
Berserker	4	unknown	unknown	unknown
Frenchville	7	7419	45650	62
Canning St	5	5414	30835	37
Lakes Ck	6	3480	14380	124
Mt Morgan	3	1912	9617	141
Parkhurst	7	3799	40019	179
Rockhampton Glenmore	8	6992	59510	97
Rockhampton South	7	2411	39472	73
Total	58	39145	307877	3294



Network Performance Report

Performance Data for the period 1st December 2010 to 31st January 2011
 Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
3/12/2010	1	3.7
3/12/2010	1	12.7
28/12/2010	1	527.2
28/12/2010	1	573.4
28/12/2010	2	503.2
29/12/2010	1	478.8
29/12/2010	1	620.3
31/12/2010	7	361.3
31/12/2010	6	409.3
1/01/2011	53	431.4
31/12/2010	1	1004.8
31/12/2010		450.4
31/12/2010	13	426.4
3/01/2011	7	159.1
1/01/2011	55	289.0
1/01/2011	72	259.7
2/01/2011	92	266.4
2/01/2011	33	244.6
2/01/2011	70	237.1
2/01/2011	1	292.5
2/01/2011	4	383.1
3/01/2011	6	288.2
2/01/2011		358.6
2/01/2011		451.9
2/01/2011	4	310.4
3/01/2011	3	214.3
4/01/2011		330.8
4/01/2011		207.8
17/01/2011	6	1.9
1/02/2011	1	2.4
Total	442	



Network Performance Report

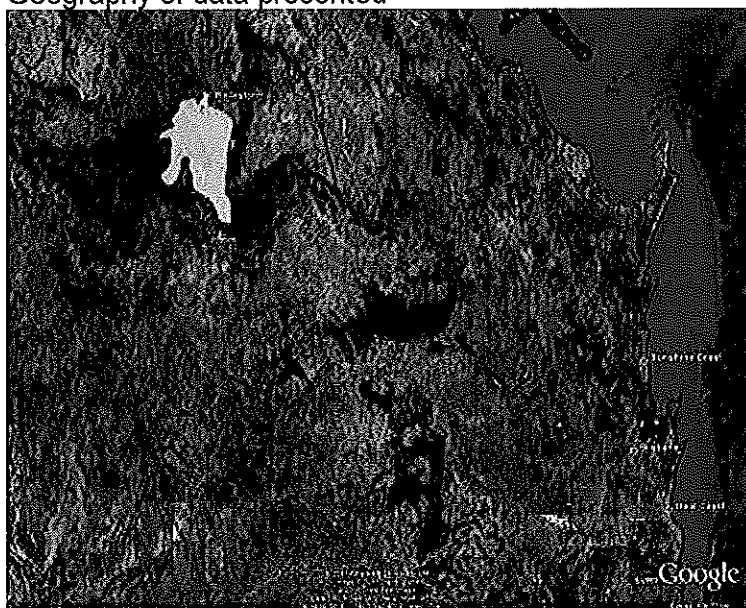
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
4/12/2010	4	13.8
13/12/2010	1	2.9
27/12/2010	1	3.9
30/12/2010	1	4.6
1/01/2011	7	29.0
2/01/2011	1	8.3
3/01/2011	1	21.7
4/01/2011	1	19.8
3/01/2011	1	52.0
5/01/2011	4	262.0
10/01/2011	87	4.6
10/01/2011	73	8.8
Total	182	



Rolleston

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Distribution Network supplied by the Crescent Feeder out of the Rolleston zone substation. This network supplies the townships and communities of:

Rolleston	Rewan	Early Storms	Purbrook	Arcadia Valley
Consuelo	Warrinilla	Wyseby	Planet Downs	Glenidal
Coorumbene	Ingelara			

The distribution network in the Rolleston supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Rolleston	1	293	3263	658

Data for the period 1st December 2010 to 31st January 2011

Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
28/12/2010	1	13.5

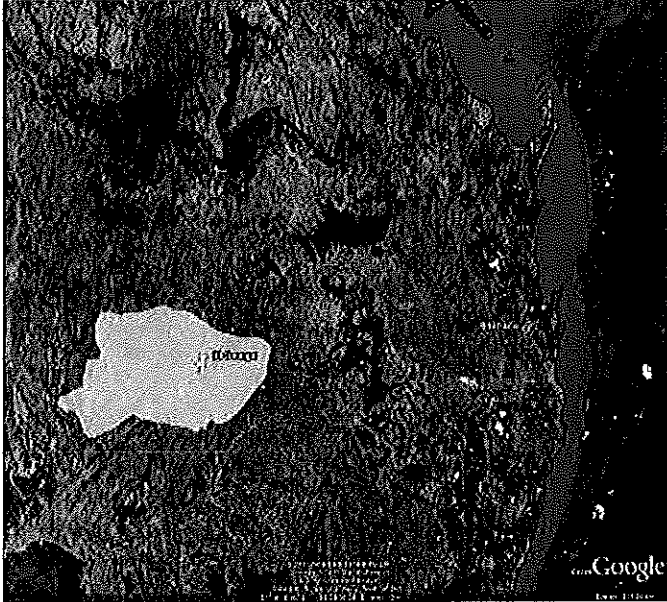
Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Nil Reported.



St George

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV and 33kV Distribution Network supplied from the St George and St George Town zone substation. This network supplies the townships and communities of:

St George Weengallon Bollon Bindebango Begonia
 Wycombe Thallon

The distribution network in the St George supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
St George 66/33kV	4	941	19934	2647
St George Town	3	1318	10378	30
Total	7	2259	30312	2677



Network Performance Report

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

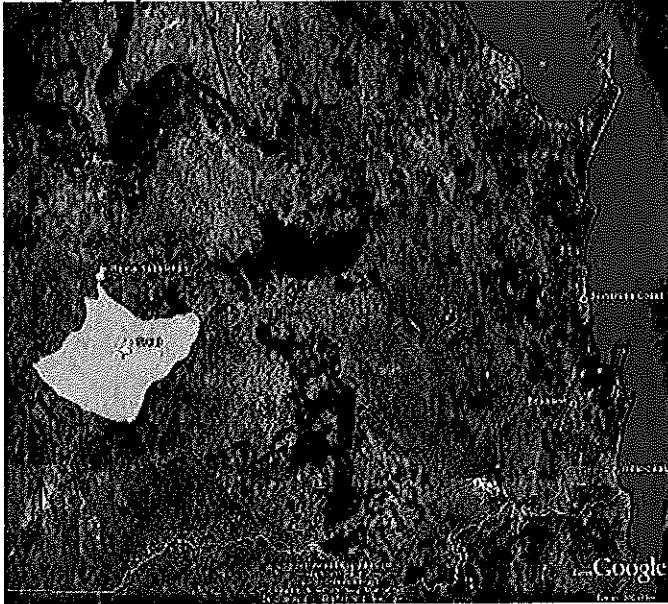
Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
7/01/2011	2	644.2
8/01/2011	3	47.7
2/01/2011	2	654.8
4/01/2011	4	165.2
6/01/2011	1	266.3
Total	12	

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
23/12/2010	2	1.4
3/01/2011	1	3.0
Total	3	

Surat

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV Distribution Network supplied from the into the Surat area from the Roma substation. This network supplies the townships and communities of:

Tingun Noorindoo Surat Weribone Ballaroo
 Warkon Parknook Wellesley

The distribution network in the Surat supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Roma	1	599	6073	1094

Data for the period 1st December 2010 to 31st January 2011

Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
21/01/2011	1	263.2



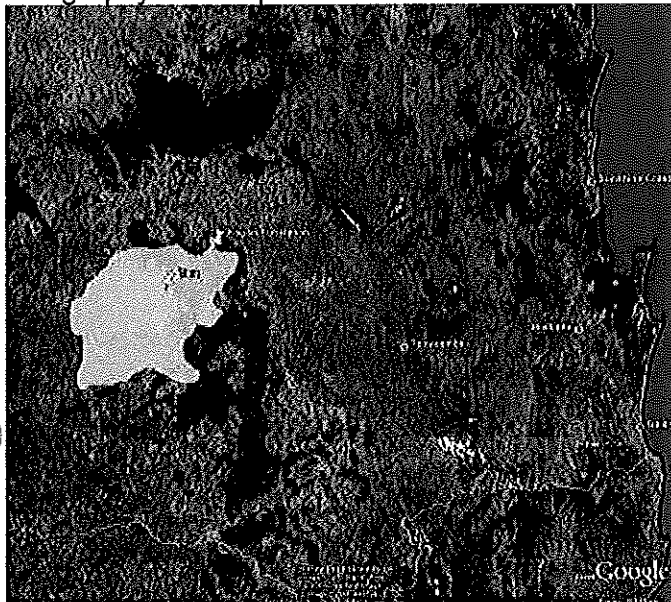
Network Performance Report

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
4/12/2010	1	20.7
2/01/2011	47	111.5
3/01/2011	1	5.7
6/01/2011	42	48.8
24/01/2011	1	4.4
25/01/2011	1	12.4
Total	90	

Tara

Geography of data presented



Supply Network Description

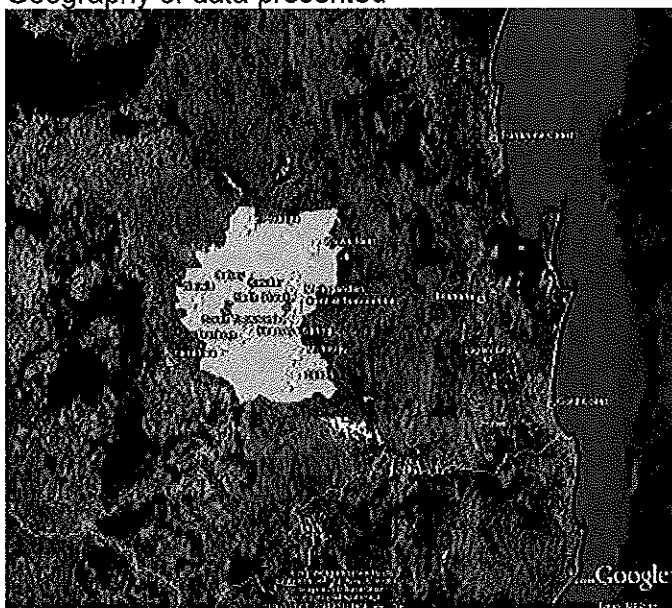
The data presented in this section is representative of the 33kV and 11kV Distribution Network supplied from into the Tara Area from the Tara and Kogan zone substation. This network supplies the townships and communities of:

Kogan	Weranga	Tara	The Gums	Hannaford
Beelbee	Goranba	Weir River		

No flood related supply interruptions were recorded in the Tara area.

Toowoomba

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Toowoomba area. This network supplies the townships and communities of:

Toowoomba	Crows Nest	Broxburn	Yarranlea	Norwin
Clifton	Westbrook	Hodgson Vale	Southbrook	Oakey
Cambooya	Pittsworth	Jondaryan	Bowenville	Brymaroo
Quinalow	Emu Creek	Goobungee	Meringandan	Geham
Kingsthorpe	Biddeston			



Network Performance Report

The distribution network in the Toowoomba supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Kearneys Spring	7	7284	unknown	unknown
Meringandan	4	2821	39136	311
South Toowoomba	7	8060	79157	72
East Toowoomba	8	12065	67523	106
Peranga	3	519	8789	325
West Toowoomba	7	10801	49030	65
Central Toowoomba	7	2277	23705	55
Yarranlea South	2	289	9419	166
North Street	9	5708	40775	63
Crows Nest	3	2040	19856	509
Broxburn	5	2446	27629	442
Mt Tyson				
Norwin	4	298	17557	320
Mt Sibley	3	1033	20762	392
Purrawunda	4	610	15711	317
Clifton	3	1215	14925	306
Oakey	6	3272	36626	568
Torrington	6	5923	86928	310
Total	88	66661	557528	4327

Data for the period 1st December 2010 to 31st January 2011
Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
10/01/2011	1,183	22.3
10/01/2011	133	22.2
10/01/2011	5	42.3
10/01/2011	58	6.2
10/01/2011	157	42.6
10/01/2011	10	16.5
11/01/2011	40	23.2
11/01/2011	25	31.9
11/01/2011	52	3.4
11/01/2011	63	7.6
11/01/2011	3	7.5
11/01/2011	19	7.1
11/01/2011	1	7.2



Network Performance Report

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
10/01/2011	1	17.3
10/01/2011	1	17.3
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	1.8
11/01/2011	1	2.3
11/01/2011	26	3.5
12/01/2011	115	3.6
11/01/2011	1	15.5
11/01/2011	1	15.6
11/01/2011	1	15.8
11/01/2011	1	15.6
11/01/2011	1	15.6
11/01/2011	1	15.6
11/01/2011	1	15.6
11/01/2011	1	15.6
11/01/2011	1	15.6
11/01/2011	1	17.
11/01/2011	1	15.6
11/01/2011	1	15.5
11/01/2011	1	15.4
11/01/2011	1	15.5
11/01/2011	1	15.5
12/01/2011	1	3.4
12/01/2011	1	3.5
12/01/2011	1	3.4
12/01/2011	1	3.5
12/01/2011	1	3.4
12/01/2011	1	3.4
12/01/2011	1	4.8
12/01/2011	1	4.9
12/01/2011	1	4.9
12/01/2011	1	4.8
12/01/2011	1	5.2
12/01/2011	1	5.1
11/01/2011	1	17.5
11/01/2011	1	15.5
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5



Network Performance Report

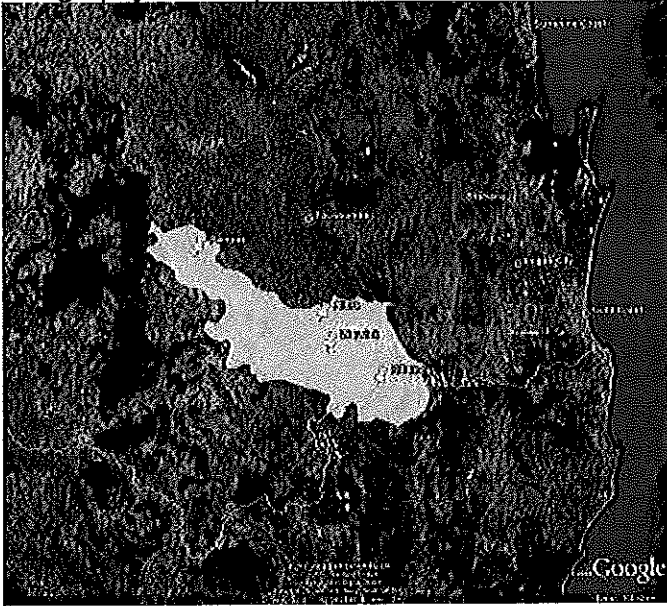
Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
11/01/2011	1	17.5
11/01/2011	1	17.5
11/01/2011	1	17.5
12/01/2011	1	9.0
11/01/2011	1	21.8
11/01/2011	1	36.8
12/01/2011	1	15.9
11/01/2011	1	38.5
12/01/2011	1	28.8
12/01/2011	1	28.8
12/01/2011	1	17.3
11/01/2011	1	21.5
17/01/2011	1	19.3
	1995	

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
11/01/2011	137	2.3
21/01/2011	109	1.8
Total	246	

Warwick

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Warwick area. This network supplies the townships and communities of:

Warwick Killarney Leyburn St Helens Tummaville
 Maryvale Allora Pampas

The distribution network in the Warwick supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
East Warwick	6	4926	53956	546
West Warwick	4	4215	23621	391
Allora	4	1940	25595	548
Killarney	3	1117	13377	278
Pampas	4	720	31590	567
Total	21	12918	148139	2330

Data for the period 1st December 2010 to 31st January 2011

Outages Initiated to Preserve Public Safety

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
27/12/2010	14	16.4
11/01/2011	11	11.9
11/01/2011	36	12.3
15/01/2011	4	119.5
Total	65	



Network Performance Report

Outages With Extended Restoration Timeframes as a Result of Flooding Issues

Date Interruption Commenced	Customers Interrupted	Event Duration (hours approx)
23/12/2010	1	1.3
11/01/2011	291	146.9
11/01/2011	1	15.9
11/01/2011	1	27.8
11/01/2011	1	50.6
Total	295	

**Queensland Floods Commission of
Inquiry**

**Ergon Energy - Operations
Report**

December 2010 to January 2011

everything in our power





Operations Report – Flooding December 2010 to January 2011

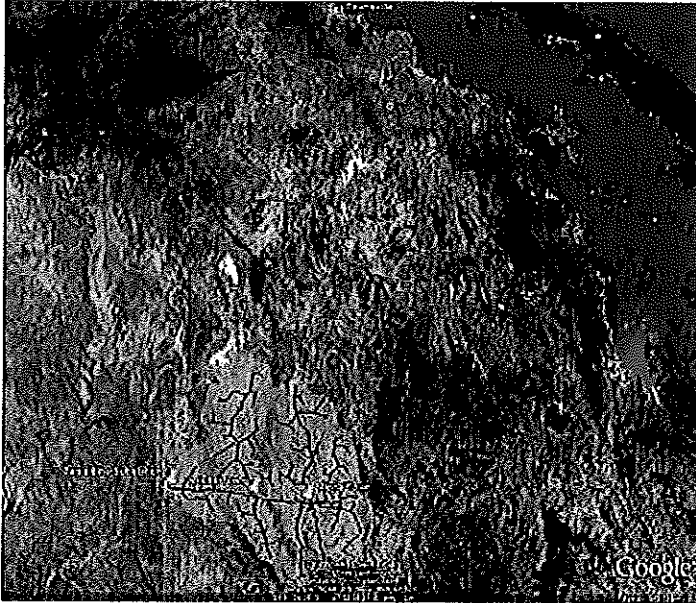
Queensland Commission of Inquiry Request For Information

The areas that are the subject of this report are:

Alpha and Jericho
Bundaberg
Chinchilla
Condamine
Dalby
Emerald
Gayndah
Gin Gin
Maryborough
Mundubbera
Rockhampton
Rolleston
St. George
Surat
Tara
Toowoomba
Warwick

Alpha and Jericho

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Alpha Distribution Feeder supplied from the Barcaldine zone substation. This feeder supplies the townships and communities of:

Grant	Garfield	Alpha	Beaufort	Jericho
Dunrobin	Mexico	Drummond Slope	Peakvale	Port Wine
Hobartville	Pine Hill	Surbiton		

Distribution Feeder	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Alpha	673	6,036	1,926

COB 30 December 2010

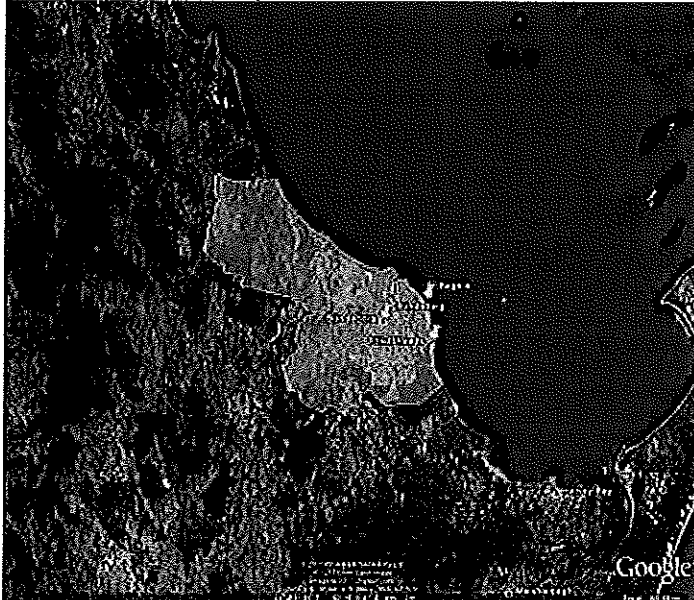
Alpha: 70 customers inundated

Jericho: 5 customers inundated



Bundaberg

Geography of data presented



Supply Network Description

The data presented in this section is representative distribution network area serviced by the Bundaberg Depot. Covering the townships and communities of:

Winfield	Miara	Fairymead	Electra	Millbank
Mullett Creek	Moore Park	Gooburrum	Givelda	Kensington
Watalgan	Beech	Meadowvale	Pine Creek	Thabeban
Rosedale	Avondale	Sharon	South Bingera	Alloway
Yandaran	Moorland	South Kolan	North Gregory	Calavos
Avenell Heights	Welcome Creek	Qunaba	Branyan	Woongarra
Kepnock	Bundaberg West	Rubyanna	Avoca	Norville
Walkervale	Ashfield	Mon Repos	Innes Park	North Gregory
Svensson Heights	Windermere	Burnett Heads	Coral Cove	Pine Creek
Coonarr	Kalkie	Bargara	Elliott Heads	Kinkuna



Operations Report

The distribution network in the Bundaberg supply area has the following:
 9 x zone substations (West Bundaberg, Central Bundaberg, East Bundaberg, South Bundaberg, Bargara, South Kolan, Meadowvale, Gooburrum, Givelda)

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity	Supplied Line Length
Bundaberg Central	6	2559	unknown	unknown
Baragara	5	5994	40274	137
East Bundaberg	8	8060	59773	149
Givelda	3	234	5759	93
Gooburrum	3	1632	19464	458
Meadowvale	4	3627	24623	255
South Bundaberg	7	6975	60290	309
South Kolan	4	1669	19094	281
West Bundaberg	11	9014	93549	117
Total	51	39764	322826	1799

COB 11 January 2011:

Bundaberg has only around 10 remaining off supply, with another 5 restored today. Power is available to all residential and business premises, however, these remaining customers require major rebuild work before being reconnected.

COB 8 January 2011:

Bundaberg town: power is available to all residential and business premises. Around 15 homes still require work to be completed by an electrical contractor.

COB 3 January 2011:

Bundaberg town: power is available to all residential and business premises, however power cannot be reconnected to around 50 homes until work is completed by an electrical contractor.

COB 2 January 2011:

Bundaberg town: power is available to all residential and business premises, however power cannot be reconnected to more than 200 homes until work is completed by an electrical contractor.

COB 1 January 2011:

Bundaberg town Only 80 remain off supply. All HV and LV network is now available. Ergon crews have inspected all affected customers. The customers that remain without supply are due to faults within their installation requiring an electrical contractor to repair.

In the **southern part of the CBD (Hinkler Place)** all customers surrounding the shopping centre have been restored, down from 222 at this time yesterday. Within the shopping centre Coles and Woolworths have been unaffected and have continued trading. A 1MVA transformer that supplies the foodcourt and specialty shops is now clear of the floodwater and will be restored this afternoon. K-Mart is supplied by a transformer that is still underwater. They have their own generator, but have been unable to utilise this as their LV switchboard is underwater. Once K-Mart repair their own LV board, they will use their generator until our transformer is able to be placed back on-line.

COB 31 December 2010:

Bundaberg town 605 customers remain off supply, 163 because of inundation and the other 442 were taken off supply as a safety precaution due to rising water. However, it is likely that a number of premises within the 442 have now been inundated.



Operations Report

In the **southern part of the CBD (Hinkler Place)** 19 customers remain off supply with 203 customers having been restored

The Bundaberg Central substation remains de-energised as a safety precaution as flood waters have entered the grounds. Water has entered the site but there has been no damage to plant and equipment.

There is no customer impact as supply is being provided from East and West substations.

COB 30 December 2010:

Bundaberg - 603 customers off supply in the area of Bundaberg town. Combination of individual faults and feeder outages, including LV. All due to inundation.

In the **southern part of the CBD (Hinkler Place)** 222 customers are off supply due to inundation, including most of the shopping centre. Water has been through the ground mounted substation and we are waiting for the water to recede to assess the situation.

COB 29 December 2010:

East Bundaberg (Walker St) - a further 121 customers are off supply due to flooding

North Bundaberg - 250 individual fault calls.

Total for Bundaberg city 593 customers without supply.

The Bundaberg Central substation has been de-energised as a safety precaution as flood waters begin to encroach. 222 customers are off supply due to inundation, including most of the shopping centre. Water has been through the ground mounted substation and we are waiting for the water to recede to assess the situation.

Customers are currently being supplied via the West and East substations. There are no concerns due to reduced loads at present.

The Burnett River is currently 7.3m and is only expected to get to 7.5m but this could be revised as the floodwaters in the upper system has taken out many of the flood monitoring systems. The river will peak today and remain high through Thursday.

COB 28 December 2010:

The Bundaberg Central substation has been de-energised as a safety precaution as flood waters begin to encroach. Ergon Energy is monitoring the situation very closely. Customers are currently being supplied via the West and East substations. There are no concerns due to reduced loads at present.

The flooding situation has worsened significantly in Bundaberg this morning with both bridges closed, effectively splitting the town in two. A number of employees have been impacted with their homes being inundated. The situation is being managed and assistance provided. The Burnett River in Bundaberg is expected to peak today or overnight. The positive news is the weather is overcast but mainly fine and we've been able to get a chopper up to check on the damage.

Around 300 premises are off supply in **Bundaberg central**, however we don't have accurate numbers at present as staff have been isolated due to floodwaters and a number of their homes have been inundated. Resourcing issues have been resolved and accurate figures will be available from this afternoon.



Operations Report

COB 14 January 2011

Chinchilla: 213 customers off supply.

COB 13 January 2011

Chinchilla: 218 customers off supply, with 24 residential and 1 commercial customer re-connected today as water levels receded. Additional connections staff will travel to the area tomorrow to assist with re-connection.

COB 12 January 2011

Chinchilla: 243 customers off supply (154 residential and 89 commercial), increased number of customers disconnected as floodwater in Charlie's ck continues to rise.

COB 11 January 2011

Chinchilla: 96 customers off supply.

COB 5 January 2011

Chinchilla: Only 6 customers remain off supply (4 residential and 6 commercial). All premises require work by a contractor.

COB 4 January 2011

Chinchilla: Only 10 customers remain off supply (4 residential and 6 commercial). All premises require work by a contractor.

COB 3 January 2011

Chinchilla: 33 premises remain off supply, however the 10 residential and 10 commercial customers that were suffering inundation are now clear of the water and will be inspected today. There remain another 13 commercial customers that require additional work by a contractor before they can be restored.

COB 2 January 2011

Chinchilla: Power is disconnected due to inundation to only six businesses. However, power has not been restored to about 60 other customers, either because they require work by an electrical contractor or crews could not contact the property owners to gain access to check the switchboards.

COB 1 January 2011

Chinchilla: There are only 20 premises without supply, 10 residential and 10 commercial. These premises are still subjected to inundation. All remaining customers that were affected have been inspected and restored, although in some instances sub-circuits have been disconnected until a contractor attends.

COB 31 December 2010

Chinchilla: 210 customers remain without supply - 96 premises have been inundated, and the other 114 customers have been proactively de-energised as a safety precaution due to the height of the flood water. In some areas the water has started to recede. It is anticipated that crews will attempt restoration to some customers either late this afternoon or early tomorrow. One crew from Toowoomba has arrived in Chinchilla to assist.

COB 30 December 2010

Chinchilla: 125 customers (64 individual properties, 5 transformers) are off supply. Even though Charleys Creek fell overnight, it is expected to remain static for a couple days. The Condamine is expected to rise from 13m to 16m over the next 36 hours (+ or - 8hrs) and it is not known yet what

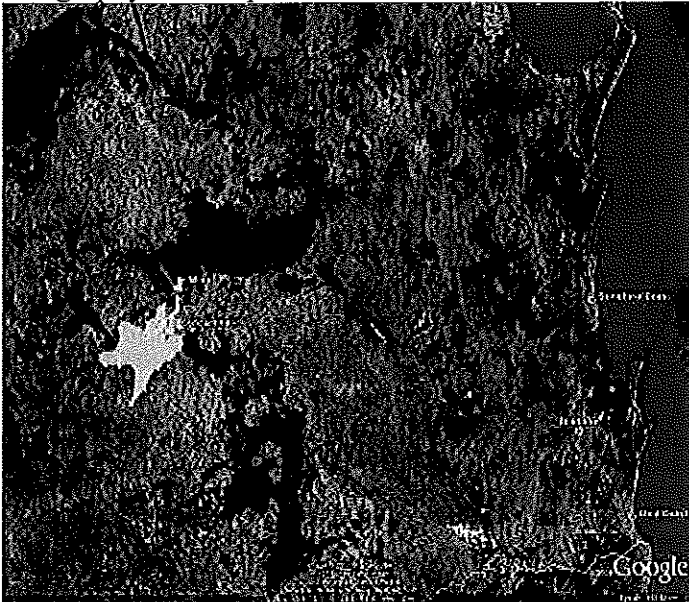


Operations Report

impact this will have on Charleys Creek. Because of the safety risk to our crews, who would have to cross water and work in water to reconnect properties and potentially have to do the same to disconnect them once more, it is not intended to reconnect any properties in the next 36 hours.

Condamine

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV Miles Distribution Feeder supplied from the Chinchilla zone substation and the 33kV Miles-Condamine Feeder supplied from the Miles substation. These feeders supply the townships and communities of:

Pine Hills Yulabilla Sunnyside Meandarra Condamine

The distribution network in the Condamine supply area is comprised of the following:

Distribution Feeder	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length 9km
Miles	51	3170	153
Miles - Condamine	314	3938	373
Total	365	7108	526

As at 20 January 2011:

Condamine: 20 customers remained without power.

As at COB 18 January 2011:

Condamine: 85 customers without power as floodwaters rise. All customers off except the BP service station and the SES as floodwaters rise.

As at 13 January 2011:

Condamine: 94 customers without power - for the second time. Water levels are rising in the Condamine area again. Crews were in Condamine to commence disconnections as levels rise. Today approx 33 customers were disconnected in township of Condamine as well as all 61 customers on Airport SWER.

As at COB 10 January 2011:



Operations Report

Condamine: 10 customers now without power (8 residents and 2 community buildings) with 1 restored yesterday. All of Ergon Energy's assets are now energised and supply is available to these 10 installations. Power will be restored when repairs have been done to the private installations.

As at COB 7 January 2011:

Condamine: 16 customers remain without power, with another 5 restored today. Three companies are providing 7 contractors to Condamine township today to commence repairs. All of Ergon Energy's assets are now energised and supply is available to all customers.

As at COB 5 January 2011:

Condamine: All of Ergon's assets are now energised and supply is available to all customers. 21 customers remain without power until major work on their installation is completed by a contractor. 20 customers were restored in Condamine yesterday with no further work required and 47 have been restored but with a sub-circuit disconnected. These are primarily hot water or air conditioning circuits that have been disconnected.

As at COB 4 January 2011:

Condamine: 44 in town without power, with another 40 restored this afternoon and with more anticipated to be on by this evening. The 33kV into the township was re-energised this morning. All four transformers are now energised. Some customers (approx 10 – 20) will require significant repairs due to the extensive damage caused by the floodwater and will not be reconnected for some time.

As at COB 3 January 2011:

Condamine: 96 customers without power due to inundation. Crews will be in the area today to determine if restoration can commence.

As at COB 2 January 2011:

Condamine: 96 customers without power due to inundation. Crews will be in the area today to determine if restoration can commence. Helicopter assessments on Condamine town and the Airport SWER will be conducted today to determine if restoration can commence.

As at COB 1 January 2011:

Condamine: 96 customers without power due to inundation. 84 of these customers are in town. There are 4 transformers supplying the town, 3 are de-energised due to inundation of the transformers by the floodwater. One of is still energised however is only supplying 3 customers. These customers are on high ground and not at risk of flooding. The remaining 18 customers on that transformer have been disconnected due to inundation. There are another 12 customers in the Condamine airport SWER disconnected as a safety precaution due to rising floodwater. There are two feedlots affected, one holding 30 000 head of cattle, the other holding 5000 head of cattle. We have performed some switching to supply the 30k feedlot; however the 5k feedlot is now disconnected after consultation with the customer.

As at COB 31 December 2010:

Condamine: 118 premises have been taken off supply because of inundation. The 33kV line has been de-energised as it is under water. The entire town has been evacuated, so no one is in town waiting on restoration. However there is a customer issue - There are 2 feedlots impacted by the necessity to proactively disconnect supply to the Condamine Township, the feedlots are run off the same HV system. One has 30,000 cattle and about 2 days of feed. The other, which has made a statement in the media today, has 4000 - 5000 cattle and no feed. We are flying a crew in this morning, and will attempt to isolate the feed that goes to Condamine township so we can restore HV and supply the feedlots. We are not sure that we are able to gain access, or whether we shall be able to manage the risk associated with conductor clearances if we re-energise the line. We have spoken



Operations Report

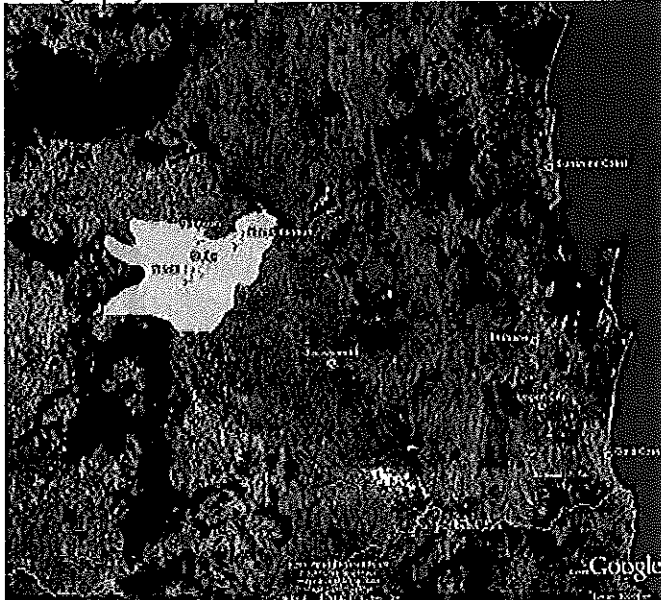
to the customer today to set expectations. If the line can't be re-energised, we will consider whether we can supply generation. As all roads are cut, this would require the airlift of a generator.

As at COB 30 December 2010:

Condamine: A large number of premises were taken off supply because of inundation. The 33kV line was de-energised on the afternoon of 30 December and later that evening parts of that line were re-energised though not to the Condamine Township. Full details of the operational activities carried out in Condamine on 30 December 2010 are contained at paragraphs 19-41 of the Witness Statement of John Thomas Fry dated 15 April 2011 which has been produced to the Commission.

Dalby

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Dalby area. This network supplies the townships and communities of:

Dalby	Bell	Karee	Ducklo	Macalister
Pirrinuan	Moola	Tipton	Kumbarilla	Warra
Kaimkillenbun	Mowbullan	Springvale	Ranges Bridge	Jimbour East
Blaxland	St Ruth	Nandi	Mirrabooka	Irvingdale

The distribution network in the Dalby supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Dalby Central	5	4228	24121	126
Dalby West	5	2358	37760	2035
Pirrinuan	3	260	5994	151
Nandi	2	116	7713	102
Kaimkillenbun	1	467	3913	219
Total	16	7429	79501	2633

COB 15 January 2011:

Dalby: 3 customers remain off supply. Ergon Assets energised. Awaiting customer repairs.

COB 14 January 2011:

Dalby: 88 customers disconnected, (85 residential and 3 commercial). Additional staff are coming from Toowoomba and then on to Chinchilla.

COB 13 January 2011:

Dalby: 107 customers disconnected, (101 residential and 6 commercial).



Operations Report

COB 12 January 2011:

Dalby: 235 customers are off supply (mix of residential and commercial). Crews are working on some further isolation of flood affected assets to reduce customer impacts. Flood level is steady at this point

COB 11 January 2011:

Dalby: Around 556 customers are off supply (mix of residential and commercial). 277 customers restored over previous night. 396 customers on the East Dalby feeder remain off supply as a safety precaution against rising flood waters, this is a mix of residential and commercial. A further 56 customers on the Myall street feeder have been disconnected as a safety precaution and another 104 customers are disconnected within the town due to the rising flood waters. The Dalby Central substation is still safe however employees are closely monitoring water levels and have done some sandbagging of the substation.

COB 4 January 2011:

Dalby: All residential customers have been restored and supply is now available to the full water treatment plant. The plant's technicians are continuing to repair internal damage.

COB 3 January 2011:

Dalby: All residential customers have been restored. The water treatment plant is the only customer that remains without supply. The plant operates in two sections – R01 and R02. R01 is fully operational. R02 – The 1MVA ground mounted transformer has now been energised. The LV remains disconnected due to damage within the plant. Once the plant's technicians complete their work, the LV can be connected. Supply will be available before the plant is operable, Council repairs are still required.

COB 31 December 2010:

Dalby: All residential customers have been restored. The water treatment plant is the only customer that remains without supply. The plant operates in two sections – R01 and R02. R01 – this section of the plant is supplied by an OH transformer. Currently the transformer is energised and supply is available at the switchboard. The plant's electricians are working to repair R01 from the flood inundation and are hopeful that it will be operational today. This will provide Dalby with water, under restrictions, for approx 2 weeks. R02 – this is the section of plant supplied by a ground mounted transformer. This area of the plant is severely damaged from the flood water and it will take between 7 and 10 days for the plant's technicians to make it operable again. Ergon Energy will assess the transformer today, with repairs likely to be carried out Monday. It is anticipated that supply will be available before the plant is operable.

COB 30 December 2010:

Dalby: 20 customers remain without supply. Of these 5 are on a transformer that has been flooded, restoration will be attempted this morning following testing of the transformer. 6 customers are off due to pillars that have been flooded. Restoration will occur this morning following testing. The remaining 9 customers require an electrical contractor to visit the premises. The major concern is with the Dalby water treatment plant where the transformer has been underwater. A back-up generator is being prepared in the event that all testing on the RMU fails.

COB 29 December 2010:

Dalby: 27 customers remain without supply. Of these 5 are on a transformer that has been flooded and restoration will not occur until after final testing tomorrow morning. 6 customers are off due to pillars that have been flooded attempts will be made to restore by tonight. The remaining 16 customers require an electrical contractor to visit the premises. The major concern is with the Dalby



Operations Report

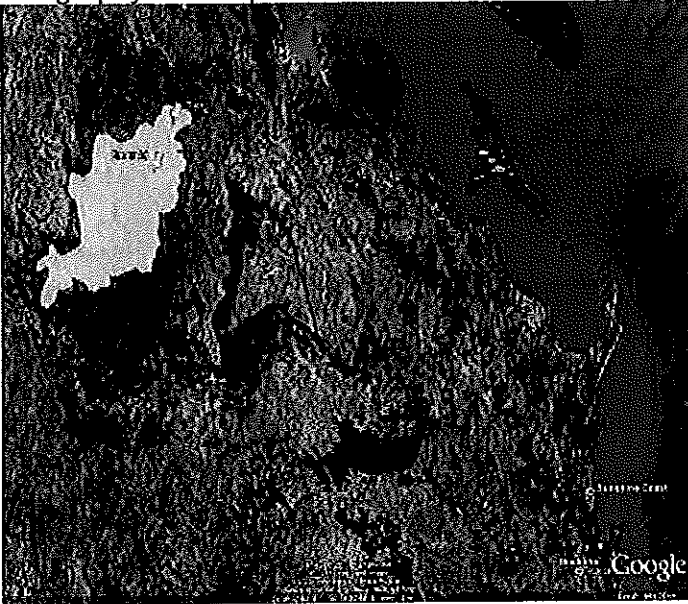
water treatment plant where the transformer has been underwater. A back-up generator is being prepared if required.

COB 28 December 2010:

Dalby: 207 customers disconnected due to flooding, but the water level is falling. Local crews will begin re-connecting as soon as flood levels allow and seven crew members are expected to get through from Toowoomba tomorrow afternoon to assist from Thursday morning. All of the disconnections are in three separate low-lying areas, so this will assist in managing the restoration process.

Emerald

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Distribution Network supplied by the Emerald and Tieri zone substations. This network supplies the townships and communities of:

Tieri	Gordonstone	Argyll	Wealwandangie	Carnarvon Park
Peak Downs	Wyuna	Willows	Cona Creek	Emerald
Crinum	Emerald	Gindie	Nandowrie	Capella
Chirnside	Central Highlands	Springsure	Mantuan Downs	The Gemfields
Cairdbeign				

The distribution network in the Emerald supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Tieri	2	588	6500	82
Emerald	8	9151	108554	2528
Total	10	9739	115054	2610

COB 20 January 2011:

Emerald: 85 premises remain off supply, awaiting contractor inspections. Further reconnections to occur once electrical contractors complete their safety assessments and repairs at houses that have had water inundation. We expect a considerable number of these premises to remain off supply for some time.

COB 19 January 2011:

Emerald: 89 premises remain off supply, awaiting contractor inspections. With only a further 4 reconnected yesterday. Further reconnections to occur once electrical contractors complete their safety assessments and repairs at houses that have had water inundation.



Operations Report

COB 18 January 2011:

Emerald: 93 customers off supply, awaiting contractor inspections. Further reconnections to occur once electrical contractors complete their safety assessments and repairs at houses that have had water inundation. Work has slowed due to the slow rate of premises being restored by the Form A process however 4 reconnections occurred yesterday. We believe low stock levels of electrical equipment from electrical wholesalers is still affecting the ability of electrical contractors to complete repairs required.

There are also some premises which may not be reconnected for some time due to the damage that has occurred to the building. Final Read requests have been received at the Ergon Energy Depot, to allow closure of customers electricity accounts from the occupants of homes that are awaiting reconnection, that have sustained major damage during the flood. The Ergon Network has been assessed in the urban area of Emerald and electricity supply is available to all locations for the connection of premises to proceed.

COB 14-17 January 2011:

Emerald: 97 customers off supply.

COB 13 January 2011:

Emerald: 110 customers off supply.

COB 12 January 2011:

Emerald: 114 customers off supply.

COB 11 January 2011:

Emerald: 116 customers off supply.

COB 7 – 10 January 2011:

Emerald: 119 premises off supply. The number has risen from 65 as additional vacant houses and units were disconnected today as staff have previously been unable to gain access to these premises. All areas have now been accessed and there will be no additional disconnects.

COB 6 January 2011:

Emerald: 65 customers remain off supply, with 60 restored today. Ergon Energy is completing assessment of homes that have been inundated and further reconnections will occur as electrical contractors complete their safety assessments and repairs. One of the issues that is delaying repairs by electrical contractors is the Electrical Wholesalers in Emerald have had water inundation which has reduced stock levels of the electrical equipment required. Electricity meters on switchboards that were affected by the flood water have been replaced by the Ergon employees in preparation for reconnection to supply. The Ergon Network has been assessed in the urban area of Emerald and electricity supply is available to all locations for the connection of premises to proceed. Electricity supply is now available to the **Coles** complex. Supply is also available to the town's critical infrastructure such as **sewerage and water**.

COB 5 January 2011:

Emerald: 125 customers remain off supply. Ergon is completing assessment of homes that have been affected by water inundation where safe to do so and further reconnections will occur as electrical contractors complete their safety assessments and repairs at houses that have had water inundation. There are some delays with repairs by electrical contractors as the Electrical Wholesalers in Emerald have had water inundation through their premises, which has seriously reduced stock levels of the electrical equipment required. Electricity meters on switchboards that were affected by the flood water have been replaced by the Ergon employees in preparation for reconnection to supply.



Operations Report

The Ergon Network has been assessed in the urban area of Emerald and electricity supply is available to all locations for the connection of premises to proceed. Electricity supply is now available to the Coles complex. Supply is also available to the town's critical infrastructure such as sewerage and water.

Repairs have been completed to restore supply to 30 customers in the Lund Subdivision at Suncross Place Emerald

COB 4 January 2011:

Emerald: 168 customers are off supply. Ergon has commenced assessment of homes that have been affected by water inundation where safe to do so. There are a number of electrical contractors in the area completing safety assessments and repairs at houses that have had water inundation, however until Ergon Energy receives the required notification (Form A or Form B) from an electrical contractor that the installation has been assessed as safe Ergon is not able to reconnect the remaining premises to the Ergon Network. Ergon will raise this with the LDMC tomorrow to ensure that contractors are getting the paperwork in as a matter of priority. A number of electricity meters on switchboards that were affected by the flood water have been replaced by Ergon employees in preparation for reconnection to supply. The Ergon Network has been assessed in the urban area of Emerald and electricity supply is available to all locations for the connection of premises to proceed.

The Ergon Energy assets at Coles New World Plaza at Emerald have been re-energised today, and electricity supply is available to the Centre once they are ready to commence trading. **Ergon Energy supply is available to the town's critical infrastructure such as sewerage and water.**

COB 3 January 2011:

Emerald: 163 customers remain off supply. A number of premises in Emerald were assessed today and connected, however there were also a number of premises that had previously not been assessed due to access issues with flood water, that have now had to be disconnected. These premises will require an electrical contractor to attend and once the premise is safe, Ergon will reconnect supply. There are still some Ergon Energy assets, such as pillar boxes in subdivisions, that will need to be tested.

COB 2 January 2011:

Emerald: 169 customers remain off supply. The **Coles New World Plaza** at Emerald remains disconnected for safety reasons due to water inundation. **Woolworths** has supply available and is hoping to be open for trading this afternoon. **Ergon Energy supply is available to the town's critical infrastructure such as sewerage and water.**

COB 1 January 2011:

Emerald: 394 premises disconnected due to inundation or as a safety precaution. Crews will commence assessment of homes that have been affected by water inundation where safe to do so. Additional crews (including Energex employees) will arrive in the Emerald area to assist with reconnection of electricity supply in the coming days. The Ergon Emerald Depot remained operational, with water stopping short of entering the building. The Coles New World Plaza at Emerald remains disconnected for safety reasons due to water inundation.

COB 31 December 2010:

Emerald: 202 premises currently proactively disconnected, this number will continue to rise. Some of these have been inundated, and some are at risk of imminent inundation. 1200 people have been evacuated from town. If the forecast flood level is reached, then up to 80% of the town will be inundated to various degrees. Flood water is not expected to start to recede until tomorrow afternoon. We have evacuated employees into appropriate accommodation. We still expect **Emerald Zone**



Operations Report

Substation to not be affected. Coles New World Plaza in Emerald is off supply due to inundation. A restoration plan is in place for when the water recedes.

COB 30 December 2010:

Emerald: 17 premises off supply. Predictions indicate 90% of town will be inundated on 31 December 2010.

COB 29 December 2010

Emerald: 26 premises off supply. Ergon has started disconnecting low-lying premises and the Coles supermarket will go off supply around 5pm this afternoon. Ergon is preparing to evacuate a number of staff and appropriate accommodation has been booked in advance. Emerald Zone Substation should not be affected by water inundation with the flood level that has been predicted.

28 December 2010

Emerald: 18 customers off

Gayndah

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network supplied by the Gayndah zone substations. This network supplies the townships and communities of:

Mount Steadman	Coalstoun Lakes	Ban Ban	Harriet	Dirnbir
Byrnestown	Gayndah	Ban Ban Springs	Reids Creek	Penwhaupell
Ideraway	Campbell Creek	Woodmillar	Binjour	

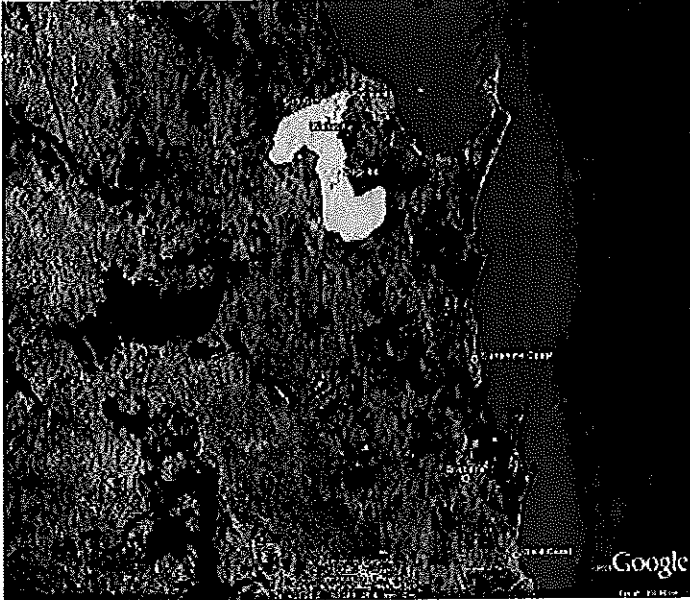
The distribution network in the Gayndah supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Gayndah	4	2061	19439	674

NO DAILY OPERATIONAL REPORT COMMENTS ARE AVAILABLE FOR GAYNDAH

Gin Gin

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Gin Gin area. This network is serviced by three zone substations, Degilbo, Wallaville and Bullyard and supplies the townships and communities of:

Bucca	Coalstoun Lakes	Damascus	Tirroan	Skyring Reserve
Bullyard	Gayndah	Delan	Redhill Farms	Dalysford
Maroondan	Campbell Creek	Drinan	Wallaville	Moolboolaman
Boolboonda	Mt Perry	Horse Camp	Booyal	New Moonta
Wonbah	St Kilda	Morganville	Dallarnil	North Aramara
Degilbo	Woowoonga	Boompa	Aramara	Brooweena
Biggenden	Lakeside			

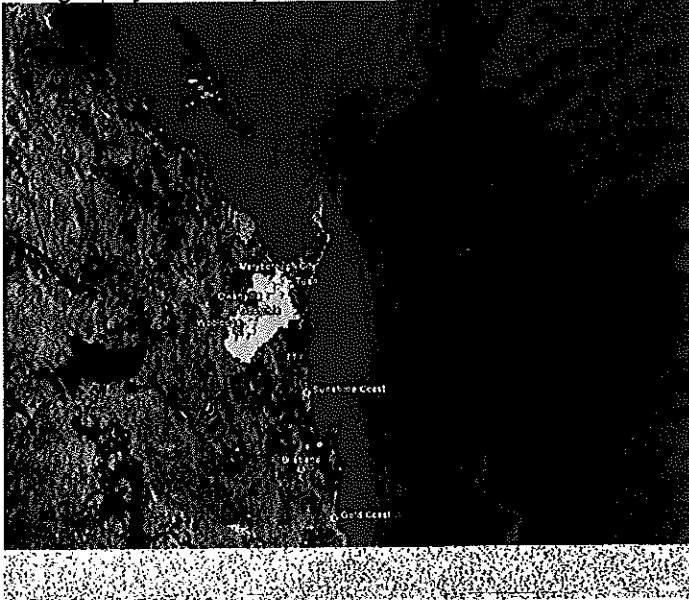
The distribution network in the Gin Gin supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Wallaville	5	2680	28530	756
Bullyard	3	830	12193	187
Monduran Dam	1	194	1285	223
Degilbo	4	1191	7208	492
Total	13	4895	49216	1658

NO DAILY OPERATIONAL REPORT COMMENTS ARE AVAILABLE FOR GIN GIN

Maryborough

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Maryborough area. This network is serviced by three zone substations, Degilbo, Wallaville and Bullyard and supplies the townships and communities of:

Bucca	Damascus	Dalysford	Horse Camp	Biggenden
Bullyard	Deian	Moolboolaman	Morganville	Woowoonga
Maroondan	Drinan	New Moonta	Booyal	Lakeside
Bungadoo	Tirroan	Boolboonda	Dallarnil	Boompa
Mcllwraith	Redhill Farms	Wonbah	Degilbo	Brooweena
Gin Gin	Wallaville	Mt Perry	North Aramara	Aramara
St Kilda	Skyring Reserve			

The distribution network in the Maryborough supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Woolooga	2	1646	9112	351
Rocky Street	6	8281	25555	183
Maryborough City	6	5787	32777	190
Tuan	1	1007	3132	65
Owanyilla	4	1906	20963	445
Gootchie	3	1868	10931	456
Kilkivan	4	665	4363	161
Total	26	21160	106833	1851

COB 20 January 2011

Maryborough: 10 commercial customers off supply. Remaining disconnected consumers require works to their installations before supply is restored. Re-connection will continue as requested by the customer.



Operations Report

19 January 2011

Maryborough: 15 commercial customers off supply. Remaining disconnected consumers require works to their installations before supply is restored. Re-connection will continue as requested by the customer.

COB 17 and 18 January 2011

Maryborough: 21 customers off supply. Remaining disconnected consumers require works to their installations before supply is restored.

COB 14-16 January 2011:

Maryborough: 28 customers off supply due to inundation or as a safety precaution.

COB 12 and 13 January 2011:

Maryborough: 27 customers off supply due to inundation or as a safety precaution (4 residential and 23 commercial)

COB 11 January 2011

Maryborough: 25 customers off supply due to inundation or as a safety precaution (2 residential and 23 commercial). No change overnight but flood levels will be monitored during the day as there has been a lot of rain upstream in the South Burnett area. Sections of city feeders (Pocket fdr, Ellena St fdr, Ululah fdr, Granville fdr and Tinana Ck fdr) have remained isolated as a precaution due to rising flood waters.

COB 10 January 2011:

Maryborough: 45 customers off supply due to inundation or as a safety precaution (20 residential and 25 commercial) Sections of city feeders (Pocket fdr, Ellena St fdr, Ululah fdr, Granville fdr and Tinana Ck fdr) have remained isolated as a precaution due to rising flood waters. Water has receded over night and crews will look at reconnecting more customers today as it's safe to do so. Maryborough crews and some Hervey Bay crews will be working in the Maryborough region today installing HV and LV switching points in anticipation of another peak in water levels. These switching points will speed up the isolation process if required and minimise the customer impact.

COB 9 January 2011:

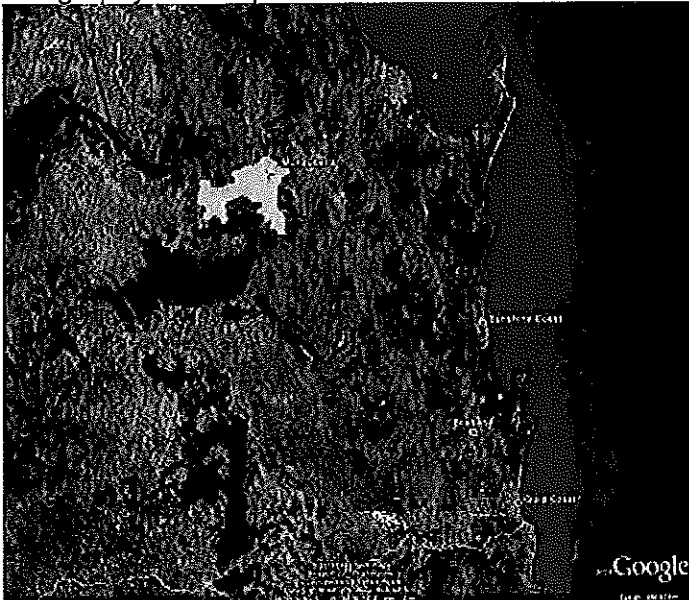
Maryborough: 199 customers off supply as safety precaution (144 residential and 50 Commercial) Overnight sections of city Feeders (Pocket fdr, Ellena St fdr, Ululah fdr, Granville fdr and Tinana ck fdr) were isolated due to rising flood waters. Local depot staff will be using helicopters and ground crews this morning to perform further switching and are hoping to restore supply to approx 150 points of supply, mostly residential. The Mary River is still rising, and stormy conditions in the Maryborough region is limiting the use of helicopters for patrols.

COB 8 January 2011

Maryborough: 9 commercial premises (shops and restaurants) and some other Council connections were disconnected this morning as flood levels rose. Ergon Energy will monitor river/flood heights and crews will disconnect other premises as required. Expected peak of Mary River is currently unknown, expected peak of 7.5m at lunch time today, this height will cause moderate flooding. A moderate flood level could see up to 100 supply points disconnected.

Munduberra

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV Distribution Network in the Munduberra area. This network supplies the townships and communities of:

Cattle Creek	Munduberra	Glenrae	Beerong	Riverleigh
Philpott	Coonambula	Dykehead	Old Coorong	Mundowran

The distribution network in the Munduberra supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Munduberra	4	1515	34995	723

COB 31 December 2010

North Burnett area, includes Munduberra: only 1 customer remains off supply. The remaining customer is in Obil Bil Rd Munduberra where a tree is across the 11kV. Access is restricted, however the customer has a generator.

COB 30 December 2010

North Burnett area, includes Munduberra: 215 customers off supply with a number having been restored yesterday. Crews are waiting for water to recede to assess

COB 29 December 2010

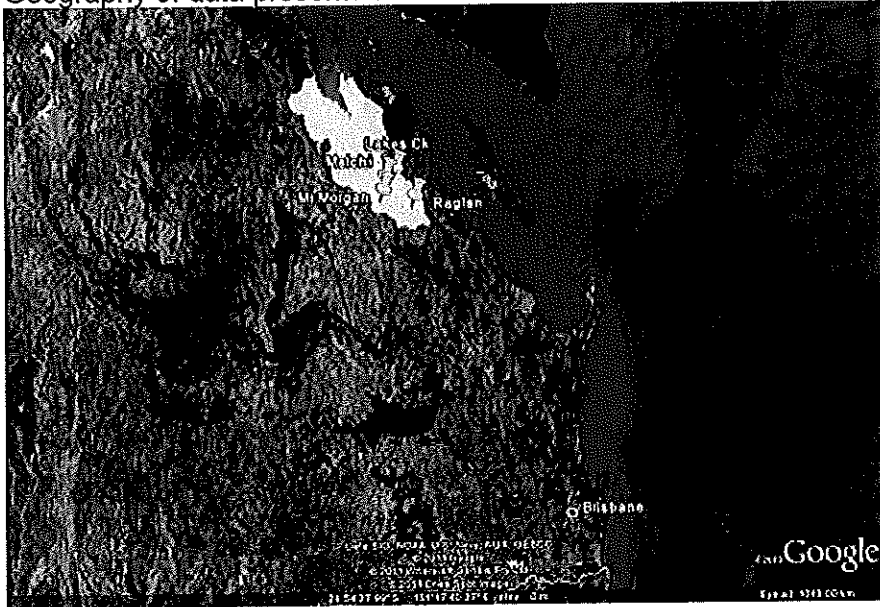
Munduberra: 300 customers off due to a fault caused by floodwaters.

COB 27 December 2010

Munduberra, Eidsvold and Riverleigh: 300 Customers off

Rockhampton

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV and 22kV Distribution Network in the Rockhampton area. This network supplies the townships and communities of:

Ogmore	Rossmoya	Garnant	Mount Chalmers	Rockhampton
Malborough	Milman	Pandoin	Ridgelands	Gracemere
Kunwarara	Yaamba	Glendale	Dalma	Kabra
Stanage	SouthYaamba	Alton Downs	Mornish	Kalapa
Canooka	Etna	Limestone Ck	Mornish South	Mt Chalmers
Jardine	The Caves	Ironpot	Glenroy	Nerimbera
Struck Oil	Port Alma	Darts Ck	Bracewell	Bouldercombe
Mt Morgan	Marmor	Ambrose	Mt Larcom	Leydens Hill
Bajool	Rgalan			



Operations Report

The distribution network in the Munduberra supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Malchi	4	4291	25247	489
Raglan	3	1035	17576	505
Pandoin	4	2392	25571	1587
Berserker	4	unknown	unknown	unknown
Frenchville	7	7419	45650	62
Canning St	5	5414	30835	37
Lakes Ck	6	3480	14380	124
Mt Morgan	3	1912	9617	141
Parkhurst	7	3799	40019	179
Rockhampton Glenmore	8	6992	59510	97
Rockhampton South	7	2411	39472	73
Total	58	39145	307877	3294

COB 20 January 2011

Rockhampton: 30 premises remain off supply. All disconnected premises have now had an initial assessment completed by Ergon Energy. Premises that remain disconnected require an electrical contractor to complete repairs prior to the reconnection occurring.

COB 19 January 2011

Rockhampton: 46 premises remain off supply. All disconnected premises have now had an initial assessment completed by Ergon Energy. Premises that remain disconnected require an electrical contractor to complete repairs prior to the reconnection occurring.

COB 18 January 2011

Rockhampton: 94 premises remain off supply. Rockhampton is now the focus of reconnections required in Central, as other areas such as Emerald and Theodore have had Ergon Network assessed, and are awaiting Form A's from electrical contractor to restore supply to the remaining premises. Additional crews have been brought in from Mackay, Moura and Gladstone to allow Ergon to reconnect supply as quickly as possible.

Ergon Energy crews are proactively trying to educate customers on the requirements of an electrical inspection by an electrical contractor for the premises that have had water inundation. Signage has been erected by Ergon Energy in areas of Rockhampton that have been severely affected by the flooding to advise the actions the public need to take in regard to electrical safety, if their premise has been inundated with water, prior to Ergon Energy reconnecting the electricity supply.

COB 17 January 2011

Rockhampton: 112 customers are without supply.

COB 16 January 2011

Rockhampton: 204 customers are without supply.

COB 15 January 2011

Rockhampton: 273 customers are without supply. Crews will work throughout the weekend to progressively restore power when safe to do so. Ample crews available with the correct skill sets to ensure reconnections occur as soon as access is available and it is safe to complete the reconnection of electricity supply. Significant crews in Depot Hill today.



Operations Report

The electricity supply for the street lighting for the major roundabout on the Bruce Highway on the southern approach into Rockhampton was reconnected on the 14th January 2011 to ensure lighting was available when highway reopened.

Signage erected by Ergon Energy in areas of Rockhampton that have been severely affected by the flooding to advise the actions the public need to take if their premise has been inundated with water in regard to electrical safety, prior to Ergon Energy reconnecting the electricity supply.

Further Rockhampton restoration forward plan as floodwaters in the Fitzroy River continues to recede:

- North Side: Park Avenue, Kawana, Parkhurst, Berserker, Koongal, Lakes Creek, Nerimbera.
- South Side: Rockhampton City, Depot Hill (incl. "The Island"), Allenstown.
- Access issues are continuing to hamper restorations efforts in a number of areas including Port Curtis and Pink Lily.

COB 14 January 2011

Rockhampton: 454 customers are without supply.

COB 13 January 2011

Rockhampton: 465 customers are without supply.

COB 7 - 12 January 2011

Rockhampton: 514-522 customers are without supply while Ergon awaits waters to recede.

In the Depot Hill area, Ergon Energy recorded the exact flood level when each premise was disconnected so we know exactly what height the flood water needs to have receded to before it will be safe to consider reconnection.

COB 6 January 2011

Rockhampton: 514 customers are now without supply. Regular assessment of the flood water level by Ergon Energy crews in residential areas is being completed so supply is not disconnected until it is necessary to do so to ensure the safety of the public is maintained.

Restoration and resourcing plans are in place for as soon as the water recedes. We are closely monitoring the sewerage Treatment plants at Lakes Creek and Gavial Creek in relation to the high voltage conductor clearance from the flood water, a sewage pump at Gracemere is also being monitored. Safety measures have been implemented to ensure public safety at these sites. Low voltage conductors at Fiddes Street, Port Curtis that supplied three customers were disconnected today due to reduced clearance levels to the flood water.

Helicopters will be utilised for response work as required, however current wet weather is resulting in low visibility making flying conditions difficult. Ergon crews will be available throughout the day to monitor the Network. Employees are being rested where possible to ensure the maximum amounts are available to commence restoration works once flood water subsides, and safe to do so.

COB 5 January 2011

Rockhampton: 499 customers are now without supply. Forecasts indicate that the peak has passed. Restoration and resourcing plans are in place for as soon as the water recedes. We are closely monitoring the sewerage Treatment plants at Lakes Creek and Gavial Creek in relation to the high voltage conductor clearance from the flood water, a sewage pump at Gracemere is also being monitored. Safety measures have been implemented to ensure public safety at these sites. Low



Operations Report

voltage conductors at Fiddes Street, Port Curtis that supplied three customers were disconnected today due to reduced clearance levels to the flood water.

Employees are being rested where possible to ensure the maximum number of resources are available to commence restoration works once flood water subsides, and it is safe to do so. Daily aerial patrols of the Powerlink Network that feeds into Rockhampton are being completed whilst the flood waters continue to rise, to ensure safe clearance is maintained. There have been no clearance issues identified. The **Rockhampton Airport** has been disconnected at the request of Airport Management, due to rising flood water levels. General helicopter line patrols have continued throughout the day.

COB 4 January 2011

Rockhampton: 485 customers are now without supply, up from 468 this morning. Fitzroy River is continuing to rise, and further disconnections will occur until the peak which is predicted to occur tomorrow, Wednesday 5 January 2011. Ergon is closely monitoring the sewerage Treatment plants at Lakes Creek and Gavial Creek in relation to the high voltage conductor clearance from the flood water, a sewage pump at Gracemere is also being monitored. Safety measures have been implemented to ensure public safety at these sites.

Commercial customers at the lower end of East Street in the CBD have now been disconnected due to pending water inundation. Low voltage conductors were disconnected for safety today at the river end of Farm Street due to reduced clearance levels from the flood water, four customers were affected. Daily aerial patrols of the Powerlink Network that feeds into Rockhampton are being completed whilst the flood waters continue to rise, to ensure safe clearance is maintained. There have been no clearance issues identified.

The **Rockhampton Airport** has been disconnected at the request of Airport Management, due to rising flood water levels. General helicopter line patrols have continued throughout the day.

COB 3 January 2011

Rockhampton: 457 customers are now without supply, with another 78 disconnected today. The Fitzroy River is rising slowly, current peak of 9.05m. Ergon is closely monitoring the sewerage Treatment plants at Lakes Creek and Gavial Creek are being monitored in relation to the high voltage conductor clearance from the flood water. Safety measures have been implemented to ensure public safety at these sites. Commercial customers at the lower end of East Street in the CBD have now been disconnected due to pending water inundation.

Reconfiguration of the Network is occurring to ensure wherever possible, disconnection of electricity supply is restricted to houses that are predicted to have water inundation. Daily aerial patrols of the Powerlink Network that feeds into Rockhampton are being completed whilst the flood waters continue to rise, to ensure safe clearance is maintained.

COB 2 January 2011

Rockhampton: 379 premises are without supply due to inundation, or as a safety precaution due to imminent inundation. The Fitzroy River is continuing to rise, and further disconnections of the Ergon electricity supply will be actioned due to water inundation up until the peak which is predicted to occur on Wednesday 5 January 2011. Regular assessment of the flood water level in residential areas is being completed so supply is not disconnected until it is necessary to do so to ensure the safety of the public is maintained. Ergon is working with the LDMC and proactively consulting with customers whom may be affected by the flood water with the current peak prediction. Maps which predict the areas that will have water inundation are being utilised to create an action plan for disconnections required in the coming days.



Operations Report

Reconfiguration of the Network is occurring to ensure wherever possible, disconnection of electricity supply is restricted to houses that are predicted to have water inundation. Daily aerial patrols of the Powerlink Network that feeds into Rockhampton are being completed whilst the flood waters continue to rise, to ensure safe clearance is maintained. There have been no clearance issues identified. Ergon has completed work at the Airport in an effort to maintain the electricity supply as long as possible whilst safe to do so. Ergon to monitor flood levels at this site.

COB 1 January 2011

Rockhampton: 266 houses are currently disconnected as a safety precaution, up from 78 this morning. Properties in Depot Hill in streets bounded by O'Connell, East, Quay and Wood streets and Arthur, Francis, Jane, Wood and Bolsover streets will be de-energised progressively throughout today, and tomorrow more properties bounded by Arthur, Francis, Wood, East and Quay streets will also be disconnected from 8am.

Disconnection for safety reasons will increase over the coming days.

Ergon had 5 boats working in the Rockhampton area and were working closely with the LDMG to plan what areas need to be de-energised as a safety precaution as the waters continue to rise. Crews are arriving in Rockhampton from Townsville to allow local employees to have a well deserved break, and to prepare their own properties for possible inundation. Crews from Mackay are also moving in to assist with disconnections. Ergon Energy fleet vehicles have been located in several areas across the Rockhampton area to ensure vehicles are available to employees during the restoration phase, as road access may be cut by the rising flood water.

COB 31 December 2010

Rockhampton: 34 houses disconnected. Fitzroy River is continuing to rise and further disconnections will occur due to water inundation over the coming week.

Fitzroy River is at 8.2m and is now forecast to reach 9.4m. Local Ergon Energy crews have begun door-knocking in low-lying areas to discuss plans for keeping things safe if major flood levels eventuate. Maps which predict the areas that will have water inundation are being utilised to create an action plan for disconnections required in the coming days.

COB 30 December 2010

Rockhampton: 30 houses remain disconnected. Fitzroy River is continuing to rise and further disconnections will occur due to water inundation over the coming week.

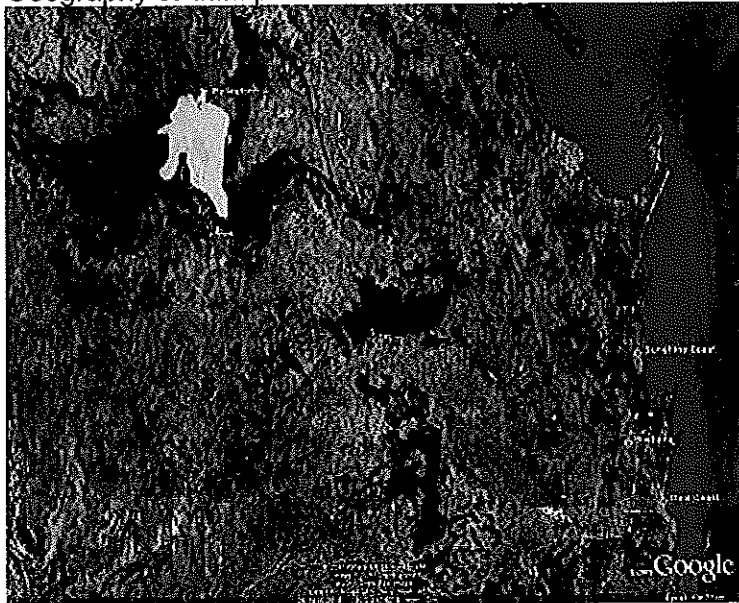
Fitzroy River is at 8.2m and is now forecast to reach 9.4m. Major shopping centres have been advised to stock up prior to road, rail and air access being compromised at an 8.8 m level. At 9m 150 homes will have inundation and 1000 homes impacted by yard water.

COB 29 December 2010

Rockhampton: 7 premises disconnected. The river is currently at 8m and is forecast to reach 9.4m next Tuesday which is above the level of the 1991 floods. This level would see the highway cut, the airport shut and around 400 homes impacted. Ergon Energy will work closely with the LDMG to monitor the situation. Ergon Energy is currently using boats to disconnect customer premises as required.

Rolleston

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 22kV Distribution Network supplied by the Crescent Feeder out of the Rolleston zone substation. This network supplies the townships and communities of:

Rolleston	Rewan	Early Storms	Purbrook	Arcadia Valley
Consuelo	Warrinilla	Wyseby	Planet Downs	Glenidai
Coorumbene	Ingelara			

The distribution network in the Munduberra supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Rolleston	1	293	3263	658

COB 7 January 2011

Rolleston: All customers restored.

COB 5 and 6 January 2011

Rolleston: 6 customers off supply due to flooding.

COB 4 January 2011

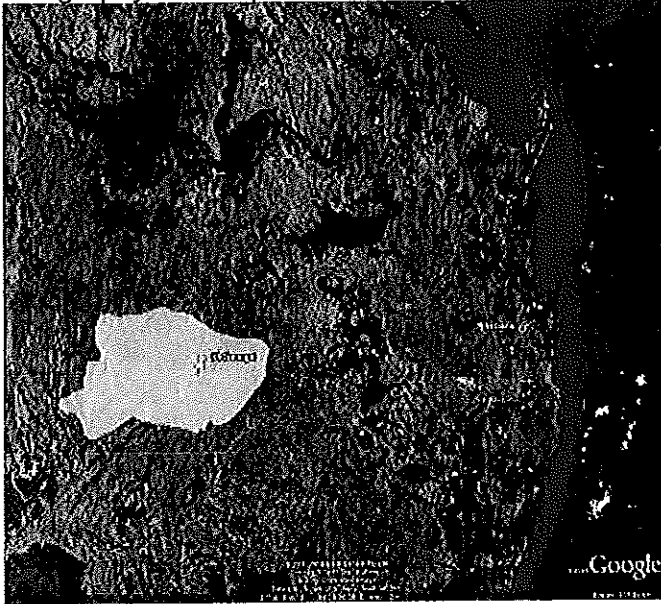
Rolleston: 7 customers off supply due to flooding.

COB 28 December 2010- COB 3 January 2011

Rolleston: 13 customers off supply due to flooding.

St George

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 11kV and 33kV Distribution Network supplied from the St George and St George Town zone substation. This network supplies the townships and communities of:

St George Weengallon Bollon Bindebango Begonia
Wycombe Thallon

The distribution network in the St George supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
St George 66/33kV	4	941	19934	2647
St George Town	3	1318	10378	30
Total	7	2259	30312	2677

COB 20 January 2011:

St George: 18 customers remain off supply and require inspections.

COB 18 January 2011:

St George: 19 customers remain off supply and require inspections. Other customers are requesting we leave them disconnected until the easing threat passes.

COB 16 January 2011:

St George: 20 customers remain off supply, with one reconnected yesterday. All Ergon Energy assets energised. The rest will require inspections. Some customers have requested not to be reconnected.



Operations Report

COB 15 January 2011:

St George: 21 customers remain off supply, with one reconnected today. The rest will require further water to recede before further inspections. Some customers have requested not to be reconnected at this stage.

COB 12 January 2011:

St George: 23 customers remain off supply. Retirement Village reconnected to supply.

COB 11 January 2011:

St George: 24 customers remain off supply, 20 of those due to inundation so reconnection will not occur until floodwaters have receded and electrical contractor inspections/repairs have occurred.

COB 10 January 2011:

St George: 26 customers remain off supply (20 inundated and a further 6 as a precaution).

COB 9 January 2011:

St George: 26 customers off supply (20 inundated and a further 6 as a precaution). The water level still rising in St George with 1 more rural customer disconnected as precaution yesterday afternoon. Warra Wee retirement village was disconnected yesterday, all residents were evacuated last week. The height of the 33kV conductor was raised to allow the 33kV to remain energised.

COB 8 January 2011:

St George: 21 customers off supply. The water level is still rising in St George, if the water continues to rise as predicted, Ergon will disconnect another 2 rural customers, 1 customer in St George town and the retirement village that was evacuated earlier in the week.

COB 7 January 2011:

St George: 21 customers off supply, with another 7 premises disconnected today due to the rising flood waters. The outage planned to raise the height of the 33kV conductor was completed at 3.30pm today. This control measures will allow the 33kV to remain energised.

COB 6 January 2011:

St George: 9 customers off supply and 5 additional customers in Albert St, St George are at risk due to rising floodwater. Ergon staff are continuing to monitor these customers and there is a possibility that they will be disconnected today. Peak expected of 14m on Sunday or Monday.

COB 5 January 2011

St George: 9 premises off supply. 8 residential customers in Albert St, St George have been disconnected as a safety precaution due to the rising floodwaters. 6 pump sites remain disconnected also as a safety precaution. A HV line has been disconnected affecting an additional 3 pump sites and 1 domestic customer. The domestic customer has a generator available.

BoM predicts an additional 100mm of rain could fall in the St George area over coming days. Peak expected of 14m on Sunday or Monday.

Staff at St George will use RTK measuring units to identify any assets that are at risk when the flooding reaches its peak. Levee banks will then be built around any significant assets that are likely to be subject to inundation when the river peaks.

COB 4 January 2011:

St George: 8 residential customers in Albert St, St George have been disconnected as a safety precaution due to the rising floodwaters. 6 pump sites remain disconnected also as a safety precaution.

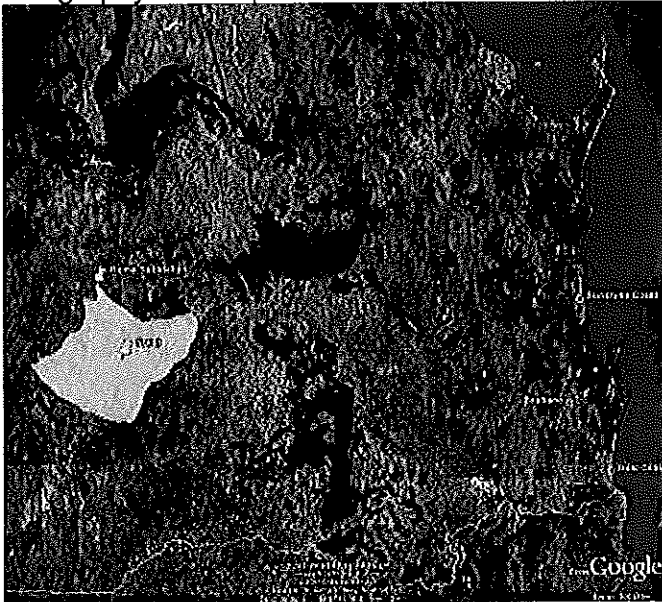
BoM predicts an additional 100mm of rain could fall in the St George area over coming days.

COB 3 January 2011:

St George - No premises off supply at this point in time, however there are now 6 LV pump sites disconnected at St George. The river is at almost 12 metres and Ergon staff are monitoring the situation closely. 6 residential properties will need to be disconnected if the height of the river exceeds 12 metres.

Surat

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV Distribution Network supplied from the into the Surat area from the Roma substation. This network supplies the townships and communities of:

Tingun Noorindoo Surat Weribone Ballaroo
 Warkon Parknook Wellesley

The distribution network in the Surat supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Roma	1	599	6073	1094

COB 15 January 2011:

Surat (Candy Downs SWER): one residential customer off supply.

COB 11 January 2011:

Surat (Toalkai SWER): 44 sites (residential and irrigation) Unknown feeder fault, at this point we cannot clarify if this is flood related damage.

Surat (Candy Downs SWER): 42 sites (residential and irrigation) Unknown feeder fault, at this point we cannot clarify if this is flood related damage.

COB 10 January 2011:

Surat (Candy Downs SWER): only 1 residence remains off supply

COB 9 January 2011:

Surat: all customers restored on the Toalki SWER.



Operations Report

Surat (Candy Downs SWER): only 1 residence remaining off supply and works planned to get them reconnected today as water recedes

COB 8 January 2011:

Surat: 1 customer remains disconnected on the Toalki SWER due to damage to Ergon Energy assets by the floodwater. Customer has generators on site. It is planned that the remaining customer should be reconnected this afternoon.

Surat (Candy Downs SWER): 9 residential customers are off supply after one strand of a three strand conductor has broken and unravelled for approx 5 metres, coming in contact with the floodwater. Three of the affected residences are completely submerged. Crews are carrying out repairs this morning and isolating the 3 submerged residences and plan to restore power to the other installations this afternoon.

COB 7 January 2011:

Surat: 2 customers remain disconnected on the Toalki SWER due to damage to Ergon Energy assets by the floodwater. Both customers have generators on site.

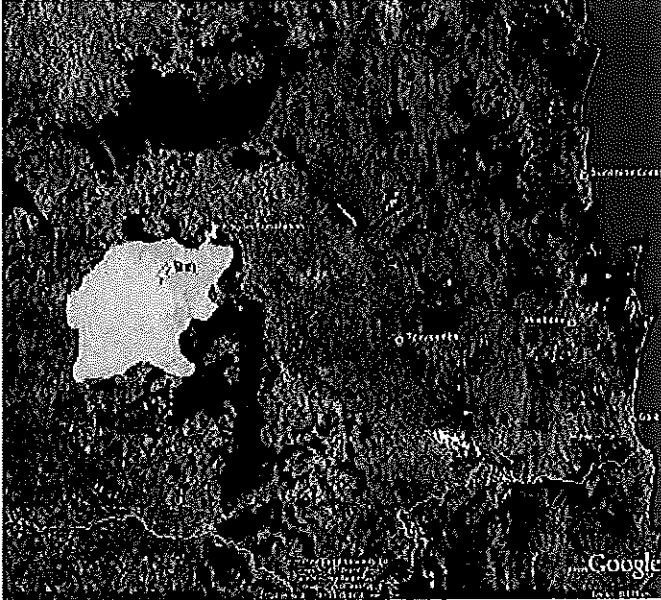
Surat (Candy Downs SWER): 18 residential customers are off supply after one strand of a three strand conductor has broken and unravelled for approx 5 metres, coming in contact with the floodwater. Crews are assessing options to carry out repairs.

COB 5 January 2011:

Surat: 4 customers off supply. 2 customers remain disconnected on the Toalki SWER due to damage to Ergon Energy assets by the floodwater. Both customers have generators on site. Another 2 customers have been disconnected in Surat township as a safety precaution. Both customers have been evacuated.

Tara

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplied from into the Tara Area from the Tara and Kogan zone substation. This network supplies the townships and communities of:

Kogan	Weranga	Tara	The Gums	Hannaford
Beelbee	Goranba	Weir River		

COB 30 December 2010:

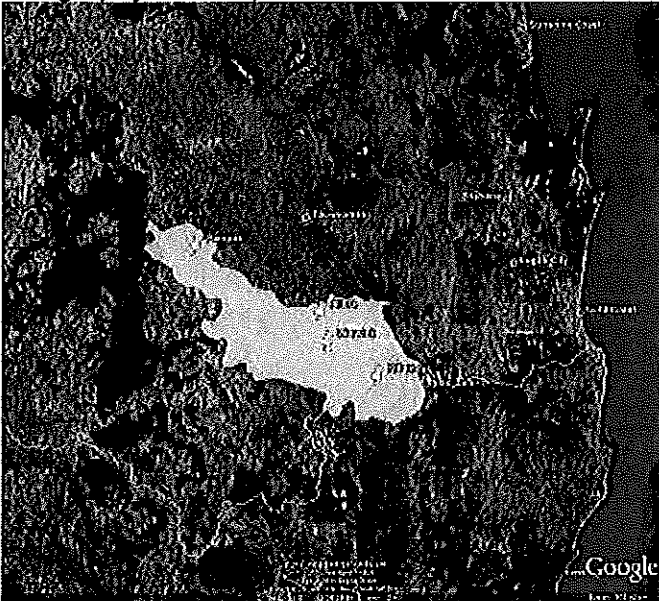
Tara: All customers have been returned to supply.

COB 29 December 2010

Tara: 1679 customers were off supply yesterday due to a fault. The 33kV Kogan Feeder tripped at 2pm today causing loss of supply to the Tara district. A helicopter and boat were made available for fault detection.

Warwick

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Warwick area. This network supplies the townships and communities of:

Warwick Killarney Leyburn St Helens Tummaville
 Maryvale Allora Pampas

The distribution network in the Warwick supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
East Warwick	6	4926	53956	546
West Warwick	4	4215	23621	391
Allora	4	1940	25595	548
Killarney	3	1117	13377	278
Pampas	4	720	31590	567
Total	21	12918	148139	2330

COB 20 January 2011

Warwick - 13 customers off supply. Ergon Energy works completed. Awaiting customer repairs.

COB 15-19 January 2011

Warwick: 20 customers off supply. Ergon Energy works completed. Awaiting customer repairs. School has been connected.

COB 14 January 2011

Warwick: 52 customers (42 residential, 10 commercial) with 16 customers re-connected today. More reconnections will continue today as water keeps falling. School has been connected.

COB 13 January 2011



Operations Report

Warwick: 68 customers (57 residential, 10 commercial and 1 school) with 11 customers re-connected today. More reconnections will continue tomorrow as water keeps falling. Efforts are still being put into working with Q Build to re-connect the Warwick East State School as soon as possible.

COB 12 January 2011

Warwick: 124 customers are off supply with around 107 customers in Warwick town are currently isolated due to inundation, re-connection will start tomorrow if water keeps falling and 17 rural customers on Tannymorel feeder are disconnected due to a pole down.

COB 11 January 2011

Warwick: Approx 100 customers currently isolated due to inundation, re-connection will start tomorrow if water keeps falling

COB 4 and 5 January 2011

Warwick: 7 customers remain off supply. Ergon Energy has inspected and is waiting for a contractor to perform work at premises following inundation.

COB 1 - 3 January 2011

Warwick: 10 customers remain off supply. Ergon Energy has inspected and is waiting for a contractor to perform work at premises following inundation.

COB 31 December 2010

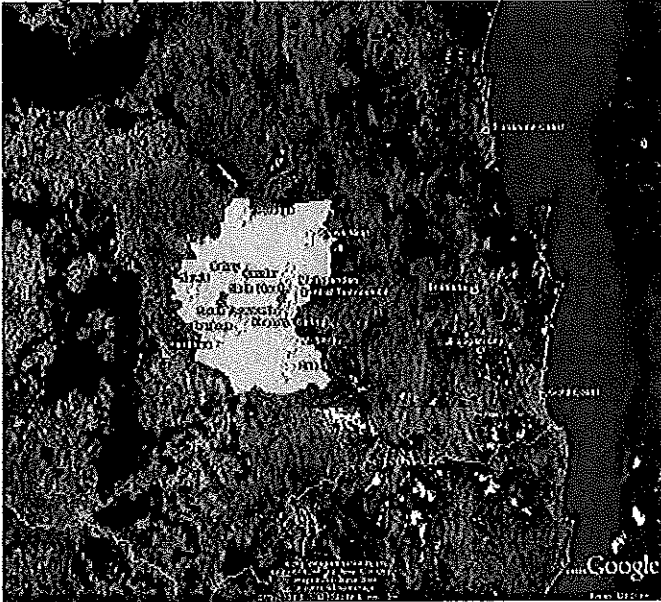
Warwick: 13 customers off supply. Ergon Energy has inspected and we are waiting for a contractor to perform work at premises following inundation.

COB 30 December 2010

Warwick: 15 customers off supply. Ergon has inspected and is waiting for a contractor to perform work at premises.

Toowoomba

Geography of data presented



Supply Network Description

The data presented in this section is representative of the 33kV and 11kV Distribution Network supplying into the Toowoomba area. This network supplies the townships and communities of:

Toowoomba	Crows Nest	Broxburn	Yarranlea	Norwin
Clifton	Westbrook	Hodgson Vale	Southbrook	Oakey
Cambooya	Pittsworth	Jondaryan	Bowenville	Brymaroo
Quinalow	Emu Creek	Goobungee	Meringandan	Geham
Kingsthorpe	Biddeston			



Operations Report

The distribution network in the Dalby supply area is comprised of the following:

Zone Substation	No. of Feeders	Supplied Customers	Connected Transformer Capacity (kVA)	Supplied Line Length (km)
Kearneys Spring	7	7284	unknown	unknown
Meringandan	4	2821	39136	311
South Toowoomba	7	8060	79157	72
East Toowoomba	8	12065	67523	106
Peranga	3	519	8789	325
West Toowoomba	7	10801	49030	65
Central Toowoomba	7	2277	23705	55
Yarranlea South	2	289	9419	166
North Street	9	5708	40775	63
Crows Nest	3	2040	19856	509
Broxburn	5	2446	27629	442
Mt Tyson				
Norwin	4	298	17557	320
Mt Sibley	3	1033	20762	392
Purrawunda	4	610	15711	317
Clifton	3	1215	14925	306
Oakey	6	3272	36626	568
Torrington	6	5923	86928	310
Total	88	66661	557528	4327

COB 19 January 2011:

For Toowoomba CBD: around 10 commercial premises are without power in the CBD, however, all Ergon Energy assets were still energised. Ergon Energy is continuing to work in the CBD area as premises are readied by electrical contractors.

COB 13 January 2011:

For Toowoomba CBD: around 19 commercial premises are without power in the CBD, however, all Ergon Energy assets were still energised

COB 12 January 2011:

For Toowoomba: around 40 commercial premises are without power in the CBD, however all Ergon Energy assets are now energised. These customers required inspection before re-connection. We had 5 teams of inspectors working in the CBD that day.

COB 11 January 2011:

Toowoomba: around 85 customers remain off in Toowoomba after the 10 January 2011 flash flooding - 35 Commercial customers and up to 50 residences across town (estimate only as assessment is still underway in some areas).

Many of Toowoomba's major businesses were among the 350 Ergon Energy customers in the CBD whose power supply was de-energised following yesterday's deluge. Three feeder lines supplying the



Operations Report

CBD will not be re-energised until crews have been able to thoroughly test ground-level assets that were inundated by the flash flooding. Once the feeders can be safely re-energised, power will be restored to individual businesses that have been inundated once their premises have been checked and, if necessary, repaired by a licensed electrical contractor. This process is expected to take an extended period given the unprecedented property damage inflicted by the flood.

The high-voltage network held up well with the only unplanned power supply interruption affecting about 1100 customers in Glenvale and Westbrook when a pole was washed away by floodwaters about 4.45pm. Ergon Energy also received a large number of calls from customers across Toowoomba reporting damage affecting their individual service lines and crews are continuing to respond to those as quickly and safely as possible.

Crew worked through the night inspecting affected assets and restoring supply to all Ergon Energy HV assets except 2 transformers that were inundated and are being inspected and tested this morning. Approx 17 commercial customers in the CBD are disconnected via LV links at transformers, again waiting for the installation to be inspected to allow us to re-connect. A quarry connection is isolated due to an inundated RMU and fallen pole and wires on the Westbrook feeder. North street 33kV feeder supplying the Toowoomba foundry is currently isolated with an unknown fault in impassable terrain. Switching is underway to restore supply to the foundry via the Ramsay st 33kV feeder. We have approx 50 single fault calls currently being attended to by local crews.