



ANNUAL SERVICE QUALITY REPORT

July 2003 – June 2004

Ergon Energy Corporation Limited



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1. Introduction

Ergon Energy is pleased to be able to present its third Annual Service Quality Report for the period ending 30 June 2004.

We have been able to supply most of the data requested, however the availability of some data items at this stage has been affected by Network system projects and reporting issues impacting on our capability to interrogate and extract data from the information systems. These affected data items will be supplied to the QCA at a later date as advised in the footnotes to this report. In future years these measures will be available without delay as reporting functionality is embedded into our internal structure.

Where there are exceptions or clarifications, these have been noted in the document. Particular issues are summarised as follows:

1.1. Aggregated Data

We are unable to supply the data measures of "Line Length" (items 2.20 to 2.29) and "Number of Poles" (item 2.30). We are waiting on a Global Feeder Trace (GFT) to be completed within our Geographical Information System (Smallworld) and for the finalisation of the second phase of the valuation. Ergon Energy expects this will be complete and recommendations will have been made to the Authority before 30th June 2005.

The capability to report measures of GWh "Energy Delivered" (items 2.51 to 2.55) across the service reliability categories is in finalisation stage, we have supplied total GWh Energy Delivered across all categories. The delivery of these data items will be provided to the Authority at the same time the "Line Length" and "Number of Poles" measures are supplied.

1.2. Reliability Measures

The data measure "Energy Not Supplied" (items 3.70 and 3.80) is currently not available in the organisation. It is a figure based on what might have been if the network was not out of service. Ergon Energy has responded previously to the Queensland Competition Authority and National Regulatory Reporting Requirements Forum on these measures. Extensive system development is required to deliver these figures. We will not undertake this development to purely deliver these measures but they may be delivered as a by-product of future development.

1.3. Quality of Supply Data

For the 2003-04 year quarterly quality of supply complaints were extracted from different information systems to improve the integrity of the data capture. The Annual Quality of Supply causes this year were based on a combination of these two systems due to symptom and cause reporting constraints. This has resulted in some mismatch between the total number of quality of supply complaints and number causes reported for the period.

From the March 2004 quarter complete technical service quality measures were reported from a single system therefore this problem will no longer be inherit for our next annual report period of 2004-05.



2. Administrative Data

| ITEM NO. | MEASURE | UNIT | VALUE |
|----------|--|------|------------|
| 1.1 | <i>Distribution Network Service Provider</i> | name | EECL |
| 1.2 | <i>First day of reporting period</i> | date | 01-07-2003 |
| 1.3 | <i>Last day of reporting period</i> | date | 30-06-2004 |

3. Aggregated Data

| ITEM NO. | MEASURE | UNIT | VALUE |
|-------------------|--|--------|---|
| 2.20 ¹ | <i>Length of distribution lines</i> | Km | Data items to be provided once second phase Asset Valuation is complete and SKM have recommended this to QCA. |
| 2.21 | Urban | Km | |
| 2.22 | Short Rural | Km | |
| 2.23 | Long Rural | Km | |
| 2.24 | Sub-transmission | Km | |
| 2.25 | Undefined | Km | |
| 2.26 | High Voltage | Km | |
| 2.27 | Low Voltage | Km | |
| 2.28 | Overhead | Km | |
| 2.29 | Underground | Km | |
| 2.30 | <i>Number of Poles</i> | Number | |
| 2.40 ² | <i>Network Service Area</i> | Sq Km | 1,698,100 |
| 2.50 | <i>Energy Delivered</i> | GWh | 13,713 |
| 2.51 ³ | Sub-transmission | GWh | 12,914 |
| 2.52 | Urban – Metered | GWh | |
| 2.53 | Rural Short – Metered | GWh | |
| 2.54 | Rural Long – Metered | GWh | |
| 2.55 | Undefined | GWh | |
| 2.56 | Unmetered | GWh | 799 |
| 2.60 | <i>Distribution losses</i> | % | 5.83% |
| 2.70 | <i>Number and capacity of transformers</i> | | |
| 2.71 | Sub-transmission | Number | 517 |
| 2.72 | Distribution | Number | 79,495 |
| 2.73 | Sub-transmission | MVA | 6,018 |
| 2.74 | Distribution | MVA | 5,498 |

¹ We are unable to supply the measures of “Line Length” (items 2.20 to 2.29) and “Number of Poles” (items 2.30). This information will be made available to the Authority after the second phase valuation is finalised. Ergon Energy expects this will be complete and recommendations will have been made to the Authority before 30th June 2005.

² Network Service Area excludes Torres Strait.

³ The capability to report measures of GWh “Energy Delivered” (items 2.51 to 2.55) across the service reliability categories is in finalisation stage, we have supplied total GWh Energy Delivered across all categories. These measures will be made available to the Authority with items included in footnote 1.

| <u>ITEM NO.</u> | <u>MEASURE</u> | <u>UNIT</u> | <u>VALUE</u> |
|-----------------------------|-------------------|-------------|--------------|
| Aggregated Data (Continued) | | | |
| 2.80 | Asset utilisation | % | 26.01% |
| 2.90 | Maximum demand | MVA | 2,231 |

4. Reliability Measures

| <u>ITEM NO.</u> | <u>MEASURE</u> | <u>UNIT</u> | <u>VALUE</u> |
|-------------------|---|-------------|---------------|
| 3.40 | <i>SAIDI – Worst Performing Feeders</i> | Minutes | See Appendix |
| 3.50 | <i>SAIFI – Worst Performing Feeders</i> | Number | See Appendix |
| 3.60 | <i>CAIDI – Worst Performing Feeders</i> | Minutes | See Appendix |
| 3.70 ⁴ | <i>Energy not supplied - unplanned</i> | MWh | Not Available |
| 3.80 | <i>Energy not supplied – planned</i> | MWh | Not Available |

5. Quality of Supply Data

| <u>ITEM NO.</u> | <u>MEASURE</u> | <u>UNIT</u> | <u>VALUE</u> |
|-------------------|---|-------------|--------------|
| 4.20 ⁵ | <i>Network initiated quality of supply complaints</i> | Number | 795 |
| 4.21 | <i>Faulty network equipment</i> | Number | 264 |
| 4.22 | <i>Network interference – standard breached by the DNSP</i> | Number | 27 |
| 4.23 | <i>Network interference caused by another customer</i> | Number | 102 |
| 4.24 | <i>Network limitation</i> | Number | 128 |
| 4.25 | <i>Environment</i> | Number | 20 |
| 4.26 | <i>Other</i> | Number | 254 |
| 4.30 | <i>Quality of supply complaints initiated on the customer side of the meter</i> | Number | 46 |
| 4.40 | <i>Quality of supply complaints for which no cause was found</i> | Number | 187 |

⁴ We are unable to supply the data measures of “Energy Not Supplied” (items 3.70 and 3.80). See previous responses to the Queensland Competition Authority and National Regulatory Reporting Requirements Forum on these measures. Extensive system development is required to deliver these figures. We will not undertake this development to purely deliver these measures but they may be delivered as a by-product of future development.

⁵ For the 2003-04 year quarterly quality of supply complaints were extracted from different information systems to improve the integrity of the data capture. The Annual Quality of Supply causes for the current year were extracted from two of these systems due to symptom and cause reporting constraints. This has resulted in some of the mismatch between the total number of quality of supply complaints and number causes reported for the period. As the numbers reported above are also based on Network events raised from complaints there is also further mismatch, as in some cases there are many complaints for a single Network events raised. For example multiple customers on a single feeder spur raise many complaints but these only related to a single Network event. From the March 2004 quarter complete technical service quality measures were reported from the single system therefore this problem will no longer be inherit for the next annual report period of 2004-05 as we will be able to report either Network initiated quality of supply complaints or network events (the lesser number).

6. Definitions to Service Quality Report

For detailed service quality measure definitions please refer to the Authority's Electricity Distribution Service Quality Reporting Guidelines, these are available for download free of charge from the Authority's Web site via the URL link below.

<http://www.qca.org.au/www/welcome.cfm>

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7. Appendix 1 – Worst Performing Feeders Urban

| Feeder | | SAIDI | | | | | | | SAIFI | | | | | | | CAIDI | | | | | | Comments | | |
|--------|-----------------------|---------------------|-------|------------|--------------|------------|--------------------|----------------------|------------------------|-------|------------|--------------|------------|--------------------|----------------------|------------------------|---------|------------|--------------|------------|--------------------|----------|----------------------|--|
| Number | Name | Number of Customers | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | Total Distribution | | Distribution Planned | Distribution Unplanned |
| MC-01 | Macknade No.01 | 1 | 2634 | 0 | 6 | 0 | 2628 | 231 | 2397 | 6.00 | 0.00 | 3.00 | 0.00 | 3.00 | 1.00 | 2.00 | 439.00 | 0.00 | 2.00 | 0.00 | 876.00 | 231.00 | 1198.50 | Single customer feeder - upstream 66kV outages |
| CF-01 | Cape Ferguson No.01 | 1 | 1596 | 0 | 0 | 0 | 1596 | 438 | 1158 | 8.00 | 0.00 | 0.00 | 0.00 | 8.00 | 1.00 | 7.00 | 199.50 | 0.00 | 0.00 | 0.00 | 199.50 | 438.00 | 165.43 | Single customer feeder - upstream 66 kV outages |
| 366 | Pontoon | 1 | 1506 | 0 | 0 | 0 | 1506 | 729 | 777 | 5.00 | 0.00 | 0.00 | 0.00 | 5.00 | 2.00 | 3.00 | 301.20 | 0.00 | 0.00 | 0.00 | 301.20 | 364.50 | 259.00 | Faults and Planned maintenance on upstream 66 kV network |
| KR-C | KINGAROY NORTH | 1680 | 1532 | 0 | 153 | 0 | 1379 | 206 | 1173 | 12.98 | 0.00 | 0.99 | 0.00 | 11.99 | 0.85 | 11.14 | 117.94 | 0.00 | 154.55 | 0.00 | 115.01 | 242.35 | 105.30 | Storms & problems commissioning new zone sub plant. |
| PH109 | Water Treatment Works | 16 | 1248 | 0 | 0 | 0 | 1248 | 0 | 1248 | 1.07 | 0.00 | 0.00 | 0.00 | 1.07 | 0.00 | 1.07 | 1166.36 | 0.00 | 0.00 | 0.00 | 1166.36 | 0.00 | 1166.36 | Few customers, 1 large storm outage |
| DI-02 | Disraeli No.02 | 1 | 1184 | 0 | 0 | 0 | 1184 | 0 | 1184 | 6.00 | 0.00 | 0.00 | 0.00 | 6.00 | 0.00 | 6.00 | 197.33 | 0.00 | 0.00 | 0.00 | 197.33 | 0.00 | 197.33 | Single Customer supply - Works planned to rectify Lack of 66 Isolation points. |
| DI-01 | Disraeli No.01 | 1 | 1184 | 0 | 0 | 0 | 1184 | 0 | 1184 | 6.00 | 0.00 | 0.00 | 0.00 | 6.00 | 0.00 | 6.00 | 197.33 | 0.00 | 0.00 | 0.00 | 197.33 | 0.00 | 197.33 | Single Customer supply - Works planned to rectify Lack of 66 Isolation points. |
| NN-01 | Nolans Mine | 2 | 1168 | 0 | 0 | 0 | 1168 | 0 | 1168 | 5.00 | 0.00 | 0.00 | 0.00 | 5.00 | 0.00 | 5.00 | 233.60 | 0.00 | 0.00 | 0.00 | 233.60 | 0.00 | 233.60 | Single customer supply, Upstream 66 kV outages |
| F3055 | HARLAXTON | 1193 | 1149 | 0 | 0 | 0 | 1149 | 510 | 639 | 10.14 | 0.00 | 0.00 | 0.00 | 10.14 | 1.20 | 8.94 | 113.31 | 0.00 | 0.00 | 0.00 | 113.31 | 425.00 | 71.48 | Storms and Vegetation problems |
| CC-02 | Cloncurry No.02 | 292 | 1092 | 0 | 0 | 0 | 1092 | 431 | 661 | 13.70 | 0.00 | 0.00 | 0.00 | 13.70 | 2.61 | 11.09 | 79.71 | 0.00 | 0.00 | 0.00 | 79.71 | 165.13 | 59.60 | Mostly large outage to replace complex 66 kV pole |



8. Appendix 2 – Worst Performing Feeders Rural Short

| <u>Feeder</u> | | Number of Customers | <u>SAIDI</u> | | | | | | <u>SAIFI</u> | | | | | | <u>CAIDI</u> | | | | | | <u>Comments</u> | | | |
|---------------|--------------------------------|---------------------|--------------|------------|--------------|------------|--------------------|----------------------|------------------------|-------|------------|--------------|------------|--------------------|----------------------|------------------------|--------|------------|--------------|------------|-----------------|--------------------|----------------------|---|
| Number | Name | | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | | Total Distribution | Distribution Planned | Distribution Unplanned |
| LM104 | Boynedale | 135 | 5498 | 0 | 0 | 0 | 5498 | 1094 | 4404 | 18.15 | 0.00 | 0.00 | 0.00 | 18.15 | 4.24 | 13.91 | 302.92 | 0.00 | 0.00 | 0.00 | 302.92 | 258.02 | 316.61 | Aged 66 kV conductor problems. Works being planned. |
| 209 | Carmila | 267 | 4682 | 0 | 36 | 0 | 4646 | 1237 | 3409 | 28.26 | 0.00 | 1.00 | 0.00 | 27.26 | 4.90 | 22.36 | 165.68 | 0.00 | 36.00 | 0.00 | 170.43 | 252.45 | 152.46 | 33kV sub-transmission faults. Some 33 kv planned works. |
| WL-01 | WestLeichardt SWER Nr 1 feeder | 5 | 4480 | 0 | 0 | 0 | 4480 | 360 | 4120 | 5.20 | 0.00 | 0.00 | 0.00 | 5.20 | 1.00 | 4.20 | 861.54 | 0.00 | 0.00 | 0.00 | 861.54 | 360.00 | 980.95 | Upstream generation problems, and storms. |
| GC-C | GLENWOOD | 527 | 4225 | 0 | 0 | 0 | 4225 | 443 | 3782 | 18.45 | 0.00 | 0.00 | 0.00 | 18.45 | 1.96 | 16.49 | 229.00 | 0.00 | 0.00 | 0.00 | 229.00 | 226.02 | 229.35 | Several very big outages during January & February storms |
| F4385 | TIPTON BRIDGE | 46 | 4027 | 0 | 4 | 0 | 4023 | 391 | 3632 | 13.86 | 0.00 | 0.98 | 0.00 | 12.88 | 2.67 | 10.21 | 290.55 | 0.00 | 0.00 | 0.00 | 312.34 | 146.44 | 355.73 | Zone sub CB problems, pole replacement works, storms |
| MK-01 | MaryKathleen No.1 | 6 | 3845 | 0 | 0 | 0 | 3845 | 1095 | 2750 | 13.57 | 0.00 | 0.00 | 0.00 | 13.57 | 5.33 | 8.24 | 283.35 | 0.00 | 0.00 | 0.00 | 283.35 | 205.44 | 333.74 | Trees, difficult fault finding overnight |
| BD-03 | Burdekin Dam SWER Nr 3 | 1 | 3676 | 0 | 0 | 0 | 3676 | 483 | 3193 | 28.00 | 0.00 | 0.00 | 0.00 | 28.00 | 3.00 | 25.00 | 131.29 | 0.00 | 0.00 | 0.00 | 131.29 | 161.00 | 127.72 | Single customer line - upstream sub-transmission problems. |
| 2SCK | STEWART CREEK | 95 | 3670 | 0 | 0 | 0 | 3670 | 327 | 3343 | 36.60 | 0.00 | 0.00 | 0.00 | 36.60 | 4.02 | 32.58 | 100.27 | 0.00 | 0.00 | 0.00 | 100.27 | 81.34 | 102.61 | Some storm/lighting, major t/x failure, problems with recloser. |
| 334 | Marian | 341 | 4090 | 0 | 431 | 0 | 3659 | 86 | 3573 | 38.70 | 0.00 | 22.67 | 0.00 | 16.03 | 0.34 | 15.69 | 105.68 | 0.00 | 19.01 | 0.00 | 228.26 | 252.94 | 227.72 | storms, cable fault, insulator pollution problems |
| 208 | Ilbilbie | 271 | 3672 | 0 | 36 | 0 | 3636 | 660 | 2976 | 24.96 | 0.00 | 1.00 | 0.00 | 23.96 | 2.34 | 21.62 | 147.12 | 0.00 | 36.00 | 0.00 | 151.75 | 282.05 | 137.65 | 33kV sub-transmission faults. Some 33 kv planned works. |

9. Appendix 3 – Worst Performing Feeders Rural Long

| Feeder | | Number of Customers | SAIDI | | | | | | SAIFI | | | | | | CAIDI | | | | | | Comments | | | |
|--------|--|---------------------|-------|------------|--------------|------------|--------------------|----------------------|------------------------|-------|------------|--------------|------------|--------------------|----------------------|------------------------|--------|------------|--------------|------------|----------|--------------------|----------------------|---|
| Number | Name | | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | Total Distribution | Distribution Planned | Distribution Unplanned | Total | Generation | Transmission | Exclusions | | Total Distribution | Distribution Planned | Distribution Unplanned |
| 2BUR | BURKETOWN | 62 | 6248 | 0 | 1032 | 0 | 5216 | 440 | 4776 | 12.12 | 0.00 | 1.00 | 0.00 | 11.12 | 1.95 | 9.17 | 515.51 | 0.00 | 1032.00 | 0.00 | 469.06 | 225.64 | 520.83 | Mostly storms/lightning, difficult access (distances & soil types) to fault find & repair during wet season resulting in prolonged outages. |
| JC-11 | Julia Creek No.11 SWER - ORINDI | 46 | 5102 | 0 | 0 | 0 | 5102 | 823 | 4279 | 16.66 | 0.00 | 0.00 | 0.00 | 16.66 | 4.02 | 12.64 | 306.24 | 0.00 | 0.00 | 0.00 | 306.24 | 204.73 | 338.53 | Isolated area - difficult access overnight - helicopter fault finding next day |
| JC-08 | Julia Creek No.08 SWER - CANOBIE | 36 | 5083 | 0 | 0 | 0 | 5083 | 831 | 4252 | 15.50 | 0.00 | 0.00 | 0.00 | 15.50 | 3.78 | 11.72 | 327.94 | 0.00 | 0.00 | 0.00 | 327.94 | 219.84 | 362.80 | Isolated area - difficult access overnight - helicopter fault finding next day |
| WL-A | BELLS BRIDGE | 1191 | 4775 | 0 | 0 | 0 | 4775 | 393 | 4382 | 19.33 | 0.00 | 0.00 | 0.00 | 19.33 | 2.64 | 16.69 | 247.03 | 0.00 | 0.00 | 0.00 | 247.03 | 148.86 | 262.55 | Severe storms in Jan/Feb. Significant work has been done, mains, veg, sub upgrade. |
| GC-A | GUNALDA | 583 | 4693 | 0 | 0 | 0 | 4693 | 261 | 4432 | 13.61 | 0.00 | 0.00 | 0.00 | 13.61 | 1.26 | 12.35 | 344.82 | 0.00 | 0.00 | 0.00 | 344.82 | 207.14 | 358.87 | Severe storms in Jan/Feb. |
| GE-02 | Glenelg No.02 Vellum Downs SWER feeder | 24 | 3973 | 0 | 0 | 0 | 3973 | 1955 | 2018 | 13.00 | 0.00 | 0.00 | 0.00 | 13.00 | 6.13 | 6.87 | 305.62 | 0.00 | 0.00 | 0.00 | 305.62 | 318.92 | 293.74 | Mostly Planned 66 kV conductor repair works. |
| F058W | TAROOM | 1102 | 3774 | 0 | 0 | 0 | 3774 | 128 | 3646 | 34.19 | 0.00 | 0.00 | 0.00 | 34.19 | 2.84 | 31.35 | 110.38 | 0.00 | 0.00 | 0.00 | 110.38 | 45.07 | 116.30 | Planned vegetation & pole replacement works. Some storms |
| ER-D | GORDONBROOK | 323 | 3673 | 0 | 113 | 0 | 3560 | 713 | 2847 | 20.63 | 0.00 | 1.00 | 0.00 | 19.63 | 2.79 | 16.84 | 178.04 | 0.00 | 113.00 | 0.00 | 181.36 | 255.56 | 169.06 | Severe storms and some trips associated with problems in KR ZS. Loss of 66kV accounts for 939 min. |
| CO-02 | Collinsville No.2 | 126 | 3400 | 0 | 0 | 0 | 3400 | 1236 | 2164 | 26.99 | 0.00 | 0.00 | 0.00 | 26.99 | 5.26 | 21.73 | 125.97 | 0.00 | 0.00 | 0.00 | 125.97 | 234.98 | 99.59 | Storms & pole replacement works |
| EM246 | Rolleston | 563 | 3358 | 0 | 17 | 0 | 3341 | 183 | 3158 | 16.82 | 0.00 | 1.00 | 0.00 | 15.82 | 0.67 | 15.15 | 199.64 | 0.00 | 17.00 | 0.00 | 211.19 | 273.13 | 208.45 | Long radial line. New zone substation programmed for 05/06 |