Appendix 6

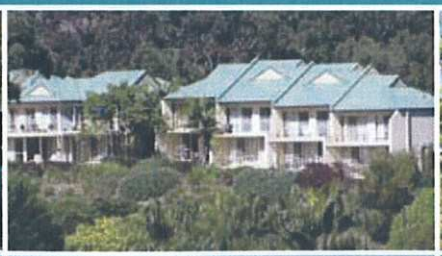
Extracts from Mid North Coast Regional Strategy

NSW GOVERNMENT
Department of Planning

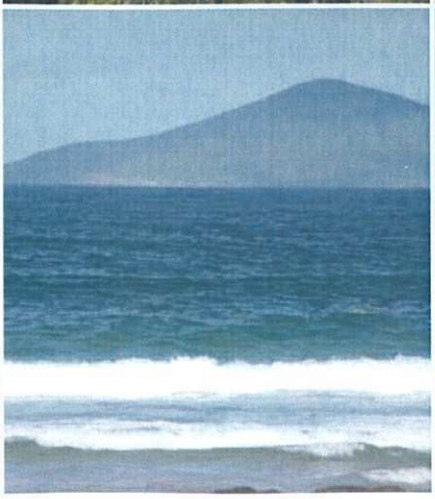
2006–31

MID NORTH COAST REGIONAL STRATEGY









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Appendix 4 major infrastructure projects

State Infrastructure Strategy 2008-2009 to 2017-2018 projects in the Mid North Coast Regional Strategy area

Human Services

Health

Coffs Harbour Base Hospital: Non-Acute Mental Health Unit
Grafton Base Hospital: Emergency Department
Manning Base Hospital: Emergency Department, Taree

Education

Bowraville Central School: Upgrade
Coffs Harbour Education Campus TAFE College: Automotive, Health, Sport and Recreation
Coffs Harbour High School: Upgrade
Great Lakes TAFE College: Relocation from Tuncurry Site
Kempsey High School: Upgrade
Kororo Public School: Demountable Replacement
Nambucca Heads High School – Trade School: New Metals Engineering Training Facility
Narranga Public School: New Hall
Old Bar Public School: Upgrade
Port Macquarie TAFE College: Child Studies, Beauty Therapy and Learner Support Centre

Ageing, Disability and Home Care

Accommodation Reconfiguration and Fitout, Dairyville
Accommodation Reconfiguration and Fitout, Wauchope
Stronger Together: New Accommodation, Grafton
Stronger Together: New Accommodation, Kempsey

Justice

Attorney General

Court Replacement, Coffs Harbour *
Court Upgrade, Port Macquarie

Police

Coffs Harbour Police Station *
Kempsey Police Station

Transport

Roads

Oxley Highway: Upgrade from Wrights Road to Pacific Highway
Pacific Highway: Bonville Bypass Dual Carriageways (State and Federal Funded)
Pacific Highway: Bulahdelah Bypass, Dual Carriageways (State and Federal Funded)
Pacific Highway: Coffs Harbour (Sapphire) to Woolgoolga Duplication * (State and Federal Funded)
Pacific Highway: Coffs Harbour Bypass * (State and Federal Funded)
Pacific Highway: Coopernook to Moorland Dual Carriageways (State and Federal Funded)
Pacific Highway: Failford Road to Tritton Road *
Pacific Highway: Herons Creek to Stills Road
Pacific Highway: Iluka Road to Woodburn *
Pacific Highway: Karuah to Bulahdelah Sections 2 and 3, Dual Carriageways (State and Federal Funded)
Pacific Highway: Kempsey to Eungai * (State and Federal Funded)
Pacific Highway: Moorland to Herons Creek Dual Carriageways (State and Federal Funded)
Pacific Highway: Oxley Highway to Kempsey *
Pacific Highway: Warrell Creek to Urunga * (State and Federal Funded)
Pacific Highway: Wells Crossing to Iluka Road *
Pacific Highway: Woolgoolga to Wells Crossing *

Electricity

Transmission

Bulahdelah 132kV Substation
Coffs Harbour–Kempsey 132/66kV Line Conversion
Hawks Nest 132kV Substation
Herons Creek Area 132kV Substation
Kempsey–Port Macquarie 132 kV Line
Nabiac 132kV Substation
Stroud to Bulahdelah 132kV Line
Taree Substation Upgrade
Tomago to Stroud 132kV Line

Distribution

Coffs Harbour South Zone Substation
Mid North Coast Sub-transmission Works: Coffs Harbour to Kempsey

Water

Country Towns Program

Bootawa Water Treatment Plan
Coffs Harbour Regional Sewerage: Stage 2 Priority Works
Grafton Sewerage Augmentation
Hastings District Water Supply: Southern Pipeline
Iluka Sewerage Upgrade
Clarence Valley and Coffs Harbour Regional Water Supply: Shannon Creek Dam
Maclean/Townsend Sewerage Upgrade
Nambucca District Water Supply Upgrade: Stage 2
Nambucca Heads Sewerage Augmentation
Stroud Sewerage Augmentation
Wooli Sewerage Upgrade
Yamba Sewerage Augmentation

Note. * These projects are not yet approved but form part of the $140 billion State Infrastructure Strategy to 2017–18.

Appendix 7

Electricity Network
Performance Report 2005-2006

countryenergy

Country Energy's Submission to the

Department of Energy, Utilities and Sustainability:

Electricity Network

Performance Report

2005-2006

2.2. Audits

KPMG carried out the following audits under CE's internal Audit plan.

Network Maintenance Planning
Review of the effectiveness with respect to reliability, safety, and asset management of Country Energy's maintenance of planning practices with particular reference to the "Detailed Report of the independent Panel of Electricity Distribution and Service Delivery for the 21st Century – July 2004". In addition, the audit reviewed Country Energy's statutory requirements relating to three key pieces of vegetation management legislation. Recommendations were to put in place a resource planning tool, identify and document bush fire risks and update legislation references in the Vegetation Management Plan.

Northern Regional Site Visit
Review of the processes and controls in place to manage key operational risks at the regional level. Recommendations included one "high" relating to defect rectification times with respect to asset maintenance and a number "moderate" and "low" findings relating to the management of asset maintenance, capital works, customer complaints and the functions of safety, finance, staffing and design.

Goods & Services contract management (Vegetation)
Reviewed compliance with Country Energy's policy and procedures in relation to goods and services control contracts with a particular emphasis on vegetation management. Recommendations involved "medium" and "low" findings, generally applying to the network with some applying corporately.

Results
KPMG presented summaries of the results of these reviews to the Country Energy Board's Audit and Risk committee.

Action plans to address audit findings
Accountable managers developed and implemented Agreed Management Actions to address the audit findings. Status of implementation of Agreed Management Actions is followed up and collated quarterly by management, prior to being reported to the Country Energy Board Audit and Risk Committee.

2.3. Independent Appraisal Process

Country Energy engaged the services of *Hughes Consultants Pty Ltd* to conduct an independent appraisal of this *Network Performance Report 2005-06*. The appraisal has been conducted with due regard to the requirements of the *Electricity Supply (Safety and Network Management) Regulation* as well as the *Independent Appraisal Guidelines* given in the *Electricity Network Performance Report Outline* issued by DEUS.

3. NETWORK PLANNING

3.1. Overview

Country Energy is committed to providing a safe, secure and reliable supply of energy in a cost effective manner. To ensure this is achieved. Network planning is conducted and investment decisions are made in line with the Network *CEK8018 Asset Management* Plan. The plan outlines Country Energy's obligations in relation to network planning, including the need to compile and publish an *Annual Electricity System Development Review (AESDR).*

Planning Approach

Development of the Country Energy network is in accordance with the *Electricity Supply Act*, the *National Electricity Code*, the *NSW Code of Practice - Demand Management for Electricity Distributors* and our policy *CEK8003 Subtransmission and Distribution Network Planning Criteria and Guidelines.*

In general, Country Energy plans the development of its network to ensure:

- Adequate network capacity to meet power transfer requirements
- Electrical and thermal design ratings (normal & overload) of equipment are not exceeded
- Supply reliability is in accordance with published standards, or as negotiated to meet the special requirements of individual major network customers
- Quality of supply meets published standards and system voltage levels are maintained within acceptable standard limits
- Safety standards are maintained or exceeded
- Environmental constraints are satisfied
- The above requirements are met in a cost effective manner.

Reliability Standards

In August 2005 the Minister for Energy and Utilities imposed on licences held by distribution network service providers under the Electricity Supply Act 1995 additional conditions relating to reliability performance.

The purpose of these conditions is to mandate minimum levels of reliability and minimum design standards. The conditions impose new design, reliability and performance standards on distribution network service providers. When fully implemented, distribution network service providers will be required to submit detailed reports to the Minister to ensure compliance with the conditions.

The policies and criteria adopted by Country Energy are in line with the requirements of the new standards and a work plan has been developed to ensure compliance with the new standards.

- Permissible loading capacities of network components
- Requirements for satisfactory voltage regulation, and
- Selection of appropriate security levels required for the network

The inherent security (configuration) of the network is a key factor influencing the reliability of supply.

Other factors include:

- Effectiveness of preventative maintenance programs
- Effectiveness of operational procedures
- Type of terrain and local climatic conditions, and
- Quality (reliability) of network components

It is the responsibility of Country Energy to ensure that the network provides a supply of adequate security and reliability.

Supply security is determined primarily by the design of the network which, in turn, is determined by the network planning policies and criteria adopted by Country Energy. The security of supply criteria and targets for reliability of supply (as measured by indices such as SAIDI and SAIFI) are key network planning considerations when assessing the appropriateness of the existing network design.

3.3. Demand Management

In accordance with the requirements of the Electricity Supply Act 1995, Country Energy gives due consideration to demand mitigation initiatives as an alternative to distribution network extension or augmentation.

Country Energy recognises that demand management (DM) can play a significant role in the achievement of improved levels of asset utilisation and efficiency. Country Energy continues to refine the application of traditional DM options and monitors emerging and innovative DM applications in order to capture the benefits for both customers and stakeholders.

To moderate the need for network augmentation in areas of network constraint, Country Energy's traditional approach has been based on these core strategies:

- Network price signals – Country Energy applies demand charges to larger customers which provides an incentive to optimise the demand profile of the installation through measures such as energy efficiency and load shifting. In addition, all new metering installations have the capacity to implement time of use (TOU) and TOU tariffs are being actively promoted across Country Energy to introduce more cost reflective pricing and help manage peak loading.
- Base load efficiency – Country Energy continues to promote energy efficiency audits for larger industrial and commercial customers through our consulting arm Energy Answers. Such audits include an assessment of the potential for on-premise power factor correction which can provide benefits in installation and downstream network demand reduction as well as contributing significantly to loss reductions in the distribution network.
- Load control – Country Energy operates an extensive load control network with significant off-peak load penetrations for residential customers. Over 30% of

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Tallwoods Village, and Diamond Beach (north of Forster). Also associated with this area are plans and design completed for a new express feeder into the area to improve capacity and voltage levels.

- Implementation of previously issued Tapping Zone settings for the Karuah feeder was completed.

- Other initiatives that will improve network voltage levels included:
  - Planning work continued for 8 new zone substation sites, all of which will improve voltage control when constructed due to the effect they will have of decreasing feeder length:
  - Several km of the North Shore feeder in Port Macquarie were upgraded to a 19 strand conductor.
  - Significant works were undertaken in Bellingen to increase transformer substation and LV mains capacity in the central shopping district.
  - Multiple (approximately six) existing substation sites in East Port Macquarie were increased in size and equipped with multiple larger LV ties to the street supply, in this area of increasing density of development, to improve LV capacity and voltage.
  - Installation work continued on the new Coopernook ZS; the new kiosk substation uses an OLTC transformer which will perform better, and have more reserve capacity, than the non-regulated transformers it replaces (which relied on separate, undersized regulating equipment)..
  - Work was completed on the rebuild of the Nana Glen ZS re-build. The new site has done away with the old (separate) voltage regulators and relays which had a temperature dependency that caused varying behaviour between summer and winter. The new installation has done away with this.
  - Construction work continued on the new 66kV line North Coffs to Moonee, which will bring 66kV supply of adequate capacity to the proposed new Moonee ZS site, which in turn will improve voltage regulation in the Moonee area.
  - A new primary power transformer was installed at Lake Cathie ZS, which has capacity to cater for increasing growth in the area.

Northern Region

A number of voltage improvement/augmentation projects are in stages of planning and implementation throughout the Region. Some projects completed in the 05/06 financial year were:

- Conversion of a section of the M6 feeder, Narrabri, from SWER to 3 Phase.
- Completion of the last stage of the reconductoring Spring Plains Feeder, Wee Waa.
- Upgrade of regulation on the following feeders -
  - M66 & M67 Mullaley/Tambar Springs - Gunnedah - Mullaley & Mary's Mount regulator sites.
  - M63 & M64 Curlewis/Breeza - Gunnedah - Curlewis regulator site.

GLB8B3	Goulburn	Insulator failure	Goulburn ring protection upgrade almost complete, "smart" reclosers will isolate faulted section of ring and restore supply to other sections.
GRFL22	Grenfell	Storm activity, faulty recloser	Additional recloser installed - feeder performance fine
GRN3B1	Grafton	Trees, flying foxes and poor conductor	Recloser installed, augmentation in progress
GRN3B4	Grafton	Subtransmission faults, cable fault, fruit bat faults.	Maintenance works done
GRN3B6	Grafton	Subtransmission faults, birds	Re-conductor completed
GRN3B7	Grafton	Subtransmission faults, storm damage	No augmentation except for necessary maintenance
GRS48035	Gresford	29 events in total, some resulting in outages of up to 8 hours duration. Mostly tree growing into mains, or trees blown into mains, and broken conductors.	Commitment obtained for increased Veg Management resources in 06/07 year. Protection revised and the 2 nulec reclosers have been installed Additional reclosers to be upgraded, several completed
GULG22	Grenfell	Storm activity, faulty recloser	Feeder performance has improved and is within acceptable limits. No additional works undertaken
IVL1R23	Inverell Central	A single outage contributed 50% of the lost customer minutes. Storms contributed a further 30% of the lost customer minutes.	Suspect 7/064 cu conductor to be replaced.
KIS7682	Kempsey	28 events in total, the major one being total loss of the duty transformer in the zone substation due to fire. Upstream 33kv protection scheme is considered to have operated properly, but did not prevent the fire from occurring. The fire also damaged 11kV	Design of 6km reconductor / rebuild is still underway. Line requires refurbishment and has been assigned high priority in that work list.
LE3B2	Lismore	Subtransmission faults, birds.	No augmentation except for necessary maintenance
LKC7781	Lake Cathie	The most significant outages on this feeder were in fact due to failures on the salt-affected 33kV radial line supplying the Lake Cathie zone.	X-arm and insulator replacement complete for salt affected areas. Remainder in town area to be considered - most of the remainder is double disc. Much fewer problems have been experienced since the 33kV insulators were upgraded.
LKT8B1	Urana	Various	Completed protection works during 2005-06.
MANI42	Manildra	The Feeders changed due to the commissioning of the new substation.	Work was completed to construct a feeder to split this, along Carlisle Street. Further to this reclosers were upgraded. A Nulec is also scheduled to be installed on Parkes Road.
MCK48037	Martins Creek	26 events in all, the most significant being due to conductor breakages, trees blown into mains, and failure of a new 11kV capacitor installation which had been direct connected to the bus pending installation of the final switchgear arrangement.	Jobs raised to upgrade/install 2 reclosers. Jobs raised to relocate fuses. First 1.3km of feeder to be reconductored and significant vegetation cleared along route
MCK48038	Martins Creek	30 events in all, the most significant being due to conductor breakages, trees blown into mains, and failure of a new 11kV capacitor installation which had been direct connected to the bus pending installation of the final switchgear arrangement. Other o	Jobs raised to upgrade/install reclosers. Significant vegetation clearing carried out.

Appendix 8

Letter dated 14 June 2007 from Wesfarmers Kleenheat Gas

Kleenheat Gas
Wesfarmers Kleenheat Gas Pty. Ltd. A.B.N 40 008 679 543
Campus Drive (off Murdoch Drive), Murdoch, W.A 6150
Telephone: 132 180 Facsimile: (08) 9312 9833
Postal Address: P.O Box 4184, Myaree Business Centre, W.A 6960

14th June 2007

Mr Tony Green
Luke and Company Pty Ltd
98 William Street
Port Macquarie
NSW 2444

Dear Tony,

Rainbow Beach development LPG Option

Please find outlined below information related to the possible development of Reticulated LPG at Rainbow Beach, Bonny Hills. Please accept this information as an indication of our interest in the development.

Assumptions

- All trenching and civil works by others.
- Pipework supply and installation by others.
- KHG to assist in the planning and development of Reticulation layout.
- KHG to supply LPG vessels and all associated works, security and vehicle protection. (Indicative site requirements attached)
- Access for LPG Delivery vehicle to the agreed location of the LPG vessels by others.
- Total energy per yr 20,000 Gigajoule. Based on all properties using LPG Hot water and cooking.
- Allocation of land to Kleenheat Gas for the purpose of LPG storage and Plant equipment.

Connections

Kleenheat Gas will be responsible for the connection of each end user from the reticulated main supplied throughout the development.

Kleenheat Gas will maintain the whole reticulated network, after defects liability period has ceased. Defect liability period to be agreed upon.

After connection KHG or associated agencies will be responsible for the maintenance of customers connection, invoicing and assorted activities.

Kleenheat Gas will reimburse the developers for each LPG Connection completed throughout the reticulation. Numbers to be discussed upon further consideration.

Kleenheat Gas
Wesfarmers Kleenheat Gas Pty. Ltd. A.B.N 40 008 679 543
Campus Drive (off Murdoch Drive), Murdoch, W.A 6150
Telephone: 132 180 Facsimile: (08) 9312 9833
Postal Address: P.O Box 4184, Myaree Business Centre, W.A 6960

Contractual Arrangements

Kleenheat Gas would need to establish the following

- A Heads of Agreement with Rainbow Beach outlining the responsibilities of each party.
- Access Agreement.
- LPG Supply Agreement.

I hope this overview assists. Please call me at your convenience to discuss this matter further.

Yours faithfully,

Chris Wright
Gas Utilisation and Development Manager - NSW & Qld
Wesfarmers Kleenheat Gas Pty Ltd
Mobile 0437 512 753