

We are reinforcing supply to Yeppoon, with the installation of the new \$8.7 million Tanby Substation and we are augmenting supply to Gladstone at a cost of more than \$5 million. Summer preparedness projects are planned for Louisa Creek, with the installation of a skid-mounted transformer costing \$1.5 million, and in Moranbah with a new \$500,000 11kV powerline.

Major customer connection works will continue with infrastructure requirements being put in place for South Walker Creek and Vermont coal mines and the Dalrymple Bay/Hay Point Coal Terminal at a total cost of \$39 million. We are also completing works on a new bulk supply substation at North Gladstone and the construction of two new 66kV lines to supply the expansion of Central Queensland Ports Authority RG Tanna coal loading facility (\$32 million). This work will also reinforce supply to Gladstone.

We also are continuing to use innovative renewable technology to provide solutions to western Queensland, with work continuing on the \$2.5 million Windorah Solar Project and the proposed new \$5 million geothermal power station at Birdsville.

Going forward, these projects will ensure we are able to meet the region's growing electricity demand, as well as deliver improvement in our network performance and enhance our operational platform.

### **Customer Service 13 10 46**

7.00am – 6.30pm Monday to Friday

### **Faults Only 13 22 96**

24 hours a day, 7 days a week

### **Life-Threatening Emergencies Only 000 or 13 16 70**

24 hours a day, 7 days a week

If you would like to discuss any of the initiatives outlined in this or the Annual Report, or any concerns you may have regarding power supplies in our Central Region, please don't hesitate to contact us on 13 10 46.



*Peter Billing, General Manager  
Operations Central*



*Stephen Simpson, Manager  
Regional Services Central*

## ABOUT THE CENTRAL REGION SUPPLY AREA

The Central Region includes the Mackay area and the vast Capricornia region.

### **MACKAY**

Mackay and surrounds is a sub-tropical environment with exposure to summer electrical storms and cyclones and consists of the following geographic area with regard to Ergon Energy's electrical infrastructure:

**Mackay Area** - the coastal strip is centred on the provincial city of Mackay and extends from the small rural community of Carmila in the south, to the rural township of Proserpine and surrounding area in the north, including the tourist destinations of Airlie Beach and Laguna Quays. The coastal strip supply area also provides supply to the Hayman, Hamilton, Daydream, South Molle and Long Islands of the Whitsunday group. The area is serviced by two 132/33kV connection points at Alligator Creek and Mackay and two 132/66kV connection points at Pioneer Valley and Proserpine, all of which are supplied from Powerlink Queensland's 132kV network. The Bowen Basin area is centered around the mining towns of Moranbah, Glenden and Nebo and includes several major coal mines. The mines are either supplied from substations connected to the 66kV supply system from the Moranbah 132/66kV connection point, the 66kV supply system from the Kemmis 132/66kV connection point, or from substations connected to the Powerlink Queensland 132kV network.

### **CAPRICORNIA**

This area extends from Miriam Vale in the south to Clairview in the north and west to Longreach, including the major provincial centres of Rockhampton and Gladstone. Rockhampton is located on the Tropic of Capricorn and is considered the beef capital of Australia. Numerous coal mines are established in the western areas of the region. Major coal-fired power stations, providing a significant portion of Queensland's power, are located at Stanwell, Callide and Gladstone. The Capricornia region consists of three operational areas with regard to Ergon Energy's electrical infrastructure. These are:

**Central Coast Area** - this area incorporates the provincial city of Rockhampton and the surrounding coastal area. The area extends from the Capricornia / Mackay regional boundary south to Raglan and west to the Great Dividing Range. The area is serviced by 11 zone substations, which are supplied from two Powerlink Queensland 132/66kV connection points at Rockhampton and Egans Hill. Ergon Energy takes supply at the connection points at the 66kV side of the Powerlink Queensland 132/66kV transformers.

**Callide Curtis Area** - this southerly area takes in the port city of Gladstone and the western communities of Biloela and Moura, extending south to the Capricornia / Wide Bay regional boundary. Gladstone is serviced by 10 zone substations supplied from the Gladstone South connection point and the Ergon Energy 132/66kV Boat Creek substation. Biloela, Moura and surrounding areas are serviced by six zone substations supplied from the Biloela and Moura 132/66kV connection points. Ergon Energy takes supply from Powerlink Queensland at 132kV and 66kV at Boat Creek and Gladstone South, and 66kV and 11kV at Biloela and 66kV and 22kV at Moura.

**Central West** - this area takes in the major rural and mining communities of Emerald, Blackwater, Barcaldine, Clermont and Dysart, along with their surrounding areas. The western area extends north to the Capricornia / Mackay / North Queensland regional boundaries, south to the Capricornia / Wide Bay / South West regional boundary and west to the Queensland / Northern Territory / South Australia state border - and is serviced by 13 zone substations, supplied from the Powerlink Queensland connection points of Blackwater, Lilyvale, Central Queensland Power (Barcaldine), Clermont and Dysart. Ergon Energy also takes supply at 11kV at Clermont and Blackwater and 22kV at Dysart in addition to the 66kV supply at these locations. Ergon Energy takes supply at 132kV at Powerlink Queensland's Lilyvale substation via the Ergon Energy-owned 132kV feeder from Lilyvale to Clermont and Barcaldine Bulk Supply Substations.

**Remote Communities** - Ergon Energy owns, operates and maintains four stand-alone power stations and associated networks in this region that supply the communities of Bedourie, Birdsville, Jundah and Windorah.

**Further information about our network initiatives, as well as network constraints, is available in our Network Management Plan [www.ergon.com.au/annualreport](http://www.ergon.com.au/annualreport)**



MERIDIAN HALO

DELIVERING TO CENTRAL QUEENSLAND 2005/06



everything in our power





**'It's so important our supplier understands our needs, especially with the increased demand we're facing.'**

*Mike Galt - Commercial General Manager Central Queensland Ports Authority, Gladstone*

## central region report

### Keeping the community informed

This report summarises our performance for 2005/06 from our Annual Report, with additional information regarding specific progress in Central Queensland. We also outline our major capital projects for 2006/07.

Our aim is to provide transparency in reporting our challenges and strategic response through these public reports, which, along with our other stakeholder engagement activities, create an opportunity for a greater understanding of Ergon Energy's operations.

### Ergon Energy achievements 2005/06

Our Annual Report showcases our response to the devastation of Cyclone Larry, highlighting the effectiveness of Ergon Energy as an organisation, as well as progress made in our summer preparedness, disaster management planning and the success of cyclone area reliability enhancements.

In 2005/06, we delivered a record capital investment program of more than \$700 million across regional Queensland, significantly increasing the capacity of our electricity infrastructure and undertaking double the level of customer requested work from three years ago.

We also report on the delivery of our service promises and the substantial boost to our

capabilities in this area. Tribute is given to the successes of the retail business and we explain our response to the changes taking place regarding retail contestability and the restructuring of the electricity industry.

We are also very proud to announce an outstanding safety performance with Ergon Energy No.1 among the 16 energy companies in Australia that use the Lost Time Injury Frequency Rate (LTIFR) performance measure. With around 4,000 employees across Queensland as well as a strong contractor base, we believe the safety of our people and the community must always come first.

Our safety success also enhances our reputation as an 'employer of choice' and aligns with our commitment to the development of Queensland's regional skills base.

With the launch of our first stand-alone Sustainability Report, we also affirm our commitment to the principles of sustainability. This report explores how we are making an economic contribution to regional Queensland, as well as meeting our environmental responsibilities and supporting the communities where we live and serve.

### Delivering across our Central Region

Ergon Energy has three geographical operating regions. This report focuses

on our Central Region, which services both Mackay and Rockhampton and their surrounds, and follows the Tropic of Capricorn inland across western Queensland. This vast region also includes the major coastal centres of the Whitsundays and Gladstone, and the inland towns and coal mines of the Bowen Basin. Continuing west, it reaches from Emerald to Longreach and then as far out as Birdsville near Queensland's South Australian border. The region is served by an Ergon Energy workforce of around 1,800, including field workers, administrative and managerial staff, apprentices and contractors.

In the Central Region, our capital investment program in the network during 2005/06 included establishing new substations, major network improvements and securing powerlines in cyclone-prone areas, as well as significant customer-initiated works, to expand and upgrade our network.

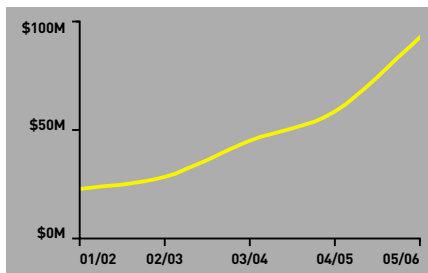
Major projects included an additional 33kV underground cable to the Mackay CBD at a cost of \$8.1 million, substation augmentation works at Tennyson Street in Mackay (\$1.9 million) and a \$4.8 million network communications upgrade for the Bowen Basin. The building of a new 66kV powerline from Moura to Theodore was completed at a cost of \$8.2 million.

Other significant projects under way include the new Mackay City Substation at a cost of around \$12 million, as well as almost \$7 million spent on initial work, as part of a larger program of works, to augment supply to Agnes Water.

In addition to these major projects, we have experienced significant growth in demand for new customer connections across our Central Region - greater than any other region - as a result of unprecedented coastal and regional development and the expansion of the coal mining sector. Major coal-related customer connection works included the development of infrastructure requirements for Rolleston, Millenium, Foxleigh and Carborough Downs coal mines at a total cost of around \$36.5 million.

To meet this steep increase in customer-initiated works, we have focused significant resources in this area. The process from application through to final connection has also been reviewed with changes made to better co-ordinate and improve our performance. We also deployed 'contestability' for subdivision works, allowing developers to use contractors for the design and construction phases. Further improvements are under way in this regard.

***Unprecedented development across our Central Region has seen customer-initiated works grow dramatically in recent years.***



To support reliability improvement, we delivered a record maintenance program in 2005/06, including extensive asset inspection and defect remediation, and a more effective vegetation management program. Reliability and quality of supply improvements were also targeted across the SWER (Single Wire Earth Return) network, servicing customers in western Queensland as part of a state-wide \$120 million, five-year SWER improvement program.

Heading into the 2005/06 summer period, we enhanced our preparedness with projects to improve network resilience and increase capacity to cope with summer peak demand. We also made significant improvements to our National Contact Centre to support our ability to respond quickly and effectively to supply interruptions and to keep our communities and customers informed. This included the implementation of a world-class general enquiry Interactive Voice Recognition system.

We continued with our Cyclone Area Reliability Enhancement (CARE) program to progressively address the need for securing key distribution assets in cyclone-prone areas of Queensland's north. To date, \$28 million has been invested in coastal communities from Mackay to Cooktown, with local works completed during the year in Cannonvale (\$192,000) in the Whitsundays.

Work continued, as part of a state-wide two-year \$58 million program known as LINK, to improve our network monitoring and response capability. This work includes the refurbishment and expansion of the Rockhampton Control Centre and the construction of a new centre in Townsville to operate a state-of-the-art network control system. Another part of the overall LINK program targeted improvements to communication facilities in Mackay, Cairns, Maryborough and Toowoomba.

## Investing in future outcomes

In 2006/07, Ergon Energy's state-wide capital expenditure program will remain at record levels. This year's planned \$700 million program includes an investment of \$189 million into the Central Region for system improvements and expansion, along with state-wide programs that will directly benefit the region. This investment will include the construction and upgrading of powerlines, major new substations and other critical network upgrades to support the current level of development and help ensure a reliable electricity supply for Central Queensland.

Major projects in the region will include the commencement of a \$19 million project to reinforce supply to Airlie Beach that includes a new substation, \$12 million for the reinforcement of supply to Mackay with construction continuing on the new zone substation at Alfred Street, \$52 million to reinforce supply to North Mackay including the construction of a new substation at Glenella, \$16.5 million to reinforce the supply to North Rockhampton with a new substation at Berserker, a \$2.5 million augmentation of the McKinlay Creek Substation, and approximately \$6 million to reinforce the Gladstone 66kV ring network.

We are also continuing to reinforce supply to Agnes Water with four major projects under way, costing \$45 million.



**To improve quality and reliability of supply to western Queensland, 'smart' monitoring units were installed at sites across the network.**

*Ergon Energy's SWER Improvement Manager Jon Turner (left) and Manager Network Planning and Development Tony Loveday.*