



Ergon Energy

Network Deliverability Plan

The purpose of the Network Deliverability Plan is to summarise how Ergon Energy will ensure an efficient, prudent and successful delivery of the AER Regulatory Period 2015 - 2020 Program of Work.

Keywords: AER, Resourcing Strategy

Network Deliverability Plan

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1 References

1.1 Ergon Energy controlled documents

Document number or location (if applicable)	Document name	Document type
Design Document I30 Project V1.0	Managing the 7 year Program of Work	PDF

1.2 Other documents

Document number or location (if applicable)	Document name	Document type
I:\Operations\Works Enablement\Working File - All\Work Plan\3. AER	Deliverability Plan Major Project	MS Word
I:\Operations\Works Enablement\Working File - All\Work Plan\3. AER	Contract Strategy EGM Overview July 2014 v2	Powerpoint

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2 Legislation, regulations, rules, and codes

This document refers to the following:

Legislation, regulations, rules, and codes
Work Health Safety Act 2011 (Qld)
Environmental Protection Act 1994 (Qld)
Electrical Safety Act 2002 (Qld)
Federal Legislation <ul style="list-style-type: none"> Electricity – National Scheme (Queensland) Act 1997 – incorporating National Electricity Law
Queensland Legislation <ul style="list-style-type: none"> Electricity Act 1994 Electrical Safety Act 2002 Queensland Competition Authority Act 1997
Environmental Protection
Federal Legislation <ul style="list-style-type: none"> Energy Efficiency Opportunity Act 2006 Environment Protection and Biodiversity Conservation Act 1999 Great Barrier Reef Marine Park Act 1975 National Greenhouse and Energy Reporting Act 2007
Wet Tropics of Queensland World Heritage Area Conservation Act 1994
Queensland Legislation <ul style="list-style-type: none"> Aboriginal Cultural Heritage Act 2003 Acquisition of Land Act 1967 Chemical Usage (Agricultural and Veterinary) Control Act 1988 Coastal Protection and Management Act 1995 Environmental Protection Act 1994 Fisheries Act 1994 Forestry Act 1959 Land Protection (Pest and Stock Route Management) Act 2002 Marine Parks Act 1982 Nature Conservation Act 1992 Plant Protection Act 1989 Sustainable Planning Act 2009 Torres Strait Islander Cultural Heritage Act 2003 Transport Infrastructure Act 1994 Vegetation Management Act 1999 Recreation Areas Management Act 2006 Soil Conservation Act 1986 State Development and Public Works Organisation Act 1971

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Competition & Consumer Protection

Federal Legislation

- Competition and Consumer Act 2010

Queensland Legislation

- Fair Trading Act 1989
- Queensland Competition Authority Act 1997

Corporate & Financial Services

Federal Legislation

- Income Tax Assessment Act 1997
- Fringe Benefits Tax Act 1986
- A New Tax System (Goods and Services Tax Act) 1999
- Copyright Act 1968
- Corporations Act 2001
- Insurance Contracts Act 1994
- Privacy Act 1988
- Electronic Transactions Act 1999
- Trade Marks Act 1995
- Patents Act 1990

Queensland Legislation

- Financial Accountability Act 2009
- Right to Information Act 2009
- Information Privacy Act 2009
- Government Owned Corporations Act 1993

Employment & Equal Opportunity

Federal Legislation

- Disability Discrimination Act 1992
- Fair Work Act 2009
- Australian Human Rights Commission Act 1986
- Racial Discrimination Act 1975
- Sex Discrimination Act 1984

Queensland Legislation

- Anti-Discrimination Act 1991
- Industrial Relations Act 1999
- Workers' Compensation and Rehabilitation Act 2003

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Native Title & Cultural Heritage Management

Federal Legislation

- Native Title Act 1993
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Queensland Legislation

- Aboriginal Cultural Heritage Act 2003
- Aboriginal Land Act 1991
- Acquisition of Land Act 1967
- Native Title (Queensland) Act 1993
- Queensland Heritage Act 1992
- Torres Strait Islander Cultural Heritage Act 2003
- Torres Strait Islander Land Act 1991

Development & Planning

Federal Legislation

- Telecommunications Act 1997

Queensland Legislation

- Sustainable Planning Act 2009
- Land Act 1994

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3 Definitions, acronyms, and abbreviations

3.1 Definitions

For the purposes of this strategy, the following definitions apply:

Term	Definition
A7	Artemis 7
AER	Australian Energy Regulator
AIDM	Asset Inspection Defect Management
BCT	Business Case Tool
CAPEX	Capital Expenditure
CICW	Customer Initiated Capital Works
CPI	Consumer Price Index
DNSP	Distribution Network Service Provider
DUOS	Distribution Use of System charges
EECL	Ergon Energy Corporation Limited
EEQ	Ergon Energy Pty Ltd
Ellipse	Ventyx Enterprise Resource Program
ERP	Enterprise Resource Planning
FFA	Field Force Automation
GSL's	Guaranteed Service Levels
KPI	Key performance Indicator
NDP	Network Deliverability Plan
NER	National Electricity Rules
NER	National Electricity Rules
NICW	Network Initiated Capital Works
OPEX	Operation Expenditure
POT	Program Optimisation Tool
PoW	Program of Work
PV	Photovoltaic
QCA	Queensland Competition Authority
SCADA	Supervisory Control and Data Acquisition
SP	Service Provider
SWER	Single Wire Earth Return
MIS	Management Information System

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WO	Work Order
OT	On Time
OC	On Cost
DC	Design Complete
SP	Service Provider
CV	Contract Value
AP	Approved Value
RWH	Request Works Handover
PIA	Project Initiation Advise
MSC	Maintenance Schedule task
WST	Work Simulation Tool

3.2 Acronyms and abbreviations

Nil.

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4 Executive Summary

The Network Deliverability Plan describes the considerations and the methods that Ergon Energy has in place to ensure that the proposed 2015-20 AER program of works can be prudently, effectively and efficiently delivered. This document forms part of and should be ready in conjunction with the suite of supporting documents for the 2015-20 AER submission.

Ergon Energy's environment has changed: our customers are looking for Peace of Mind, Choice and Control for the Best Possible Price. The appropriate response has been initiated through our clear strategic direction, our new organisational structure, our revenue submission, and the new Enterprise Agreement. We are seeking to fundamentally improve our way of working. While ensuring the right focus and reducing the overhead burden, these business-wide foundations are enabled by an aggressive pursuit of a number of work delivery improvement initiatives that have delivered real reductions in the cost of work.

Vegetation costs and Asset inspection costs have fallen and productivity has lifted. The quality and performance of our works contractors has improved, and we are achieving improved competitive contractor pricing with increased safety performance. Technology such as ROAMES is being leveraged to remove labour intensive activities and improve risk management. Customer service performance has improved with consistent and shortened delivery cycle times for customer developer works. These gains and many more have informed our forward assessment and approach to the deliverability of the 2015 - 2020 AER program of works.

The 2015 - 2020 AER program of works combined with other non-regulated commitments represents an average of 4.6M hours of work annually. This is an effective reduction of 2% in the level of activity in the baseline year of 2012 – 2013. As shown in Table 1, Ergon Energy will continue to use a mix of external and internal supply to deliver the works program.

	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20
Demand	4.61	4.70	4.49	4.57	4.61
Internal Supply	2.60	2.60	2.60	2.60	2.60
Current External	1.35	1.28	1.16	1.13	1.17
Demand subject to levers	0.66	0.82	0.73	0.84	0.84

Table 1 – Supply and demand forecast for 2015 - 2020

Ergon Energy has anticipated this position, with commensurate reductions in the level of internal resourcing and a rationalisation of our external delivery partners already actioned. Notwithstanding this, the forward position outlined in our AER proposal is within the combined deliverability capacities of our internal and external resources.

Ergon Energy and our customers are in a better position as a result of all these changes: costs are decreasing, and customer service is improving. The challenge outlined within this document is to continue the aggressive pursuit to deliver an efficient service.

Ergon Energy is in a good position to successfully deliver the 2015 – 2020 works program.

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5 Overview

5.1 Purpose

The purpose of the Network Deliverability Plan is to describe Ergon Energy's consolidated works delivery strategy to ensure an efficient and successful delivery of the 2015 to 2020 work program.

Responsibility for the efficient delivery of Ergon Energy's regulated capital and maintenance program of work is shared between the Customer Service business unit (formally known as the Operations Group) and the Network Optimisation Business unit through the Major Projects group. The Major Projects group has a prime responsibility for significant sub-transmission capital works with a value greater than \$5M. The remainder of the program, representing the bulk of the work, is delivered through Customer Service. For the purposes of this document, the assessment of demand and supply of resources will be consolidated.

5.2 Scope

The Network Deliverability Plan focuses primarily on the resourcing strategies to be employed by Ergon Energy to ensure effective and efficient delivery of the 2015 – 2020 work program.

The document outline includes:

- Ergon Energy's Business Strategy; has been renewed and ensures that we remain sustainable, relevant and a valued player in the electricity supply chain. Our customers are at the centre of everything we do.
- Ergon Energy's Service and Works Delivery Strategy; set out the principles for how we plan, resource and manage work. This chapter also outlines a summary of improvement achieved in the current regulatory period by the Customer Service business unit to improve customer service while driving costs down.
- The Work and Service Demand Assessment; assesses the deliverability of the 2015 – 2020 works program. The works program for 2015 -2020 is balanced and supported by a flexible resource strategy that allows for uncertainty. Ergon Energy is in a good position to successfully deliver the 2015 – 2020 works program.

The Network Delivery Plan is focused on the efficient delivery of the works program. The efficient expenditure forecasts and their associated work programs are taken "as given" for the purposes of this document. The program has been developed on the basis of the most likely outcomes. This recognises that the approved work plan reflects a collaborative, whole of business approach to planning which includes input on deliverability.

For Noting: For completeness, the assessment of demand for and supply of resources in this document considers the total program of works – non-regulated as well as regulated. Non-regulated works represents approximately 20% of the total work program. This broader assessment ensures that the deliverability plan is complete and robust and minimises any risk that might compromise the effective and efficient delivery of the regulated program.

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5.3 Document Qualifications and limitations

The Network Deliverability Plan has been developed with the best available information as at October 19, 2014.

The following qualification apply in assessing the degree of confidence

- Resource demand has been built based on the estimating model.
- Resource demand has been based on the “AER System Capex forecast” version 8.3. It should be noted that the resource demand in this document used input form version 8 as provided by Network Optimisation on October 19, 2014. Network Optimisation has confirmed that the 3 versions issued post version 8 had no resource impact.
- OPEX program estimates reconciled to COGNOS as of May 22, 2014.
- Program taken as is from the program owners
- Resource supply has been based on internal resource levels as of March 2014.

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6 Ergon Energy Business Strategy

The big issue for Ergon Energy's Customers is clear – affordability. Ergon Energy has recalibrated its strategic direction to ensure that it remains sustainable, relevant and a valued player in the electricity supply chain.

The key messages from this chapter are:

- We are continuously improving to become vital and valued in the hearts and minds of our customers.
- We understand the market changes that are required.
- We have created a visionary business strategy to recreate how we serve.

6.1 Ergon Energy Business Strategy

Affordability issues and rapid changes in technology mean that our customers are increasingly willing and able to make different choices when it comes to energy. Ergon Energy's Strategic Plan (2015-2020) underpins and enables increasing energy productivity, bringing down the cost of energy supply and creating more choice and value for our customers.

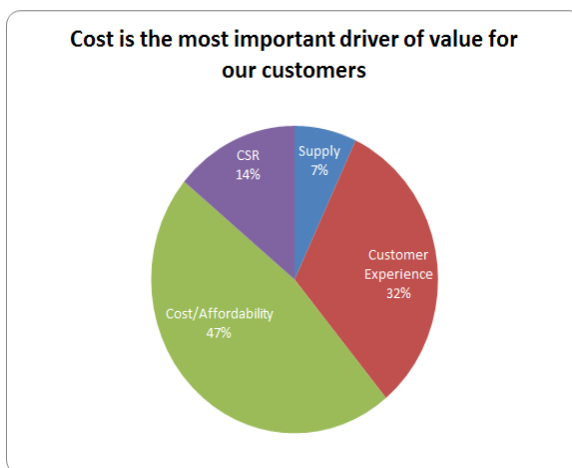


Figure 2 – Cost is the most important driver of value for our customers.

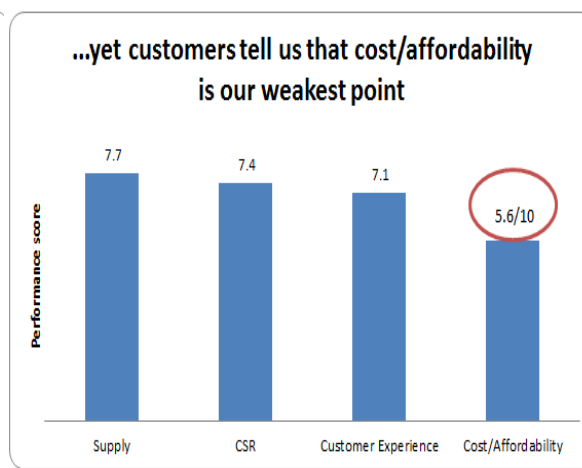


Figure 1 – Customers tell us that cost/affordability is our weakest point

To achieve this we will deliver an **effective market** and **efficient services**.

Delivering an 'effective market' means we will:

- Support new markets – we will enable customers, retailers and other businesses to use our distribution network as a platform to trade demand management and energy services and products.
- Push for better regulation, pricing and tariffs that will bring competition, choice and better network load management.
- Prepare for our retailer, Ergon Energy Queensland Pty Ltd (EEQ), to separate into a competitive environment.
- Ergon Energy Corporation Limited (EECL) will continue to support a competitive environment.
- Tap into smart technologies, and enable our people to make great business decisions thanks to better information.

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Delivering an 'efficient service' means we will:

- Invest prudently.
- Continue our focus on efficiency, without compromising safety or minimum service standards.

The Key: Effective Market and Efficient Service

We will always put the **safety** of our people and communities **first**

Effective Market	Efficient service
<ul style="list-style-type: none"> • We will: <ul style="list-style-type: none"> • Separate our retail and distribution business • Support Full Retail Competition • Support the introduction of new tariffs • Provide the essential infrastructure that connects buyers and sellers of energy services • Improve our distribution management systems and progressively adopt appropriate smart-grid technology • We will not: <ul style="list-style-type: none"> • Sell products such as solar PV panels or battery storage; but our retailer may. 	<ul style="list-style-type: none"> • We will: <ul style="list-style-type: none"> • Reduce cost but not at the expense of safety or network performance • Adopt Field Force Automation • Continue to improve field efficiency and customer service through: <ul style="list-style-type: none"> • improve work practises • the right structures • joint work with Energex • better information and decision making tools

Figure 3 – Ergon Energy has created a visionary business strategy to recreate how we serve.

At the heart of this strategy is a re-energised and refocussed business model underpinned by a new organisational structure (Figure 4). The new structure went live in May 2014, and positions Ergon Energy to remodel our delivery and to meet future challenges and achieve our goal to deliver more affordable services and greater choice and value to customers.

The new organisation structure is made up of the following key business units:

- **Retail:** is accountable for running Ergon Energy's retail business Ergon Energy Queensland (EEQ). Retail works to ensure delivery of high quality retail services to maximise customer satisfaction and loyalty
- **Network Optimisation:** is accountable for balancing the use of existing network assets with the need to invest capital and build new assets. It also delivers Major Projects and liaises with an expanding group of partners, including Retail, to enable the market to better deliver non –network solutions to meet the needs of our customers and the network.
- **Customer Service:** holds the key accountability for customer service delivered by the distribution business and for the safe and efficient operation and maintenance of the network.
- **Finance & Corporate Services:** supports and drives the business to manage and improve the profitability and sustainability of all aspects of the business through the provision of Finance, Commercial, Reporting, Risk and Assurance and Legal functions
- **People & Shared Services:** is leading all 'people-related' functions including health, safety and environment, human resources, training and development, property services stakeholder engagement and communications, administrative services, payroll, and travel and information resources

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- **Strategy Revenue & Transformation:** is responsible for the development of Ergon Energy's strategy

The Customer Service business unit has a key role to play in the delivery of the 2015-20 work plan. This group was formerly known as Operations. For this significant part of Ergon Energy, the name change reinforces the fact that these employees are Ergon Energy's main interface with our customers (Figure 4). The change underpins the key strategic themes of effective market and efficient service, aiming to greatly improve consistency, accountability and clarity. The restructure will also help Ergon Energy to prepare for Field Force Automation (FFA) (work and workforce mobility solution) and the introduction of Full Retail Competition.

The Operations restructure is targeted to deliver an headcount reduction of 595 over four years. Further efficiencies and cost reduction are to be realised with the implementation of workforce mobility solutions.

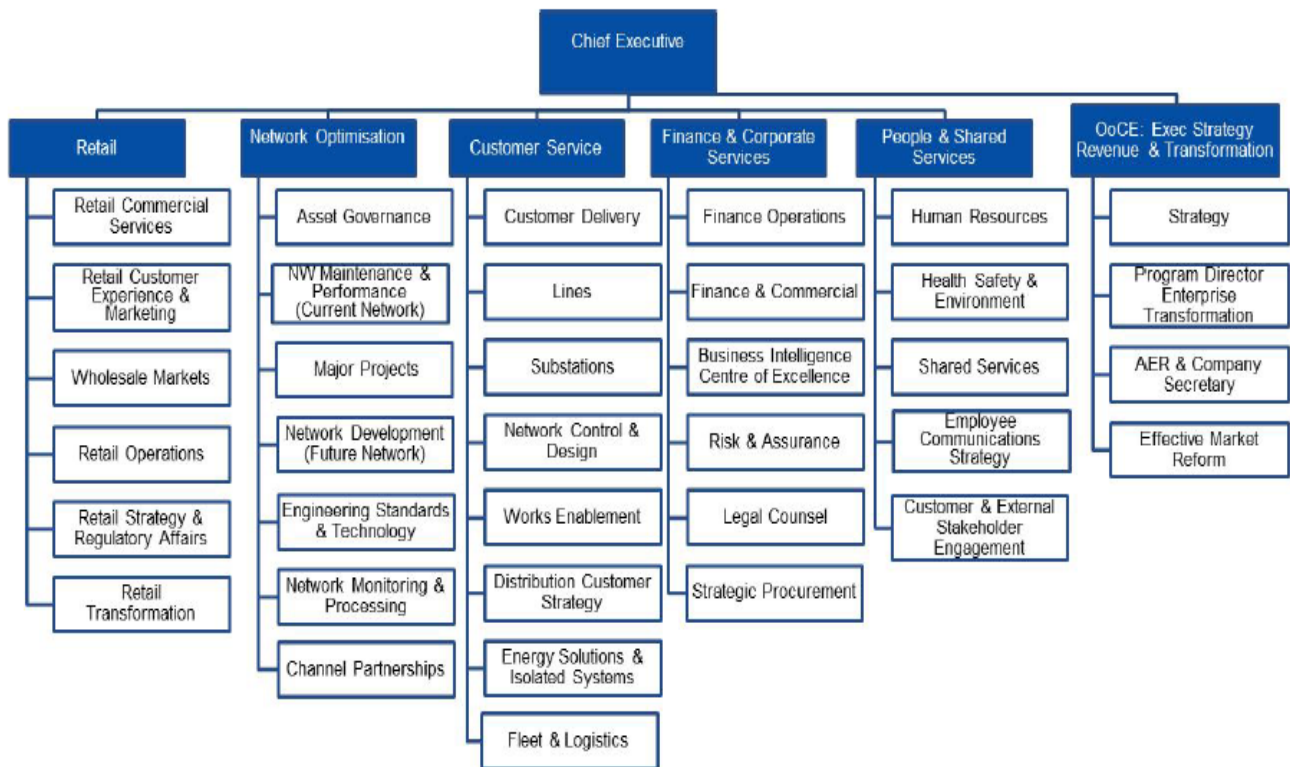


Figure 4 - Operations is renamed to Customer Service to underline the role of its people - our customer-facing field, support and service teams, who lead the distribution business in serving and understanding our customers

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7 Service and Works Delivery Strategy

Our Service and Works delivery strategies serve our Business Strategy (Section 6.1). We have developed the following strategies in support of the efficiency objectives:

- **Strategy 1:** Cost reduction and improved productivity: We will systematically reduce the cost of service and works delivery by optimising the way in which our services are delivered:
- **Strategy 2:** Technology: We will leverage technology to improve the management, planning and delivery of services and works.
- **Strategy 3:** Efficiency and Effectiveness: We will continually measure and drive efficiency and effectiveness in order to improve our level of service and reduce expenditure.

Key messages from this section include:

- We are better at delivering what we do and we have become more efficient.
- We have reduced our operational cost and improved our customer service performance
- Implemented changes are delivering positive results and are contributing in bringing the cost of electricity down.

7.1 Implementation of current strategies

Ergon Energy has made significant gains during the current regulatory period in the safe, efficient and effective delivery of service and in prudence of investment. The performance of our work plan is continuously being reviewed to ensure efficient, effective and prudent delivery of works. The use of competitive procurement practices and outsourcing where value for money is demonstrated is pursued. As an example, in 2013 Skilltech was contracted to perform meter reading activities. This initiative is estimated to achieve efficiency benefits of \$1.2M over two financial years. The work plan is subject to ongoing review against time, cost and quality measures at a work order, project and budgeted program level. This is demonstrated in the delivery against Certified Practical Completion (KPI 113) which shows a dramatic improvement going from an average of 31% in FY10/11 to 99% in FY13/14. In addition Work Orders within estimates (KPI 523) has improved from an average of 122% in FY10/11 to 98% in FY13/14. To effectively manage prudent delivery for higher value contracts works are subject to CE and Board oversight (e.g. above \$50M). These are just a few examples of actions, measures, process in play to drive efficient, effective and prudence in investment. In total, we have provided a summary of thirty eight (38) initiatives that have been implemented or are in the process of being implemented. These initiatives are targeted at concurrently improving service and reducing cost whilst actively managing our risks and ensuring the wellbeing of the public, our people and the environment in which we operate.

The initiatives also provide a platform of continuing drive for improvement and step change that will be aligned to our new Business Strategy. The main areas that drive efficient service are cost reduction and improved productivity, technology and efficiency and effectiveness (shown in Figure 5).

Improvements and savings generated from these initiatives have been considered and are accounted for in the Resourcing Strategy for 2015 – 2020.

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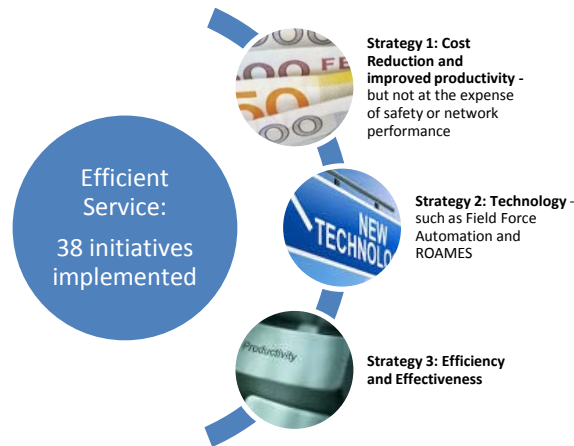


Figure 5 - Ergon Energy has implemented 38 initiatives to improve and drive lower costs outcomes while improving customer service levels and safe delivery of work.

Summary of Key Improvement Initiatives

A more complete summary of the initiatives is provided in Appendix 9.1 Appendices , but the highlights are summarised below.

Strategy 1: Cost Reduction and Improved Productivity

- **We will systematically reduce the cost and improve productivity of service and works delivery by optimising the way in which our services are delivered**
- 10 initiatives implemented or in progress
- Example of achievements:
 - Improvement in the vegetation management program has enabled significant reduction in the average cost per span from \$148 in Financial Year 2007/2008 to \$83 in Financial Year 2013/2014.
 - Improvements made to the Asset Inspection program and the defect classification process has delivered a total of \$10.5M in efficiency benefits between December 2012 to February 2014.

Strategy 2: Technology

- **We will leverage technology to improve the management, planning and delivery of services and works**
- 4 initiatives implemented or in progress
- 2 initiatives has enabled significant improvement in planning and bundling of work by utilising existing Enterprise Resource Planning (ERP) tool. This is minimising planned outages (thus improving customer service) and drive efficient execution of work
- 2 initiatives relate to the adoption and introduction of new innovative technology like ROAMES and Field Force Automation (FFA). Key enabler to drive further cost reductions and efficiency in work practises.

Strategy 3: Efficiency and Effectiveness

- **We will continually drive and measure efficiency and effectiveness in order to improve our level of service and reduce expenditure.**
- 24 initiatives implemented or in progress
- Initiatives address several touch points in the works delivery process and has enabled improved work practices, better information and decision making tools including implementing the right structure and technology.
- Example of achievements:
 - The Asset Inspection program is on target and under budget, with attainment of program compliance.
 - By implementing several targetted initiatives in late 2012 and throughout 2013 we have achieved significant improvements for our Customer Initiated Work by consistently delivering lower connection cycle times than target.

Figure 6 - Ergon Energy is transforming and is becoming safer, more attuned to our customers, smarter, ready and receptive.

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For the purpose of this section we have selected six initiatives to provide a flavour and highlight the breath of the initiatives undertaken. For the complete listing, please see Appendix 9.1.

Works Delivery Improvement Program

This program redeveloped our end to end works delivery value chain and improved our efficiency and cross-business collaboration. Ergon Energy has moved to 5 - 7 year works programming, 2 year rolling works planning and 3 month works scheduling cycles. Our core systems use is significantly improved and we are leveraging the process, relationship, systems and data improvements to drive cost reduction through reducing rework and waste. We are vigorously pursuing the straightest line possible from the Work Program to a Crew.

Remote Observation Automated Modelling Economic Simulation (ROAMES)

Ergon Energy initiated ROAMES as a way of reducing vegetation management costs. Before ROAMES, Ergon Energy engaged dozens of contractors to drive the vast network looking for vegetation encroaching on the network. The historic approach was labour intensive and cost tens of millions of dollars every year.

Today, Ergon Energy uses two planes equipped with hi-tech equipment to fly the network to determine the state of the line assets and proximity or intrusion issues. This data is analysed via highly automated software and fed back to Ergon Energy's vegetation strategy and management teams to enhance the annual planning cycle. Strategic decisions are supported by accurate data resulting in contractors being deployed to maintain vegetation zones only where necessary. We are now developing strategies to further utilise and optimise the ROAMES information, including risk management and post-major event asset assessment.

Customer Initiated Capital Work (CICW) Developer

The Ergon Energy "Customer Initiated Works: Developer" project significantly uplifted our stakeholder satisfaction and our business performance.

In October 2013, engagement with development industry representatives resulted in a list of improvement opportunities relating to three main themes:

- Improve the customer experience
- Reduce overall cost per development lot
- Reduce the timeframe from concept to completion

Some key achievements as a direct result of this project are:

- Implementation of tighter targets for Key Performance Indicators (KPI's) including development of complementary KPIs has improved implementation timeframe.
- Changes to technical standards has enabled a reduction in costs associated with developments and enabled alignment with Energex.
- Changes to end to end CICW process achieved reductions in timeframes associated with delivery
- Establishment of an online enquiry process improved efficiency and experience for users.
- Initiated work to expand the types of work that are currently defined as contestable. This will allow increased choice, control of time and cost by the customer.
- Development of a customer charter which captures key commitments and timeframes for this customer segment will improve customer satisfaction and enable effective management of expectations.

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Asbestos Initiative – Safe delivery of work

Safety of our people and the public is one of the key factors underpinning our success in delivering work. As an example, Ergon Energy is pro-actively addressing asbestos related issues and has developed a strategy that:

- secures the long term health of our workers, contractors and members of the public by ensuring the company has strategies in place to mitigate the risk of asbestos exposure to airborne asbestos.
- describes how Ergon Energy's facilities will be asbestos free by 2027.

To mitigate the risk of asbestos exposure Ergon Energy has implemented several initiatives:

- Suspected customer asbestos-containing switchboards identified, labelled and recorded.
- Developed and implemented an Asbestos Training Package
- Developed a Permit to Work (PTW) system for contractors.
- Developed Safe Work Method Statement (SWMS) in consultation with Unions and Workers
- Initiated a clean shaven policy for workers who may disturb asbestos
- Developed videos of asbestos related tasks.
- Developed a one-stop asbestos SharePoint site

Ergon Energy is seen as an industry leader in managing and addressing asbestos. We are well represented and are invited to speak at industry events. Our industry leadership has been recognised by the Asbestos Manger being nominated by the Energy Network Association (ENA) to represent the industry on a Federal Government, Senior Steering Committee and Technical Advisory Group for asbestos management at the national level.

Enterprise Resource Planning systems

Ergon Energy has driven step change, and has further planned improvement in place for the use of our core (ERP) systems. During the past few years, we have driven the use of this core enabling technology and connected with emerging opportunities like Google Earth. Geographical bundling has successfully been implemented by amalgamating innovative solutions with ERP core functions based on equipment locations. By visually linking all work requirements to the actual electrical layout of the network this work can then be planned according to impacted elements of the network. As the work is identified by the core work type which often requires different resources, this allows planning staff to then plan across multiple workgroups and resources to ensure all work is delivered in the most effective and efficient manner while meeting required by date commitments that may be in place internally or with external customers. As seen in Figure 7, the work is displayed visually in our ERP solution using Google Earth and Spatial Ellipse viewer. This enables us to bundle work on the impacted assets. Effective bundling of work provides information to logically prioritise work and reduces network outages and drive efficient execution of the work. Further improvement iterations are planned for spatial systems to continue to build on this emerging capability.

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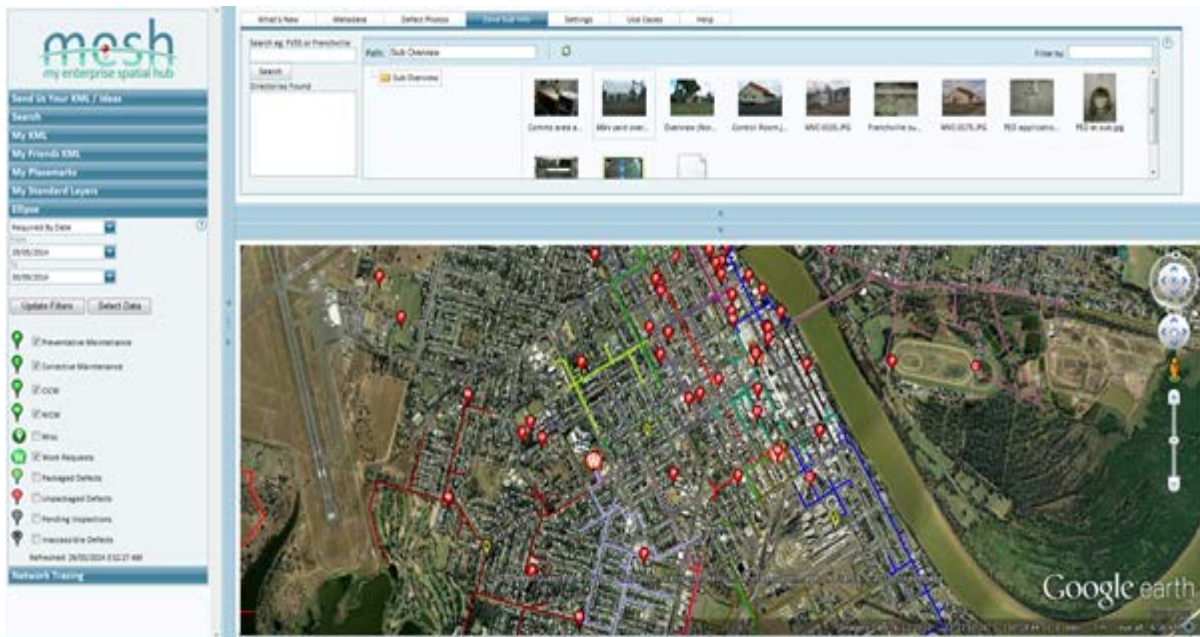


Figure 7 - Geographical bundling: Implementation of a visual view in ERP using latest mapping technology of the work locations allow for effective bundling of work which reduce network outages and drive efficient execution of the work

7.2 Towards a Mature Works and Service Delivery System

This section describes the underpinning models guiding the development of the delivery strategy.

Key messages from this chapter are

- Ergon Energy continues the journey towards a mature works management system and is striving to be more agile and responsive to changing needs whilst driving costs reductions.
- Balanced service and works delivery supply and demand is supported by a flexible resource strategy that allows for uncertainty.
- Ergon Energy's processes, models and systems provide the required base to successfully plan, resource and deliver the 2015 -2020 works program.

7.2.1 Works Management Model

The Works Management System is a simple depiction of work flow in Ergon Energy (Figure 8). It shows the overarching framework that guides the development and implementation of Ergon Energy's delivery strategies.

The system (Figure 8) depicts the works delivery flow to secure the optimal delivery of Ergon Energy's work program by:

1. Establishing an 'enabling' function where one group provides a fully resourced and scheduled work plan and methods for the safe, efficient and effective delivery of work
2. Using a works management system that has clear points of accountability and handoffs with greater levels of collaboration and customer focused (process begins and end with the program of work owner).
3. Clearly setting the embedding of continuous improvement through the plan, monitor, analyse and improve cycle.
4. Improving the agility in works management that supports the development of a balanced work program based on planning, scheduling, management, procurement and performance measures

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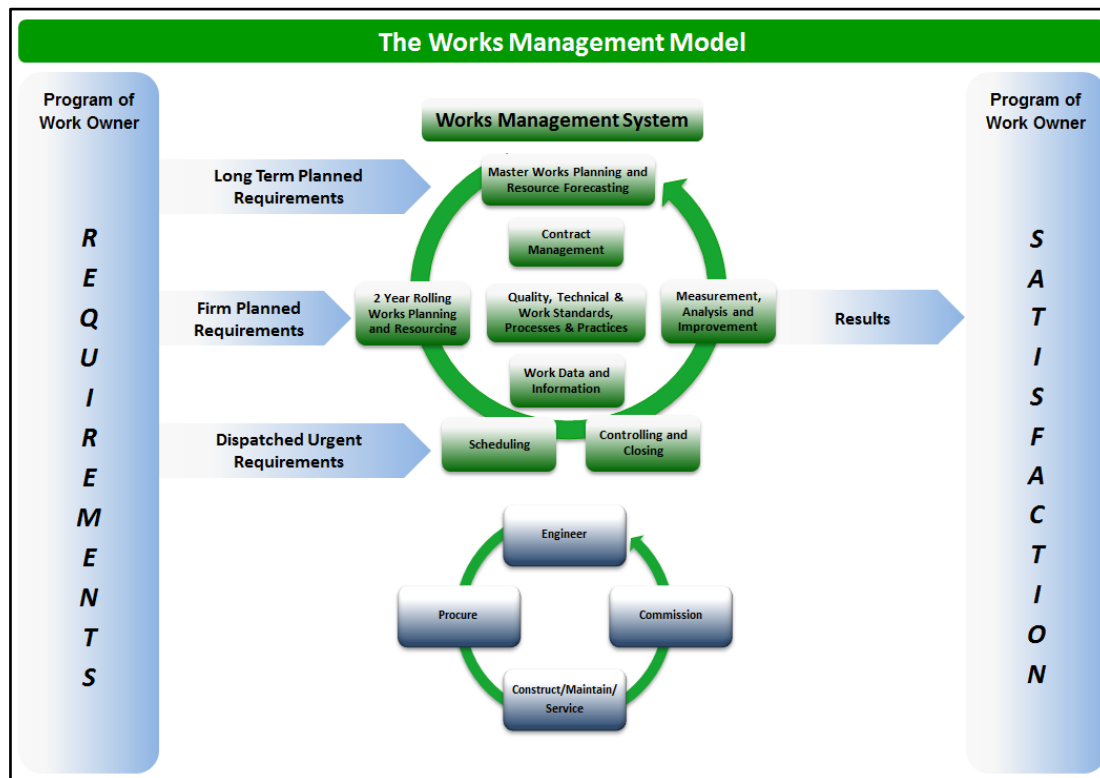


Figure 8 - The Works Management Model; foundation of a strong delivery strategy

This system (based on ISO9000 Quality Assurance requirements and the International Standard) is supported by a comprehensive suite of process and related documents that describe our way of working. These methods are audited, are the basis of training and improvement, and are reviewed on a regular schedule. Each Process (major level of the work flow) is owned by a General or a Group Manager in Ergon Energy. Our work delivery processes were reviewed and reinvigorated in the recent Works Delivery Improvement Program, with the key outputs (the Works Delivery Modelling) setting the platform for the future. The review provided multiple opportunities for improvement that are being embedded and sustained.

The Works Management System

The success of the Works Management System is predicated on a set of clear requirements determined by the various Program of Work Owners. The owners are the customers of the delivery system. These requirements are drawn into the Works Management System that uses a proven set of processes to enable a successful delivery of the works program.

The key working elements of the model are:

1. Master Works Planning and Resource Forecasting phase, which is accountable for *developing* the long-term delivery and resourcing strategic plan at investment level. Master planning and resource forecasting has a window as far into the future as possible, but looks for stability and reasonable certainty from a five year outlook back to the next two rolling years. The objective is to forecast resource requirements and create stable plans for the two year planning window.

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2. The Two Year Rolling Works Planning and Resourcing phase delivers a *refined and resourced* mid-term delivery and resourcing strategy to work plan, by describing the volume, types and locations. These plans are allocated to service delivery functions in Ergon Energy with agreed delivery parameters.
3. The Scheduling phase is accountable for *actioning* the delivery strategy by assigning tasks to crews to start work on a specific day. This is a short-term activity and occurs when there is a high level of confidence that work will go ahead, typically once the project enters the rolling 3 month scheduling view.
4. The Controlling and Closing phase is accountable for reconciling and closing of work once complete.
5. Measurement, Analysis and Improvement phase is monitored using Key Performance Indicators for Two Year Rolling Work Planning and Resourcing phase and Management Control System for the Scheduling Phase.
6. The intent is to provide early and increasing certainty and granularity of work to enable the most effective (on time, to specification and to budget) and efficient (cost, time, least waste) delivery.
7. This intent is achieved by planning and scheduling all key phase of works delivery: engineering, procurement, execution and commissioning and closure. This full planning and scheduling will be further enabled from July 2014 with the implementation of centralised scheduling and the significant business uplift provided by the new Customer Service Business Unit.

The Works Management Model is supported by:

1. Contract management that ensures that the supply chain capacity can be flexed in the event of a significant increase or decrease in demand.
2. Quality, Technical & Work standards, Process & Practices that set the standards for the planning and delivery of all work, including the continuous improvement feedback.
3. Work Data and information that supports the reporting framework that enable informed decision making.
4. Centralised Project Management
5. Single Point Accountability in Service Delivery in the organisation structure: Lines, Substations, Customer works, supported by centralised design, logistics, fleet and network control.

Reporting Framework

Ergon Energy has a comprehensive reporting framework in place to effectively monitor and manage the delivery of the works plan. Figure 9 below details the Key Performance Indicators (KPI) in place. These are monitored frequently and are tied into performance agreements.

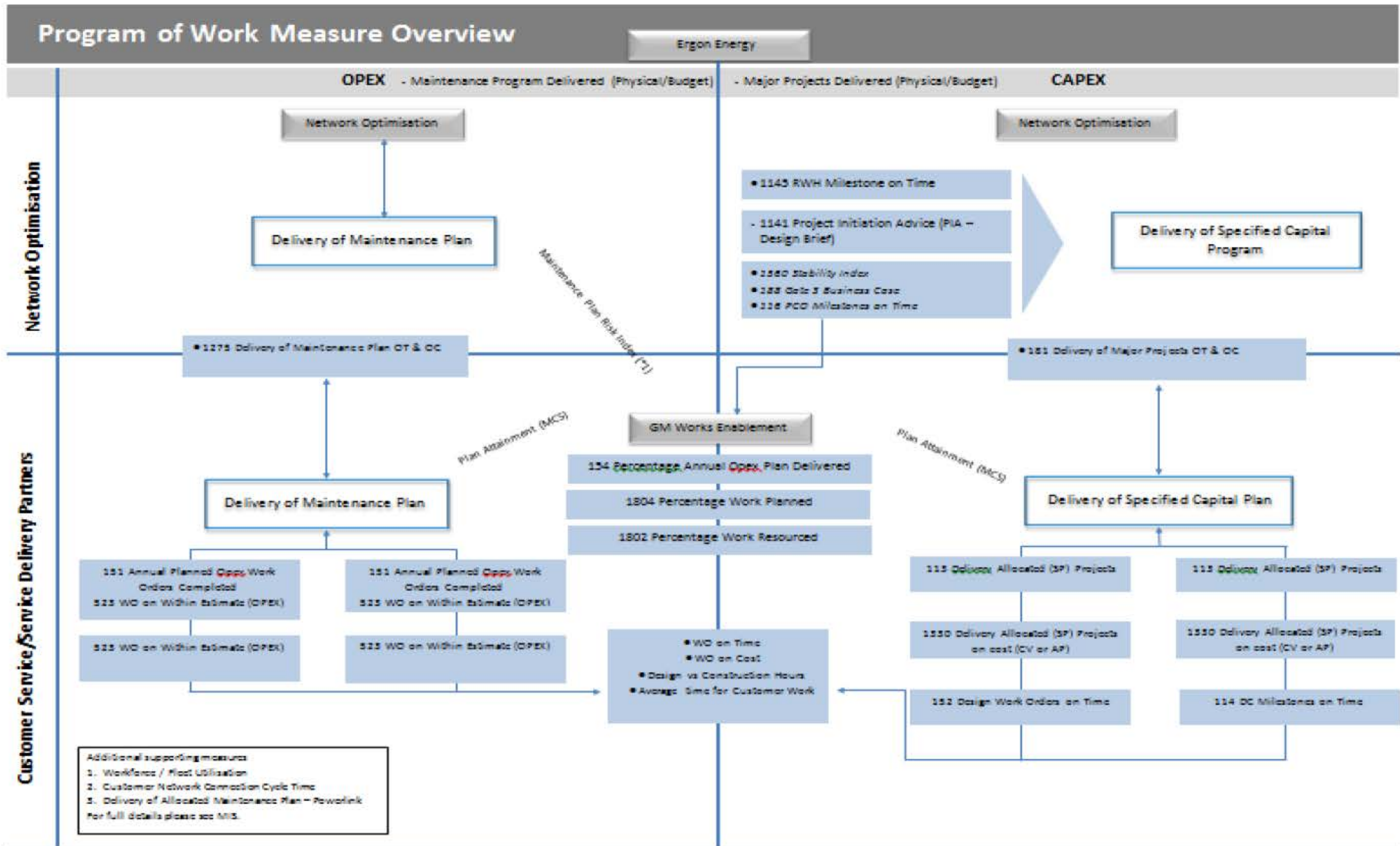


Figure 9 - Ergon energy has a comprehensive reporting framework in place to effectively monitor and manage the delivery of the works plan

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The KPI reporting is easily accessible via the Ergon Energy Business Intelligence Portal. To further facilitate and simplify analysis and informed decision making, each Business unit has access to a dashboard style representation of their suite of KPIs.

7.2.2 Works Resourcing

Ergon Energy utilises a combination of internal (employee) and external (contractor) labour to effectively and efficiently resource and deliver the work programs.

Key messages from this section:

- Ergon Energy has a capable workforce with the right capacity available to safely, efficiently and effectively deliver the work program and ensure customer satisfaction
- Ergon Energy has the ability to flex our external workforce to accommodate peaks and troughs without compromising return on investment
- Ergon Energy needs to consider supply over a vast geographical area.
- Ergon Energy has been driving efficiency and cost reduction with measurable effect, and has plans to continue this journey, including the implementation of a new Works Contracting Strategy

Ergon Energy uses a mix of resources to support the delivery of the program of works. These include:

- Internal Resources:
 - Major Projects
 - Lines
 - Customer Service
 - Substations
 - Energy Solutions & Isolated Systems
- External Resources:
 - Pre-qualified Panel Contractors – Lines, Civil, Design
 - Strategic Partnership Alliance/Substation
 - Third party delivery of contestable works

While the degree of work contracted has historically been driven by resource constraints, key skill shortages or peaks in the program, Ergon Energy is striving to seize and optimise efficiency opportunities, cost reductions and flexibility in outsourcing.

During the current regulatory period, Ergon Energy has targeted a reduction in the workforce to produce a more efficient resource base that is closely aligned to service demand. We have both reduced our employee numbers and the number of contractors (Figure 10).

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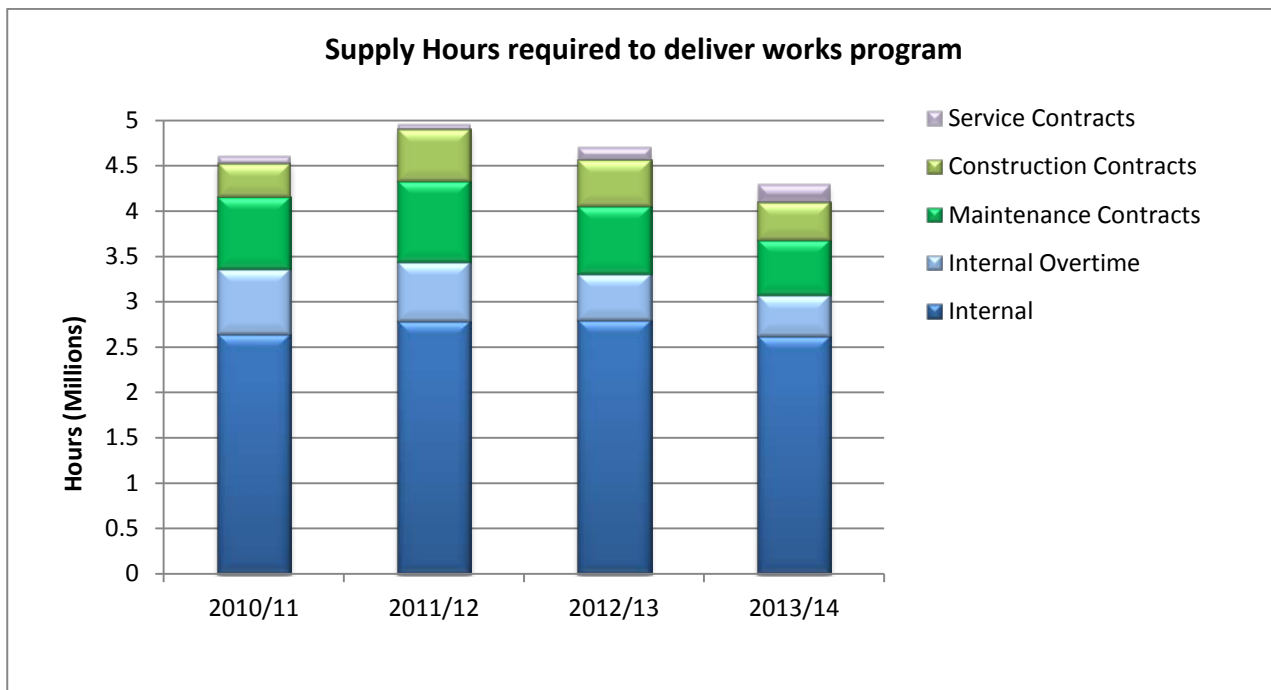


Figure 10 – Mix of internal and external resourcing in the current regulatory period. Data include all resources engaged in delivery of the works plan. (2103/14 – forecast)

We have uplifted contractor safety, risk management and productivity and reduced cost in several key areas; particularly in lines construction and maintenance. We have also introduced new contracting opportunities and extended design, engineering and related external works where there is value to Ergon Energy and our customers.

This journey will continue into the next regulatory period with an invigorated Works Contracting Strategy currently under finalisation. This strategy will take Ergon Energy towards a more mature model that reflects the work program.

Internal workforce

Ergon Energy’s employee workforce is considerable, skilled and experienced.

The strength of our employed workforce is one of competence and motivation to serve and deliver the work well. For example, our reputation in emergency response is largely due to the attitude and work ethic of our employees and their ability to restore the network and respond to customer demand.

Ergon Energy operates from 7 Major Service Locations and has a total of 69 regionally located depots and workshops throughout the network footprint to service the needs of customers and to ensure our assets maintained.

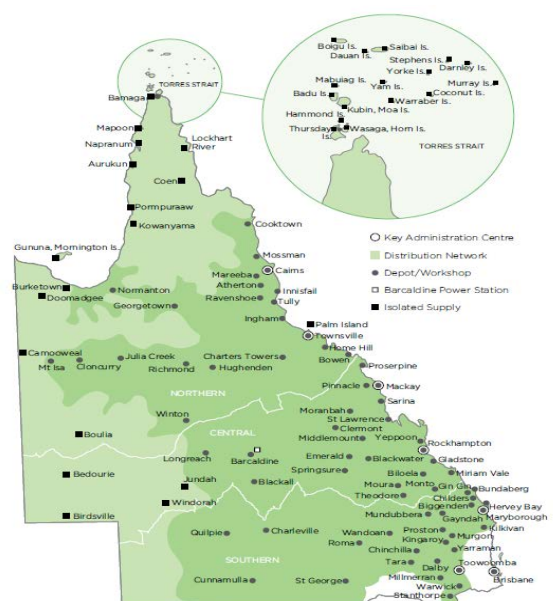


Figure 11 – Our network: one of the largest and most diverse in the Western World.

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Our field based work force is 1930 Full Time Equivalent personnel (as at March 2014). Resourcing levels in each location are reviewed regularly for cost effectiveness and to ensure that the supply and demand at a local level remains aligned to the work plan and customer needs. For misalignments between *internal* supply and demand the following strategies are in place:

- Short Term: resources are redeployed based on network priority and efficiency.
- Long term: positions moved to areas of increased demand; build supply through the Apprentice and Traineeship Program; up-skill current resource base.

Ergon Energy's current internal supply by resource group as at March 31, 2014 is summarised in Table 2 below.

<i>Resource Type</i>	<i>Supply Hours</i>
<i>Substation Design</i>	149,000
<i>Distribution Design</i>	148,000
<i>Other Design</i>	41,000
Total Design	338,000
<i>Substation Construction</i>	584,000
<i>Distribution Construction</i>	1,349,000
<i>Other Construction</i>	205,000
Total Construction	2,138,000
<i>Contract Management</i>	42,000
<i>Project Management</i>	55,000
Total Support	129,000
Total Workforce	2,573,000

Table 2 – Current Internal Supply

Recruitment Activity

Demand for skilled labour has softened and employers now have a better chance of recruiting skilled employees than at any time in the past five years. Although skills shortages are not widespread, they persist in some occupations, and are most evident for experienced and specialist workers. The labour market for engineering professionals and associates, and technicians and trades remains tight (particularly for the latter group), but to a lesser extent than in previous years.

While economic growth and investment in Queensland has been lower than forecast, over the longer term it is anticipated that growth in new investments and Final Investment Decisions (FID) into mining, minerals, gas and other energy projects will lead to increased demand for skilled labour.

This increase is likely to impact regional centres most, particularly in Central Queensland and the Darling Down and Fitzroy areas, where there is greater activity from mining and coal seam gas projects. Based on Energy Skills Queensland forecasts, a gap of over 7000 licensed electrical workers is likely over the next five years.

Supply issues in the electricity supply industry are driven by a number of factors, including:

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- an ageing workforce, with over 45% of the workforce in Queensland eligible to retire over the next 10 years;
- insufficient numbers of electrical apprentices completing, in training or commencing
- occupational detachment resulting in loss of skilled electrical tradespeople to other occupations.

Currently Ergon Energy is able to meet its demand for electricity supply trade and professional roles. Over the last two years factors such as a reduced program of work and continued focus on efficiency and effectiveness initiatives have resulted in reduced demand for workforce resources from the external labour market. In addition, prevailing economic conditions, which have slowed investment in energy and resource projects, have softened the external labour market improving our ability to source suitably skilled workers when the need has arisen.

It should be noted however, that the employee initiated separation rate for technical service person roles (electrical trade employees) has increased from 4.7% in 12/13 to 7.4% in 13/14. Regionally, rates have increased in Southern from 4.5% in 12/13 to 10% in 13/14 and Central from 7.3% in 12/13 to 8.2% in 13/14. During 13/14, external recruitment for technical service person roles (excluding apprentice roles) has been minimal, and terminating employees are not being replaced by candidates from the external labour market. This is consistent with our focus on headcount reductions across the organisation and managing staff movements with internal resources. However, should demand to replace terminating employees with candidates from the external labour market increase, the organisation may experience some difficulty in recruiting suitable candidates. This risk may be greater in Central and Southern regions, particularly as these areas are impacted by mining and coal seam gas projects, thus increasing competition for skilled workers.

Tenure Profile

Historically, Ergon Energy has experienced low levels of separation rates. Sixty-seven percent (67%) of the workforce has been with the organisation five or more years, and over a third of employees have tenure of more than ten years. This represents a relatively stable and experienced workforce. While separations have increased over the last four years, when compared to the All Industry Benchmark, Ergon Energy's results have been positioned at or below the 25th percentile of benchmark organisations. We consider that the forward projection of workforce-critical roles will remain stable, resulting in minimal loss of capability, organisational knowledge and departure and vacancy costs.¹

Workforce development

The aim of Ergon Energy's workforce development is to manage the size and skillset of the employees to deliver the works program, whilst maximising career opportunities and adhering to industry standards and government policies. Some of the key attributes of our current workforce development incorporate:

- Training and development, on and off the job
- Performance planning and review
- Improving competence and engagement
- Improving leadership
- Improving customer service

¹ Workforce Planning Review 2013, Ergon Energy, Page 16

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- Innovating and improving our operations

Apprentice, trainees and graduate programs continue to deliver Ergon Energy's future tradespeople and professionals. The program has a mix of mature aged people and school leavers with a completion and placement rate of 91%. The apprentice program has redefined its focus to promote dual trades to ensure an increasing flexible workforce.

Ergon Energy recently defined and refined the core competencies that are associated with the core roles, resulting in field staff receiving the optimal level of training. We also continuously monitor and review the training programs to identify areas of current and future skill requirements to tailor training programs to suit. This is demonstrated by Ergon Energy's Technical Training and Development team increasing Live Work training capacity to combat the Australian skills shortage. There is an additional focus on dual trade (System Electrician / Distribution Linespersons) especially in remote areas. This is achieved by up-skilling current employees and the apprenticeship program.

Ergon Energy has registration from the Australian Skills Quality Authority as a Registered Training Organisation. Whilst Technical Training and Development predominately trains Ergon Energy employees, we have the ability to support core-contractors with Ergon Energy Training that cannot be provided by external contractors.

Contract workforce

Up to thirty percent (30%) of our delivery capacity is provided by the external market, depending on demand.

Ergon Energy utilises various standard-form contracts that have been adapted from the Australian Standard suite of contract formats to achieve a balance between risk and cost. The types of contracts predominantly include:

- Construction based contracts
- Maintenance based contracts
- Services contracts

Different pricing mechanisms are utilised within the abovementioned contract formats to ensure value for money. The mechanisms consist of:

- Fixed Price Lump Sum
- Schedule of Rates (including hourly rates)
- Cost Plus (under the Alliance arrangements)

Incentive regimes also exist for a number of these contracts.

A variety of engagement methods are utilised to ensure that Ergon Energy's contracted resource remains agile and is able to flex with the requirement of the works plan whilst mitigating risks. This includes but is not limited to:

- The use of standing orders to appoint appropriately qualified contractors to preferred contractor panels
- The engagement of these panel members through the use of simplified job orders
- The direct engagement for specific maintenance programs and construction packages – usually larger packages of work
- The use of the alliance arrangement to deliver major substation projects

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In the considerable majority of cases, work is outsourced through pre-qualified panels. This creates agility to address shorter term changes in the resourcing demand while ensuring that the contractor can meet minimum performance standards and deliver at a market-tested price.

In addition to the traditional contracting models, Ergon Energy continues to expand access to third parties to deliver customer initiated works to increase access and competition. This includes further expansion of the range of work that developers can have designed and constructed by third party contractors.

Delivery assurance for project based contracts

In 2011 Ergon Energy formed a Major Projects group to provide enhanced delivery of larger and more complex projects and programs of substation and related work. The group is growing their capability to effectively deliver project-based contracts through collaborative partnerships, preferred contractor panels and the open market.

This approach provides flexible, cost effective mechanisms to:

- Provide delivery continuity for large programs of work, which can be significantly disrupted or delayed by the disaster response requirement of internal resources.
- Ensure a timely response to changes in resource demand levels; including the flexibility to respond to short term resource requirements beyond the delivery capacity of internal resources.

The Major Projects forecast program consists of:

- Large specified capital works programs valued at greater than \$5M.
- Major Customer initiated capital works.
- Beta-programs capital works (valued at less than \$5M) projects beyond the delivery capacity of internal resources and suitable for external delivery.

The group has developed its capability to provide end-to-end program management for capital projects; bringing expertise in concept development, estimating, engineering design, contract management, project management and delivery together under a single delivery stream focused on external delivery mechanisms.

The 2015-2020 forecast load for project based contracts is approximately 310,000 hours averaging 62,000 hours per annum. As part of its delivery strategy Major Projects manage the Substation Program Agreement (SPA) alliances; which have delivered an average of \$30M per annum, with a peak of \$50M since this delivery mechanisms initiation.

To stabilize and improve program delivery for project based contracts the Major Projects group has:

- Removed potential churn from its forecast 2015-2020 program by ensuring all specified CAPEX programs have a firm business case and concept estimate validated by market pricing.
- Commissioned two independent reviews of the SPA to initiate actions to improve the value and performance of the SPA.
- Grown its end-to-end structure to provide integrated and enhanced program delivery.

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7.2.3 Methodology – Determination of Resource Demand

The approach used by Ergon Energy has matured from the top-down \$/hour approach used to support the 2010 - 2015 submission. The development of the resource profile for 2015 – 2020 is based on an iterative process using a bottom up approach, followed by top-down (policy and strategy driven). This approach shows the individual resource demand requirements based on work type. This is then rolled up to the demand required to deliver the program of work. This iterative forecast has been chosen as the preferred option to forecast resource demand since it is better suited and aligns to the characteristics of our works program:

1. There is variability between major work categories year on year.
2. The demand associated with the work categories requires different types of resources.
3. There is a need to determine the impact of changes in the resource profile within any period and to drill down to forecast resource needs on a region-by-region basis

While the trend is relatively consistent across the 10-year period, analysis shows that the works plan category mix and volume of work in Ergon Energy is volatile year on year as shown in Figure 12.

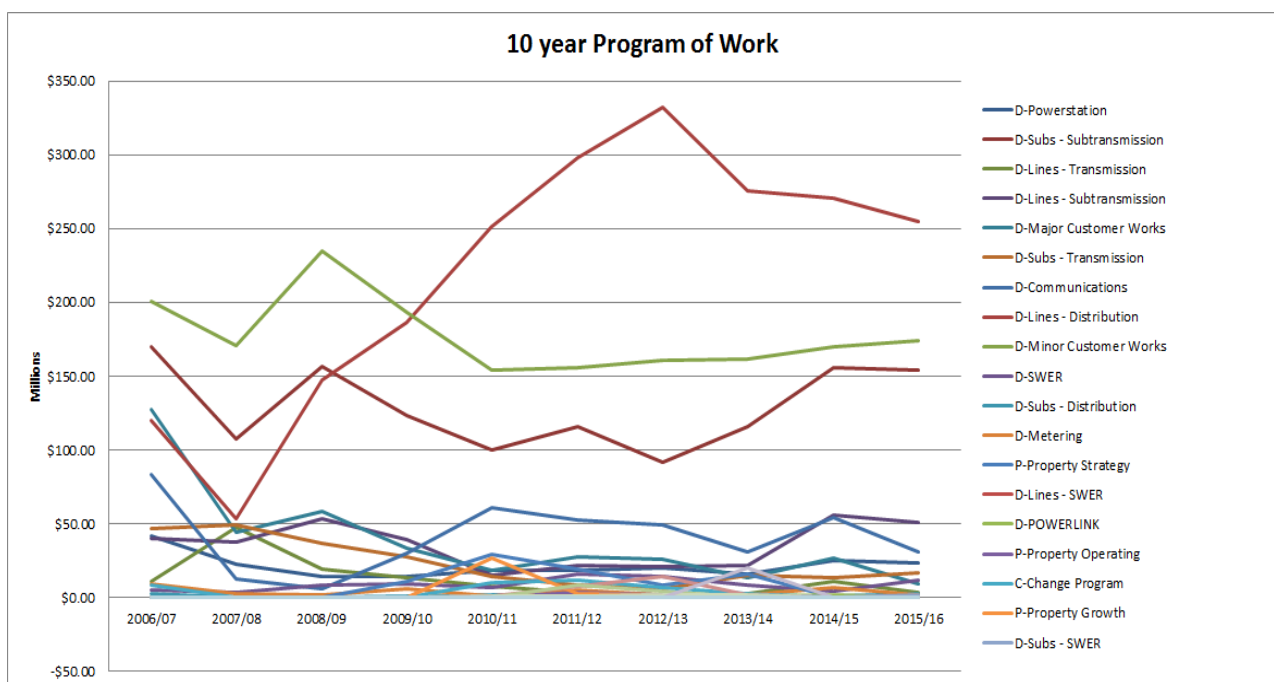


Figure 12 – Historical and forecast breakdown CAPEX (Actuals to 2013/14 April)

The estimating capabilities within our corporate ERP systems combined with a selection of standard estimates, standard jobs and compatible units, allows Ergon Energy to provide a direct link between the budgets for each of the proposed program of works and the resourcing and major material requirements.

The estimating model behind the different programs is based on historical actuals, incorporates adjustments that reflect new efficiencies, changes in technology and shifting demand and supply characteristics. The revised estimate approach will enable future regional comparisons and benchmarking with Energex.

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7.2.4 Resource Balancing Process and the Optimal Resource Model

Ergon Energy's planning and resource approach strives to ensure that the balance between resource demand and supply is efficient and sustainable. Ergon Energy has developed an Optimal Resource Model that strives to achieve safe, efficient and sustainable delivery of our work plan. The Optimal Resource Model (Figure 13) highlights the key factors and tactics available to manage the balance between resource demand and supply to ensure all sources of available resource demand are considered, prioritised, and managed within relevant policies and constraints. In particular, the balance can be maintained by considering opportunities to modify both demand and supply, for example; by levelling demand rather than paying a premium for peaked delivery. This approach maximises the outcomes for Ergon Energy and all of its key stakeholders.

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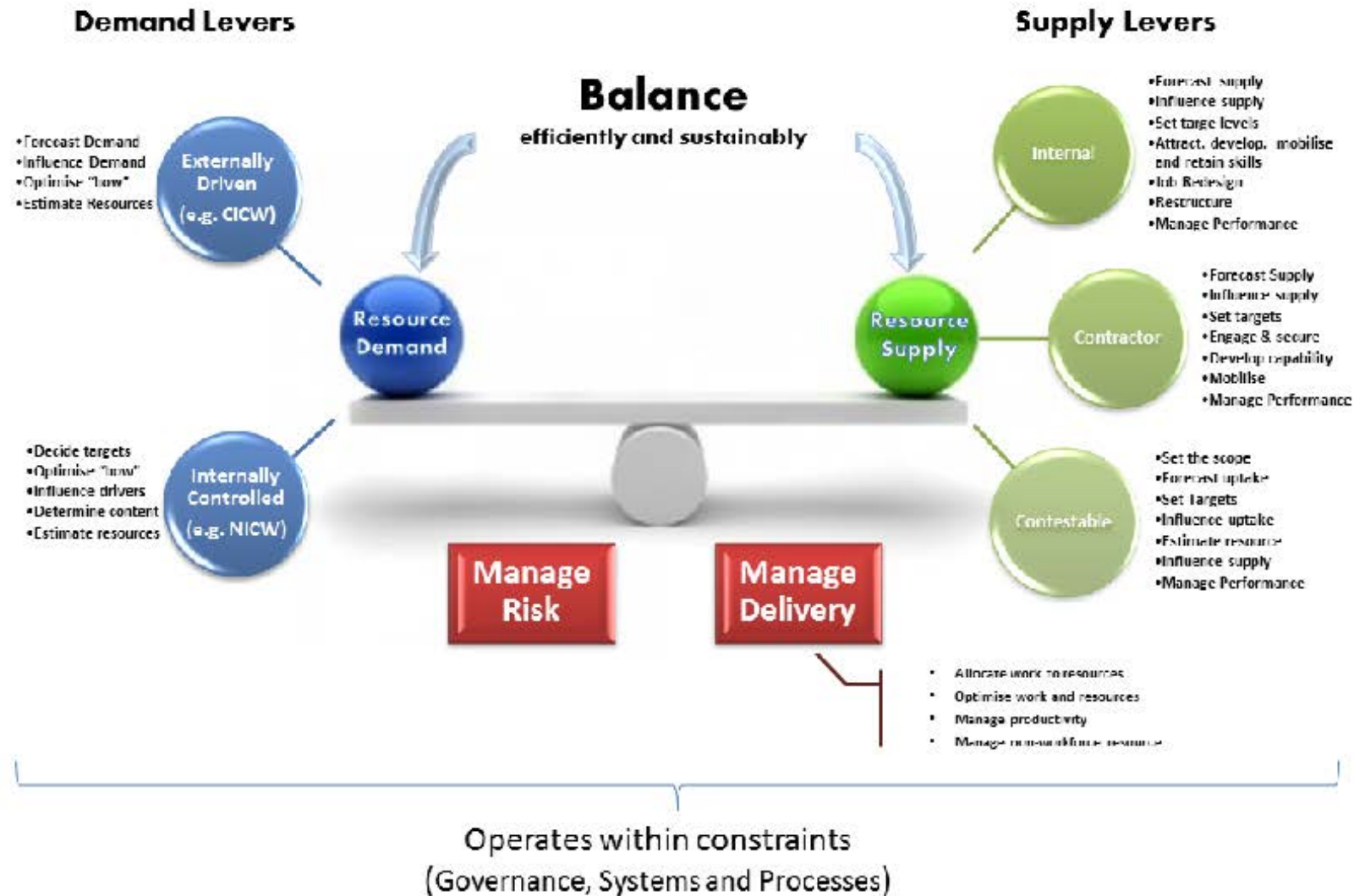


Figure 13 – The Optimal Resource Model: Resourcing process for works delivery

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Ergon Energy has taken a balanced approach to formulate the works delivery strategy. The main elements include:

- Maintain the core competencies of the internal supply to undertake primary fault response, rectification and network maintenance, as well as construction activities in particular those that are regarded as being more complex.
- Use of Collaborative Partners to deliver greenfield and less complex brownfield works
- Maintain a viable and competitive contracting base through the use of Schedule of Rates Contracts and tender processes.
- The resourcing mix is continuously reviewed and optimised. Risks are identified and mitigation strategies are implemented

The tiered resource model as shown in Figure 14 supports a balanced delivery. By continually adjusting the available resource channels based on factors like type of work, relative stability of work, labour and market conditions we achieve efficient and effective delivery of the program.

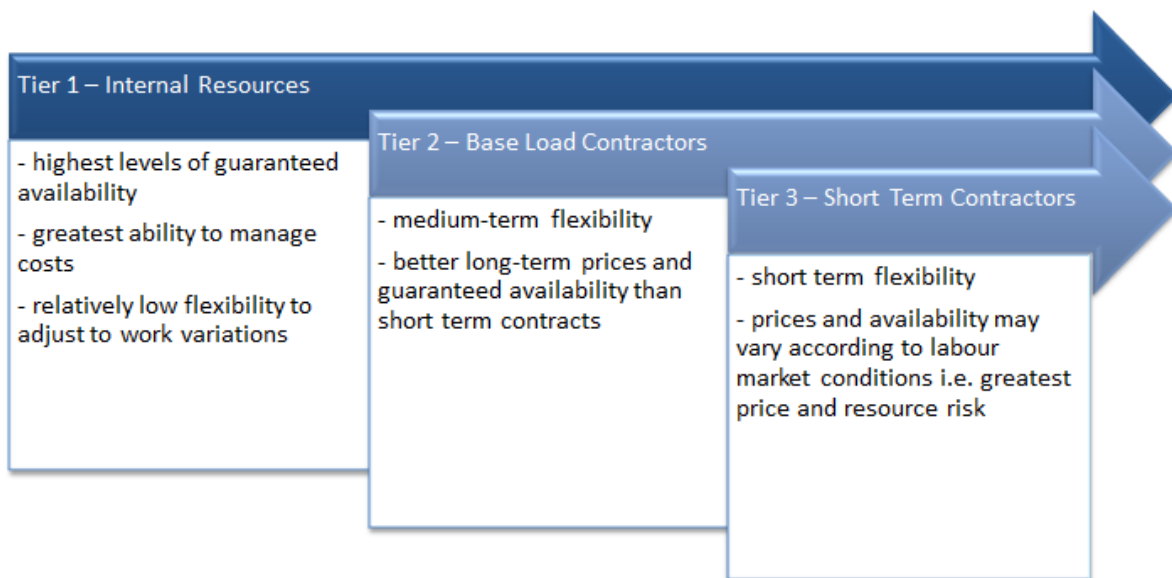


Figure 14 - Tiered Resource Model

The agility of Ergon Energy's resourcing strategies support achievement of the overall delivery objectives by balancing the following operational parameters:

- Safety: providing safe work practices, fatigue management, emergency response
- Delivery: designed to deliver the works program.
- Efficiency: work allocated to the resources best-suited to efficient delivery
- Flexibility: respond to changing work demand in efficient and timely manner
- Competitively: achieving efficient market prices

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8 Work and Service Demand Assessment

This chapter assess the deliverability of the 2015 – 2020 works program.

Key message from this section:

- Ergon Energy is in a good position to successfully deliver the 2015 -2020 works program.
- The works program for 2015 – 2020 is balanced and supported by a flexible resource strategy that allows for uncertainty.

8.1 Demand: the Programs of Work

For the purposes of this document and for completeness, the assessment of demand considers the AER non-regulated works as well as the AER regulated programs of work

The key messages from this section include:

- Demand profile in excess of 4.6M hours per annum
- The mix and volume of work has not been stable over time.
- Methodology applied to forecast demand has matured.

The resource demand profile considers:

- The annual resource demand requirements; assessed in labour hours
- The mix of skills year on year; assessed in terms of resource types
- The broad distribution of work across the Ergon Energy footprint; this informs longer term internal resourcing decisions and the potential internal/external delivery mix.

The annual demand is inclusive of hours required to deliver the complete work program and as such include all of our internal and contractor hours. The contractor hours include all hours required to deliver our meter reading, vegetation, asset inspection and other external contractor programs.

8.1.1 Components of the program of work

The total program of works consists of a range of activities relating to the delivery of the AER regulated and Non AER Regulated CAPEX and an OPEX program (shown in Figure 15). The program of work assessed is a consolidation of a number of sub-programs developed by their respective owners. The consolidated program has been “taken as given”. The AER regulated component of the overall program of work represents an estimated 81% of the overall program.

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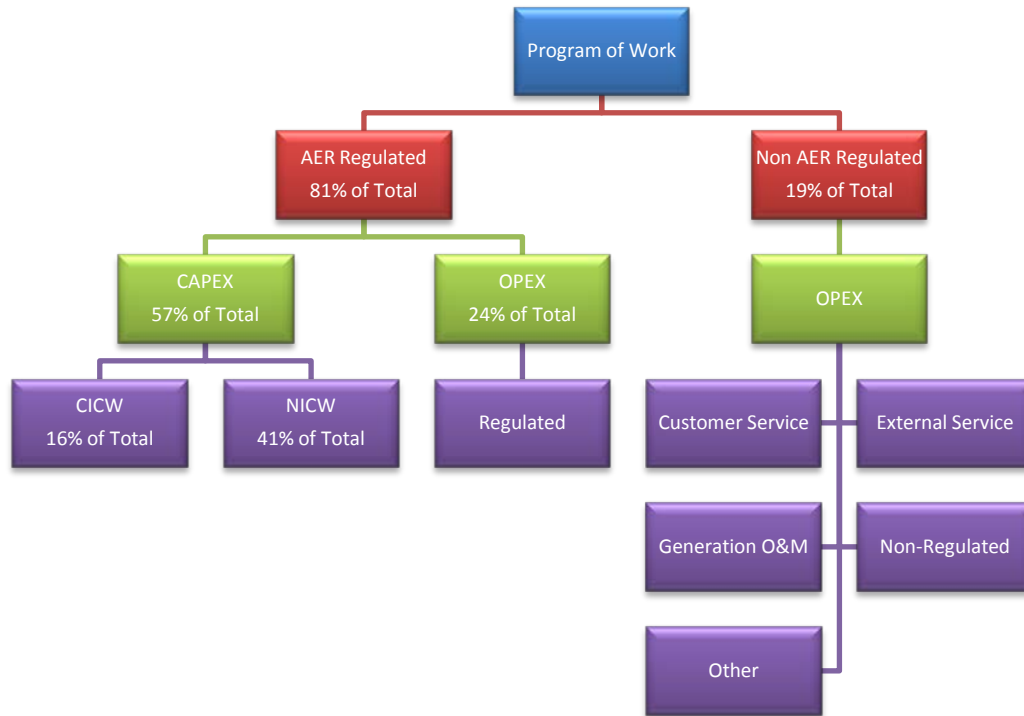


Figure 15- Program of Work subject to resource strategy

8.1.2 Projected Resource Demand

The program of work for the next regulatory period (2015-2020) represents an annual work demand of 4.6M hours. This represents a 2% reduction on the 12/13 actual demand of 4.7M hrs. The 10-year view of the total resource demand (inclusive of internal and external delivery) covering the current and next regulatory periods is shown in Figure 16.

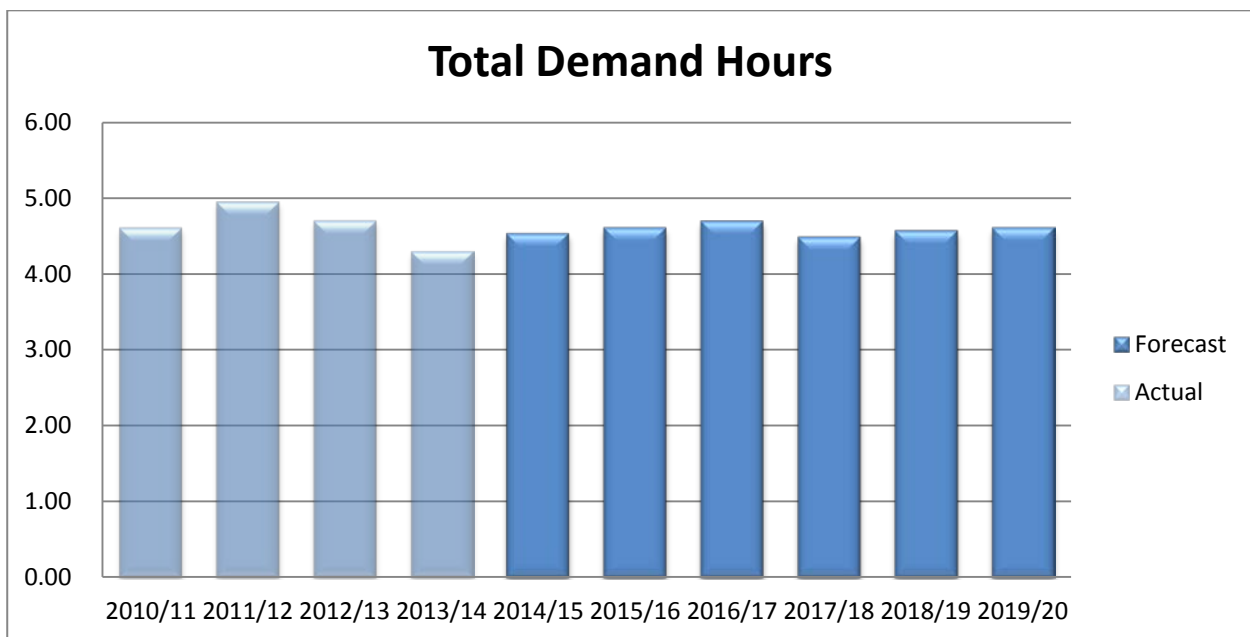


Figure 16 – 10 year Total Demand hours

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8.1.3 Program of Work stability

Past experience and forward assessment indicate two key sources of risk to the overall program of works – severe weather events and economic conditions around direct and indirect impacts from customer demand.

It is assumed that the severe weather events across the state will continue. This document does not attempt to provide any judgement as to the impact of Environmental, Economic factors and possible short-term impacts of the program over the next 5 years.

Customer Initiated Capital Work (CICW) is demand that is created by our customers and represents 16% of the total program of work. The level of customer driven works generally reflects the underlying rate of population and economic growth. Consequently, the overall level of Customer Initiated Capital Works is reasonably consistent from year to year (subject to the influences of non-recurring events such as the GFC and the Building Stimulus Program).

The fluctuations in CICW can also directly affect the requirements of Network Initiation Capital Works (NICW). For example, an increase in Customer Works can cause acceleration in the need for Network Capital expenditure – in augmentation or other related works. The reverse also applies, i.e. a decrease could potentially cause deferrals in the program.

The work program which drives resource demand is based on the most likely scenario and is subject to annual reviews in line with our Works Management System (Section 7.2.1).

8.2 Works Resourcing Strategy

This section outlines the resourcing strategy for 2015 -2020.

Key message from this section:

- Ergon Energy will deliver a balanced work plan for period 2015 – 2020
- A risk assessment has been completed and the resource strategy has been built to effectively mitigate any risks

8.2.1 The 2015-20 Delivery plan – allocation of work

Ergon Energy has the internal supply (normal time) to meet an average of 57% of the program of work.

Table 3 below shows how the increase in the work plan for the next regulatory period is effectively managed by utilising external supply.

	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20
Demand	4.61	4.70	4.49	4.57	4.61
Internal Supply	2.60	2.60	2.60	2.60	2.60
Current External	1.35	1.28	1.16	1.13	1.17
Residual subject to resource levers	0.66	0.82	0.73	0.84	0.84

Table 3 - Supply vs demand and ability to adapt to changes

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Table 4 provides a summary view of the allocation of work across the available resources.

	Work/Activity	Internal Supply	Construction Contracts	Maintenance Contracts	Service Contracts
OPEX Program	Forced / Corrective	✓		✓	
	Preventative	✓		✓	
	Customer Service	✓			✓
CAPEX Program	Core Management & Control	✓			
	Concept Design & Estimating	✓	✓		
	Design	✓	✓		
	Construction	✓	✓		
	Commissioning	✓			

Table 4 – Optimum levers used to address differences between supply and demand across programs.

8.2.2 Assessment of Delivery Plan

Ergon Energy will continue to use a mix of internal and external resources to deliver the program of works efficiently and in full.

An assessment of work level and mix for each resource type has been made in accordance with the resource optimisation framework and work allocation decision model that considers factors such as:

- Viable workloads
- Overall and year on year work program variation
- Uncertainty of customer funded works
- Delivery risk
- Performance

Figure 17 shows the long range resourcing forecasts required to deliver the 2015 – 2020 program of work. The internal supply capacity has been projected forward at current levels and without allowances for overtime. Overtime levels have typically operated between 14% to 21% per annum. Maintenance contracts have been projected forward based on the current operating levels. The level of external construction has been based on the levels contained within our baseload contracts and work levels to be managed through our major projects group. The residual levels of demand will be managed through the application of resource strategy levers including the use of overtime, productivity improvements, increasing internal and/or external resourcing and management of demand. Ergon Energy will use the iterative procedures underpinning the Works Management system (see 7.2.1) to determine the appropriate resourcing balance on an annual basis.

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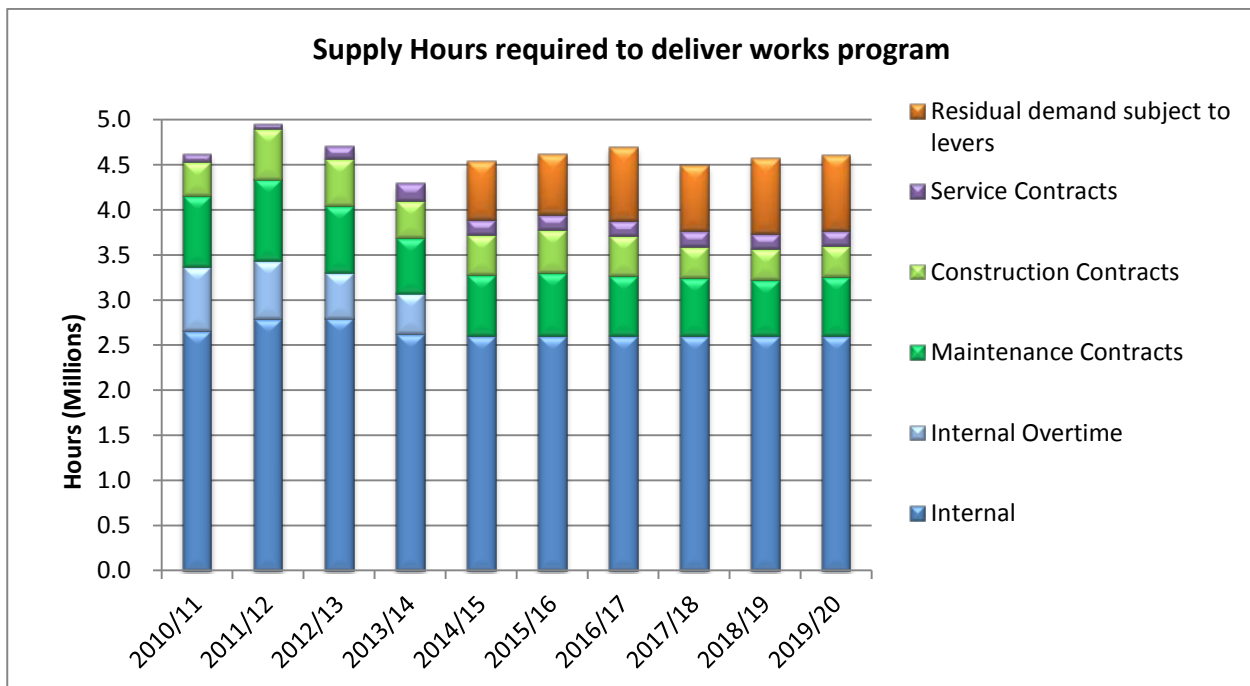


Figure 17 – Resource allocation 2010 – 2020.

Tier 1 - Internal Resource Supply

Ergon Energy will ensure that we have adequate resourcing to meet our emergency response, forced and corrective maintenance including competence in construction and general maintenance activities. Ergon Energy will maintain the current level of internal workforce required to support the vast network footprint. Overtime has not been factored into our overall assessment however overtime will be used as a short term lever to meet normal fluctuations in demand that occurs throughout the year.

Ergon Energy will maintain an internal workforce to undertake work planning, resource planning and field activities. We will maintain a significant role in the following areas of expertise:

- Program, project and contract management – to drive effective management of external delivery and to drive cost reduction in both internal and external delivery.
- Work planning and scheduling – ensure we have visibility and control of the work pipeline to adjust work allocation to achieve optimal delivery performance and resource utilisation.
- Design and commissioning – ensure we maintain expertise to scope contracts and work effectively with external service providers to achieve efficient outcomes. However, to maximise the flexibility of external parties, Ergon Energy has extended commissioning activities to external service providers.
- Critical security issues around communication and SCADA design.
- Network monitoring and outage management – to ensure a reliable network.

Tier 2 and 3 - External Resource External

We will continue to use external partners including:

- Project based contracts – e.g. Alliance and preferred contract based panels
- Maintenance Based Contracts – e.g. Asset Inspection and Vegetation Maintenance Program

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- Service Based Contracts – e.g. Customer service and meter reading

The use of these standard format contracts enables Ergon Energy to minimise costs via:

- Securing a competitive price
- Increasing the effectiveness of competition
- Benchmarking delivery performance - internal to external and external to external

Ergon Energy will implement a Corporate Construction Strategy in line with the Tiered Resource Model in Figure 14.

Tier 2 resources requirements are for known volumes and therefore best fulfilled by baseload contracts which are medium to long term contracts. The baseload contracts will:

- improve safety by including an auditing, assessment, reporting and management system to manage contractor performance,
- assist delivery through securing adequate resources,
- ensures efficiency by facilitating easy engagement through a streamlined process; and
- provides competitive pricing through leveraging of volumes via a tender process.

Tier 3 resource requirements are for flexible volumes and therefore best fulfilled by short term contractors. In response to this need Ergon Energy are developing a Register of Pre-Qualified Contractors (RPQC). The RPQC will include all streams of construction work and allow for contractors to tender for work within the stream that they have prequalified for. In addition, Standing Offer Arrangements will be established with contractors to pre-agree contract terms and allow for a streamline engagement process. The RPQC align with Ergon Energy's business objectives. The RPQC will:

- improve safety by the reducing operational risk by ensuring all contractors have met Work Health and Safety requirement and are appropriately qualified,
- assist delivery through simplifying the process of identifying pre-qualified contractors for parcels of work,
- ensure efficiency by allowing the ability of contractors to pre-qualify for additional streams if capable and best –suited for delivery,
- ensure flexibility allowing for the adding or removing of prequalified contractors responding to changing work demand; and
- ensure competitive pricing is obtained through allowing of all pre-qualified contractors in a stream to quote for work.

Variable components of the program of works such as major customer initiated works are more effectively managed through and delivered by the external market. Ergon Energy has selected alliance partners and contractors who operate across Australia and therefore have greater flexibility to manage variability in work level by reallocating resources across different contracts and states.

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Figure 18 illustrates Ergon Energy’s suppliers for key aspects of the work program. The allocation is based on the application of the principles and other matters as described above.

	Activity	Internal Supply	Construction Contracts	Maintenance Contracts	Service Contracts
OPEX Program	Forced / Corrective	General		Disaster Response	
	Preventative	General	ABS Replacement	Vegetation Aerial Inspections ABS Access Tracks	
	Customer Service	General			Meter Reading Customer Connection
CAPEX Program	Network Initiated	Augmentations Refurbishment Reliability	Substations UBINET Defect Refurbishment		
	Customer Initiated	Minor Works	Minor Works Major Connections		

Figure 18 - Ergon Energy’s supplier for key aspects of the work program.

8.2.3 Delivery Plan Risk Assessment

The strategies outlined in this document are not “set and forget”. Our Works Management model builds on a continuous hierarchy of reviews that consider changes to environment, program of works and resourcing.

There are a number of uncertainties which we monitor and track to ensure we maintain alignment with developing trends and demands from our customers

Risks associated with the delivery plan have been assessed in terms of the PESTEL model. A summary of the risks are outlined below in Table 5. There are multiple environmental factors – both at the macro and micro levels – that may impact both the work demand and availability of resources.

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Stakeholder	Likely expectations
MACRO (PESTEL)	
Political	Foreign worker migration policies; funding for training; climate change policies;
Economic	Growth rates impact availability of resources; prevailing economic conditions including impacts from global financial crisis and resource boom; competition for resources; availability of resources from the labour market; inflation
Social	Contemporary expectations of employees regarding working arrangements; increased globalisation and mobility of labour; intergenerational differences; ageing workforce; mismatch between education standards and entrance requirements for trade and technical programs; housing affordability issues especially in some regional areas; cost of living pressures; barriers to workforce participation
Technological	Changes in skills due to sustainable technologies and smart technologies; ability to work remotely via internet
Environmental	Weather affects work demand and our ability to carry out work; internal organisational cultures influences how we go about things; requirement to operate more responsively; efficiently and innovatively to stay competitive; carbon tax
Legal	Employment Law including antidiscrimination and equal opportunity; Fair Trading Act, Qld Workplace Health & Safety Act, Government Owned Corporations Act, Corporations Act, electricity law, etc., development of National Occupational Licensing System (NOLS), Electricity Supply Industry (ESI) passport, and National WH&S harmonisation; Introduction of National Electricity Rules and National Energy Customer Framework (NECF)
MICRO	
Industry growth	Customer Demand: Changing energy use, peak demand, expected quality of supply, new connections, demand for and types of services, etc.
Contractual/ Legal	Ergon Energy Union Collective Agreement, Shareholder agreements (e.g. only outsource peak demand), etc.
Industry competition (Porter's Five Forces ²)	<ul style="list-style-type: none"> - Power of suppliers relatively high and we tend to still be price takers; - Power of customers increasing re price, service levels and contestability; - Competitive rivalry generally low due to regulated monopoly status; - Threat of new entrants limited due to capital requirements but risks in terms of increasing contestability for delivery of services - Threat of substitutes increasing through of distributed generation

Table 5 – Strategic factors affecting Ergon Energy Delivery plan

² Porter's five forces (Michael Porter) refers to negotiating power of customers and suppliers, level of competitive rivalry, threat of new entrants, and threat of substitute products

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9 Appendices

9.1 Key Initiatives Summary

Program	Initiative	No	Improvement Challenge	Outcome
Works Delivery Improvement Program	Asset Inspection/Defect Maintenance Reinvigoration	1	Reinvigoration P2 defect reclassification	As of February 2013 a total benefit of \$10.5M has been delivered since the implementation of the Defect Reclassification process in December 2012.
	Estimating Capability	2	To build, deploy & maintain major capital works project estimating data to support Strategic, Concept and detailed estimating.	Estimating work are now visible in Ellipse and aligned to ENEREX's framework. Solution has removed the need to manage programs in spreadsheets and allow better decision making on resourcing of capital work.
	2.5 year Work Plan	3	Replace Excel spreadsheets and Access databases that are used to build and maintain the current Work Plan. Utilisation of the ERP systems will provide a long term sustainable solution.	Implemented reporting that maximise benefits of Ellipse and provide a view of future work requirements that drive informed decision making.
	Improved Planning Capability	4	Develop and implement a procedure for leveraging external providers to support on-time delivery. Develop and implement a new Planning model and Planning Manual	Allowed greater control and visibility of the work plan. Planned completion of work is now more certain and being carried out efficiently.
	Subsequent Improvements Enabled by WDIP	5	1. Estimating 2. 2.5 Year Work Plan and Improved Planning collectively 3. Non-compliant pole project	1. Estimating framework has improved works planning practices. 2. 2.5 Year Work Plan has improved resource forecasting 3. "Non compliant pole project" has successfully addressed poles outside of inspection cycle (non-compliant).
	Planning and Development Stream	6	In total six projects that aimed to improve Ergon Energy's ability to plan for delivery of work inclusive of improving its ability to forecast its resource needs more accurately, consistently and completely.	Identification and build of a suite of standards to deliver optimisation of resource-, inventory-, fleet- and contractor management.
	Works Delivery Resource Strategy and Optimal Resource Model	7	Develop a Strategy and Model that guides the development and implementation of Ergon Energy's delivery strategy and secure efficient management of people for works delivery.	Implementation of the model and strategy has improved resource management and has optimises overall outcomes to our customer and shareholder. This includes keeping downward pressure on costs by having the right people in the right place at the right time to deliver our work.
Business Planning	Operations	8	Implementation of a Contract Management Improvement Plan to streamline engagement process, improve safety and efficiency.	The quality and performance of Ergon Energy's works contractors has improved, and Ergon Energy is achieving improved competitive contractor pricing with increased safety performance
		9	Customer Initiated Capital Work (CICW) Developer project was launched in October 2013. The project identified three improvement areas: 1. Improve customer experience 2. Reduce overall cost per development lot 3. Reduce the timeframe from concept to completion	The project has significantly uplifted stakeholder satisfaction and business performance.
	Works Enablement	10	Reengineering of Customer Initiated Capital Work process	Enable an end-to-end view and allowed for increased contestability
Audit	Ernst and Young Audit	11	The objective of the audit was to examine whether controls are in place to mitigate the key risks associated with engaging and managing contractor performance and whether these controls are operating as designed	Significant work has been undertaken to address observations and recommendations including: 1. development and deployment of a Works Contract Management Manual 2. documentation of an end to end contract management process. 3. Post Implementation Support Model (OIL Forum)
	Program Investigations	12	Ensure capital and operating programs are delivered to commercial outcomes.	Several investigations completed. Key learnings and process improvements has been identified and implemented.

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Program	Initiative	No	Improvement Challenge	Outcome
ERP Improvement Ellipse 5	Management Control System	13	Improvements to enable more effective and efficient use of current version and improve user experience.	Utilise previously unused functionality in ERP to identify work by network location Develop supporting GIS functionality to present work that is packaged by location on actual electricity network.
Efficiency & Effectiveness Program	Labour Optimisation	14	Target outcome was the implementation of practical solutions to increase productive utilisation through opening communication channels between Business Units and developing more efficient and collaborative work practices.	Efficiency benefits expected to be delivered from initiative: \$34 million dollars to the Operations business.
	Procurement Restructure	15	Implemented an improved organisational structure.	New structure is driving a strategic approach to contract management and procurement which has generated significant cost savings.
	Overtime management	16	Efficient service delivery	Significant savings was achieved by implementing a strict management of overtime.
	Consolidation of Admin resource	17	Efficient service delivery	Significant savings was achieved by consolidating administration resources.
Safety Program	NOVA Switching Safety Program	18	Aim to change perspective on how to approach switching. Designed to tackle the challenges of keeping focused on the job and how to managed unexpected change.	A training package has been developed and is currently being rolled out. Training is made up of a half-day Switching Incident Risk Mitigation Program which comprises the initial training element, and a more intensive Switching Standardisation Program for a key group of participants, aimed at consolidating, embedding and supporting the program principles.
	Low-Voltage Connection Training	19	Re-training field workers around the new work instruction for low voltage connections.	Manual developed. Completed rollout of training program.
	Live Line Work Process	20	Essential training program in advanced high voltage switching.	Manual developed. Completed rollout of raining program. Significant improvement achieved in Safety performance.
	Aerial Service Provider	21	Use external service provides to inspect power lines, survey, emergency response and transport.	Established standards on maintenance, availability, equipment. Compliance is monitored by audits.
	Alignment of Work Practises	22	Review of work practices to align with Customer (Powerlink).	Enable the delivery of the Powerlink program.
	Customer Installation Manual	23	Identified a need to standardised approach to deliver customer installations.	Manual completed. Standardised and improve the delivery of Shock Complaints, Reconnects and disconnects.
	Asbestos Initiatives	24	Minister for Housing and Public Works has ordered the development of a comprehensive, long-term plan for the management and targeted removal of asbestos from Queensland Government buildings.	Ergon Energy is seen as an industry leader in managing and addressing asbestos. "Working with asbestos" and "Asbestos awareness" programs delivered. Asbestos removal plan to achieve asbestos free environment by 2027.
Contract Management	Works Contractor Management Improvement	25	Implement an end to end set of process and instructional documents that reduces ambiguity and provides for optimal, consistent, and repeatable operations. Include improved contractor compliance and performance management. Develop the capability of the contracts team in Ergon to improve contract management performance.	Improved value for money in contracted works delivery. Reduced Ergon Energy risk exposure. Increased employee performance and satisfaction.
	Outsourcing of Meter reading	26	In 2013 Skilltech was contracted to perform meter reading activities. This activity was previously performed by internal resources.	It is estimated that this initiative will achieve an efficiency benefit of \$1.2 million in FY13/14 and FY14/15 over FY11/12 actual costs.

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Program	Initiative	No	Improvement Challenge	Outcome
Vegetation Program	Program Management and Contracting strategy	27	The Vegetation program started the current regulatory period (2010 - 2015) with a backlog and an escalating cost per span.	By combining effective program management, competition between external service providers and implementation of a contracting strategy we have seen a significant reduction in cost per span in Ergon Energy's Vegetation Management program . Cost per span has reduced from \$148 (07/08) to \$83 (13/14)
	Competition	28	The Vegetation program is mainly delivered by external contractors. In 2013 the Vegetation contract was renegotiated. This enabled the introduction of and improved contract structure and competition between external service providers.	
Asset Inspection Program	Non-compliant poles	29	The Asset Inspection program has successfully addressed the outstanding "Non-compliant poles". This was achieved by implementing a targeted strategy in 2013.	In February 2013 Ergon Energy reported 0 "non-compliant poles".
Customer Initiated Capital Works Program	Cycle Time	30	Customer Network Connection Cycle time based on a three month rolling average, was trending unfavourably. In Sep 2012 Service Delivery Central was at 226 days vs. target of 170. Several initiatives were put in place to address.	In February 2013 Cycle time was 130 days compared to target of 170.
Restructure	Operations restructure	31	Implementing an improved organisational structure to align accountabilities, remove duplication and promote efficient and effective collaboration between Business units.	The restructure underpin the key strategic themes of effective market reform and efficient service, aiming to greatly improve consistency, accountability and clarity
	Major Project Group Formation	32	The Major Projects Group was established in December 2011, with the intention of driving improvements to the way we approach large customer connections and major network projects.	Major benefits: 1. Efficient integrated delivery of Major Projects from concept to commissioning for external delivery mechanism 2. Single point for coordination for major customer connections intelligence and resolution of connection issues.
New Work Practices	Remote Observation Automated Modelling Economic Simulation (ROAMES)	33	Before ROAMES, engaged dozens of contractors to drive the vast network looking for vegetation encroaching on the network.	Use two planes to fly the network to pin-point trees and branches obstructing assets. Data is analysed and fed back to vegetation contractors who trim back vegetation only where necessary.
	Field Force Automation (FFA)	34	The FFA solution will centralising dispatch and automating field force operations by using field computers and smart devices. FFA is considered to be the single most important initiative to improve operational performance and reduce cost to Queensland energy consumer	FFA will deliver quality, integrated information where people need it both in the field and in the office. This will improve customer service, decision making and achieve efficiencies in the Asset Inspection and Maintenance program.
	Planning & Scheduling Manual	35	Ensure a consisted planning and scheduling approach.	Successfully developed and implemented a planning and scheduling manual which is driving an optimal delivery of the work program.
Planning & Scheduling	Geographical bundling	36	Geographical bundling of work: Implementation of a visual view of the work locations allow for effective bundling of work which reduce network outages and drive efficient execution of the work	Geographical bundling of work minimize planned outages and drive efficient execution of the work.
Continuous Improvement	Fleet Continuous improvement	37	Several initiatives implemented to enable an efficient and a more effective fleet support function.	Standardisation of Fleet catalogue and manual, Online replacement approval, review of vehicle usage, improved reporting, achieved fleet reduction of 107 vehicles (Jan 2014) in current regulatory period.
	Logistics Continuous Improvement	38	Several initiatives implemented to enable an efficient and effective Logistics' support function.	Optimisation of inventory has enable a 25% reduction in depot stock holding. Delivery on Time has improved from 74% to 94%. Operational inventory has been reduced by 25%.

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9.2 Targeted Improvement

Affordability issues and rapid changes in technology mean that our customers are increasingly willing and able to make different choices when it comes to energy.

Our Strategic Plan (2015-2020) is all about increasing energy productivity, bringing down the cost of energy supply and creating more choice and value for our customers.

To achieve this we will deliver an effective market and efficient services.

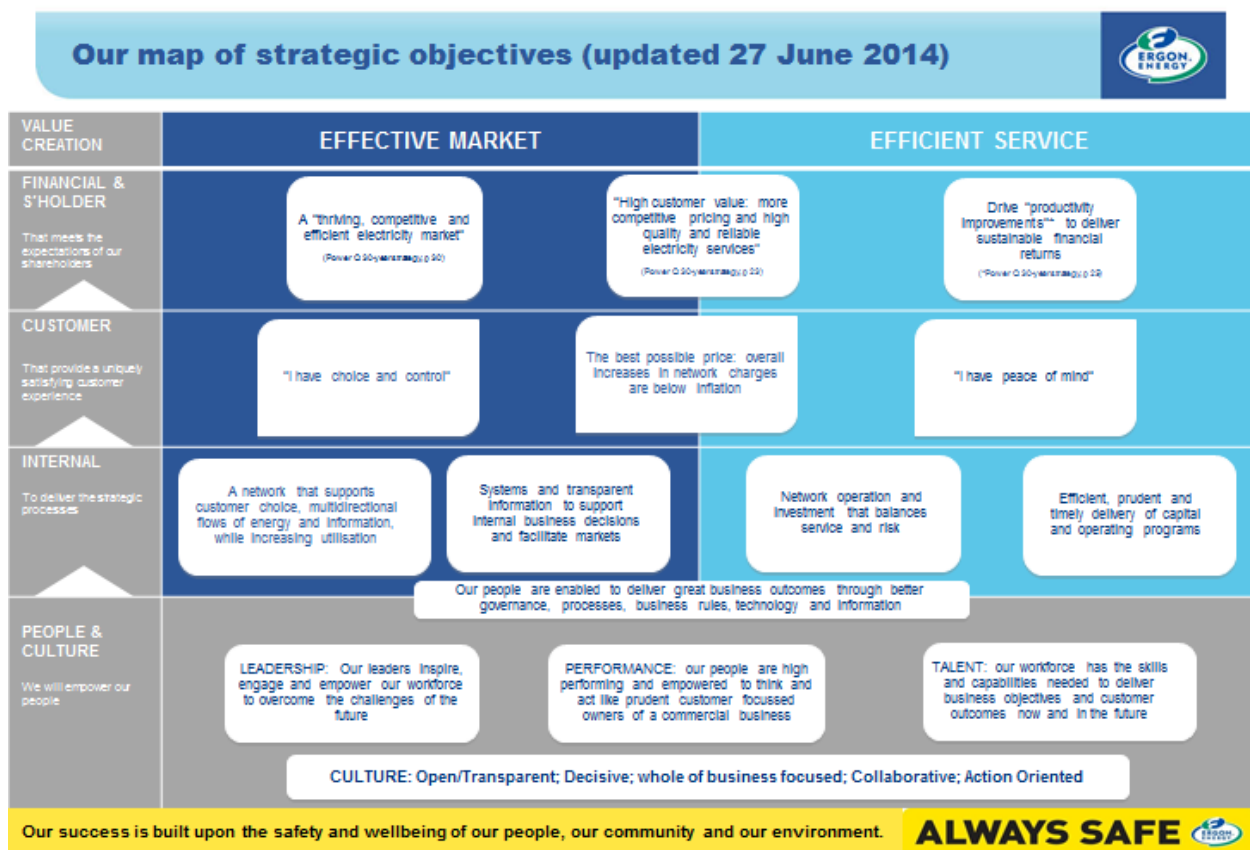


Figure 19 – Our strategic plan (effective market and efficient service): increase productivity, bringing down cost of supply and create more choice and value for our customers

The network deliverability plan is a key enabler in the pursuit to improve efficiency and effectiveness in our service delivery. Some of the key initiatives underway to drive cost efficiencies down and improve our service delivery are listed below.

9.2.1 ROAMES

In early 2014 Ergon Energy signed a contract to sell the ROAMES program to Fugro Spatial Solutions, a Dutch surveying company with strong roots in Australia. As part of the agreement, Fugro will continue to provide ROAMES services to Ergon Energy for the next 10 years (five years+ five year option). As such ROAMES will continue to be an integral component to drive improvement in efficiency and effectiveness.

ROAMES light planes and helicopters will continue to map the entire network each year. Previously the network was mapped only every three years. Due to access to better information, Ergon Energy will continue to save money by doing the right work at the right time and not performing unnecessary work. ROAMES mapping technology combined with the ability to generate 3D models of vegetation growth will continue to guide our vegetation management program.

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9.2.2 Field Force Automation (FFA)

Implementing enabling technologies like Field Force Automation (FFA) will deliver quality, integrated information where people need it both in the field and in the office. This will improve customer service, decision making and achieve efficiencies in the Asset Inspection and Maintenance program.

A cornerstone project within the Ergon Energy Strategy Enablement Plan and the Joint Ergon Energy and Energex Business & Information Blueprinting Program, Field Force Automation will enable the business to respond to constrained revenue, potential growth and higher customer service standards. FFA will improve compliance with existing Electricity Industry Code requirements, position Ergon Energy to comply with the National Energy Customer Framework to be implemented in Queensland and allow the business to meet the requirements and demands of Full Retail Competition when it becomes a reality in regional Queensland. FFA will progress the information enablement strategy allowing process re-design, change to the operating model and alignment of the organisation structure.

Phase 1 of the FFA project is an enabler of future business improvement as it embeds a mobility solution within the business which, when leveraged, will drive further business efficiencies in subsequent phases (2015-2020) as additional capability and work types (planned work, asset maintenance, time sheeting, switching sheets, etc.) are deployed through the mobility solution.

Historically the management and allocation of work to field staff has been primarily driven by labour intensive paper based processes and multiple legacy systems, spreadsheets and tools. Depot based office staff manually input data into systems to manage dispatch of work to field crews and to manage the completion of work. While there are many variations, the common theme has been high reliance on manual and time intensive processes in the scheduling and dispatch of work and close out of the service orders on completion of the work. This can clearly be seen when traditional dispatch processes are compared to the new model, shown in the Figure 20 below.

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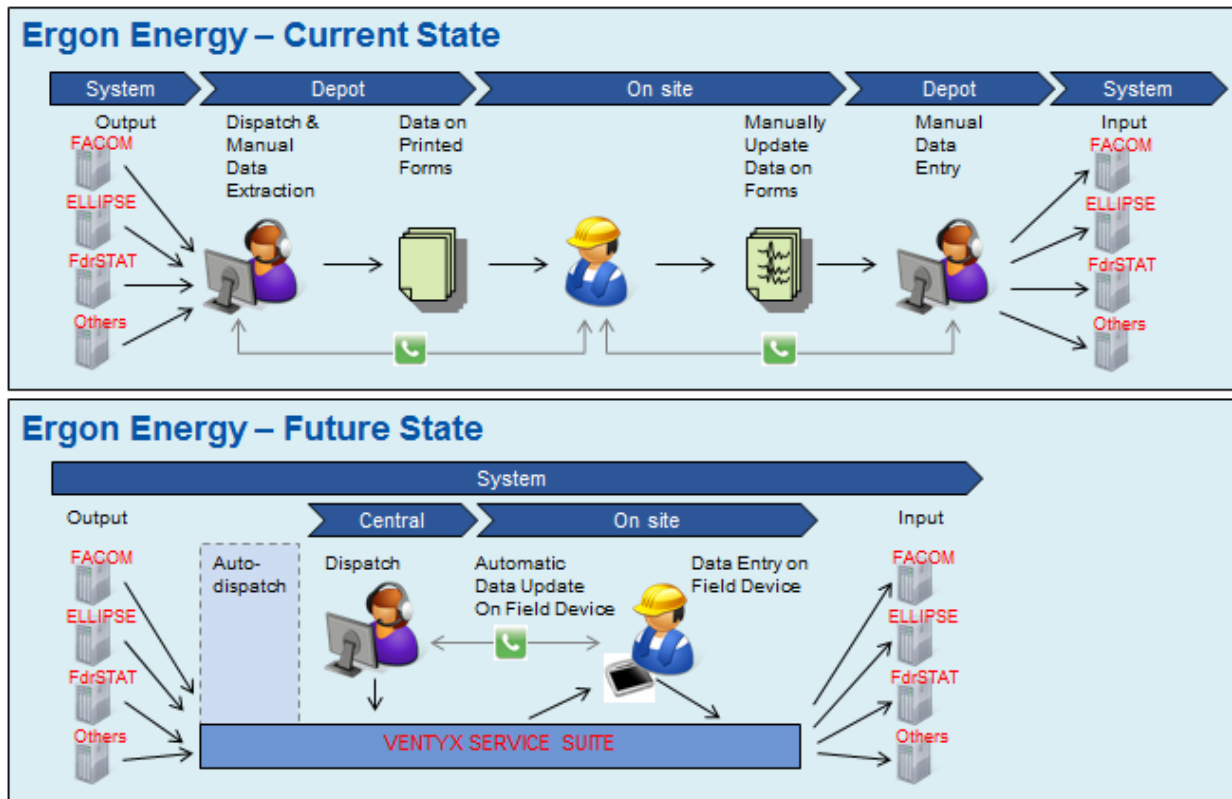


Figure 20 - FFA will drive an efficient delivery of the works plan by removing manual tasks, paper work and real time access to information

FFA Phase 1 automates dispatch and close out processes realising significant productivity benefits by reducing the amount of time each crew member spends each day in preparation for work, paperwork completion and validation, along with the return of work completed at the end of each day. Analysis of the time spent doing these activities identified that an average of 45 minutes can be saved for each crew with access to the field device for Customer Service and Fault Response work. Automated dispatch of work to the device removes the need for office based staff to print each service order and associated data capture forms.

Customer Care and Fault Response work has been dispatched through a mostly decentralised model by 51 full time equivalent employees from over 80 staff in both Operations Support and ESS Administration, from more than 24 locations with limited process standardisation utilising many technology and communication solutions. The staffing mix, including skillsets and varying time spent on service order work, contributed to an inconsistent and depot-specific standard of work. The differences in processes resulted in an inconsistent customer experience and service quality variation. The differences between the highest and lowest performers presented an opportunity for cost saving and efficiency improvements.

When data on paperwork is not accurately completed or returned to the depot, time has been spent finding the correct data – sometimes requiring additional visits to site. Contractors and field crews travelled to depots to collect job folders. Tracking the location of field crews mostly requires time consuming use of phone and radio communications.

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Field crews and office based staff kept safety and operational manuals and standards current by taking time to replace superseded paper based copies. Digitally based corporate information has been difficult to access, such as safety advices, email and dailymail. Reduction in paper consumption results from the FFA device enabling electronic update of manuals and standards. In addition the FFA device enables electronic update of manuals and standards, access to email, safety advices and the intranet.

The opportunity arose from advances in mobile computing and communications technology, changes to core business processes, and the ability to leverage the learnings from Energex/Ventyx Service Suite 9.1.2 implementation. The current project (phase 1) implements a centralised dispatch model simultaneously with the FFA device and solution rollout providing the opportunity to capture the benefits of implementing a standardised better practice process hand in hand with the supporting FFA technology.

Subsequent to the current project a five year roadmap (Phases 2-4) has been developed to expand and optimise use of the solution out to 2020 by improving efficiency and effectiveness through a positive user experience with line of site to a customer centric culture.

FFA is a recognised enabler for the business to deliver more choice and control for customers and more cost-effective energy supply options and significantly contribute to achievement of the Ergon Energy 2020 strategic vision

9.2.3 Maturity of Works Management System

Ergon Energy continues the journey towards a mature works management system and we are striving to be more agile and responsive to changing needs whilst driving cost reductions. The works management model as described in section 7.2.1 is a simple depiction of work flow in Ergon Energy. The model shows the overarching framework that guides the development and implementation of Ergon Energy's delivery strategies.

The works management system is being embedded in Ergon Energy's day to day operations. Further work is underway to achieve Level 5 which is the optimised maturity status as described in Figure 21. The maturity model is used to describe the phases in which an effective management system comes to life. The maturity model rates processes according to their maturity levels, which are defined as: Initial, Repeatable, Defined, Quantitatively Managed, Optimising

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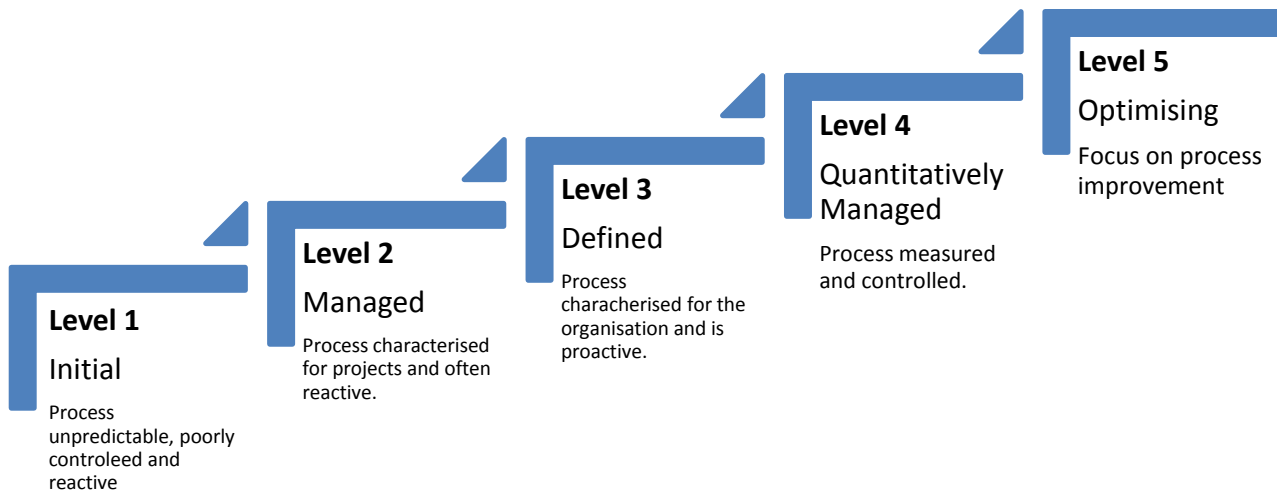


Figure 21 – Characteristics of the maturity levels³

The works management model is critical and is the foundation to successfully plan, resource and deliver the 2015 -2020 works program.

9.2.4 Contestability Roadmap

Ergon Energy is working in collaboration with key stakeholders representing the development industry to further improve the customer experience relating to contestable works and reduce the timeframe from concept to completion of developer work.

Development industry participants have identified the desire for Ergon Energy to expand the Ergon Energy Developer Design and Construct contestability model to include additional work types. As a result the development industry participants from the Ergon Energy Customer Initiated Capital Works Developer Reference Group and Ergon Energy have developed a roadmap (as described in Figure 22) to expand the contestability model.

The implementation of proposed Contestable Model aligns with Ergon Energy's Business strategy of Effective market and efficient service:

- Efficient delivery of the works program
- Achieve the right balance of quality, and value and choice for customers (intermediaries) and consumers
- Maintained a strong end-consumer relationship and positioned the business to meet the future needs of our customers

³ Sally Godfrey (2008) What is CMMI ?. NASA presentation, http://en.wikipedia.org/wiki/Capability_Maturity_Model_Integration#cite_ref-Go08_1-0.

Roadmap for Contestable Works



Figure 22 - Strategy and Roadmap has been developed to illustrate the identified segmentation and proposed timeline for implementation of Contestable Works in line with expectation of development industry participants.

The road map for contestable work is pending approval and will be subject to a rigorous consultation process. The implementation will be managed as per the following:

- Project Management methodology will be employed for the implementation of each identified segment of Contestable Works.
- Appropriate Planning and Scoping documentation will be submitted to and approved by Group Manager Works Enablement & Executive General Manager Operations prior to commencement of all project start up.
- In Line with planning and scoping of each identified segment, business model verification and consultation with key external stakeholders on market conditions will be conducted. It is proposed that in the first instance the Ergon Energy CICW Developer Reference Group would be the initial engagement avenue.

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9.3 Strategic Procurement

Ergon Energy's Strategic Procurement Group is made up of 61 staff. Ergon Energy's procurement policies stipulate the principles and practices that govern its procurement activities for all goods and services. The governing principles are to:

- Achieve value for money through the application of sustainable procurement principles including important considerations such as environmental, community and corporate sustainability needs;
- Support the business operational and commercial objectives, with innovative responsive procurement solutions, systems and processes;
- Ensure probity and accountability standards are maintained, are transparent and consistent with community expectations of a Government Owned Corporation; and
- Advance Government's Priorities including local industry development.

Ergon Energy adopts a centre-led procurement function that enables the business to leverage its spend in order to gain maximum utilisation and savings, standardise procurement policies and processes, facilitate knowledge and resource-sharing, provide transparency and governance whilst empowering local business units to undertake their own purchasing where appropriate. The centre-led approach promotes value for money; competition; accountability; risk management; and probity and transparency in Ergon Energy's procurement activities.

In July 2012 Ergon Energy implemented a revised structure for its Strategic Procurement Group to provide greater focus on its strategic sourcing, category management and supplier management activities. A Procurement Excellence arm was also established at that time to ensure that the Strategic Procurement Group is aligned in its planning with the Ergon Energy business needs; continues to improve its processes and practices; measures and monitors its activities and outcomes; and addresses its improvement needs in a controlled and consistent manner. At this time the Strategic Procurement Group was also given the charter from senior management to lead the business in investigating savings opportunities in all procurement related activities and to report back to the senior management team on a regular basis. This has proved positive and the Strategic Procurement Group has been able to achieve significant savings with the support of other Ergon Energy business units.

The Strategic Sourcing team is made up of a Strategic Sourcing Manager and 6 Strategic Sourcing Specialists. They are responsible for the identification and execution of all Strategic Sourcing Projects. These projects examine Ergon Energy's high value and strategic supply arrangements to ensure that Ergon Energy is achieving maximum value from those arrangements.

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Three distinct Category Streams (Construction & Contractors, Corporate & Indirect and Materials) were established to focus on similar spend groups and align to key business and operational functions thus allowing for optimal alignment to strategies, development and retention of category knowledge to deliver better value for money outcomes. Each of the Category Streams is led by an appropriately qualified manager and is made up of Supplier Management Specialists, Contract Services Advisors and Contracts Administrators. The Supplier Management Specialists are responsible for the proactive management of the commercial relationship Ergon Energy has with its high value and strategically critical suppliers focusing on cost, service, quality, health & safety, sustainability and process improvement. The Contract Services Advisors are responsible for managing and leading the sourcing of all goods and services (any that are not managed by the Strategic Sourcing team) for the whole of business to drive sustainable procurement and achieve optimum value from supply markets. The Contracts Administrators are responsible for monitoring and administering Ergon Energy's contracts. Stream personnel develop detailed category strategies which document and retain category knowledge and prioritise the activities that will deliver value for Ergon Energy over the short, medium and longer term.

Agreements are established via competitive processes to meet business requirements and to deliver value for money. The selection, evaluation and award process is supported by the engagement of relevant subject matter experts to ensure that the goods and services obtained meet Ergon Energy's requirements including compliance with safety, environmental, technical, commercial, and qualitative standards.

Ergon Energy is an active member of the Asia Pacific Utilities Group. Ergon Energy participate in working groups and benchmarking activities and keeps up to date with industry developments to ensure that any learning's in terms of improved practices, costs or risks reduction opportunities are thoroughly investigated.

Category Management

Ergon Energy's category management methodology is an integrated approach to managing categories of spend across the organisation designed to leverage commercial and business requirements, supplier relationships and industry expertise to drive sustainable, immediate, medium and longer term benefits.

Each of the Category Streams within Ergon Energy focus on individual categories and work in conjunction with internal stakeholders to examine the business requirements and explore opportunities to deliver significant value for the business.

Category Stream personnel maintain detailed category strategies that capture the research and analysis of the category and contain the opportunities, recommendations and guiding principles as to how the category should be managed. The opportunities and recommendations from the respective category strategies that are to be implemented during the term of existing arrangements are incorporated into the supplier strategies.

Ergon Energy's category management approach enables the business to:

- Understand and leverage market dynamics/forces/changes which can translate to improved practices, processes, technologies and leadership across the end to end value chain;

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- Leverage market developments and best practices in a systematic and controlled cross-functional approach to align the supply chain with present and future business stakeholder requirements;
- Assess, develop and strengthen new and existing supplier relationships which can lead to enhanced commercial benefits via improved quality, cost, sustainability and health & safety performance of services and/or products supplied to the organisation; and
- Identify innovative and new approaches to the delivery of stakeholder goals and objectives.

Supplier Management

Each of Ergon Energy's high value and strategically critical suppliers are managed by one of the category stream's supplier management specialists. The supplier management specialists maintain detailed strategies which focus on the commercial arrangements between the respective supplier and Ergon Energy. The strategies provide a summary of those arrangements and the supplier's current performance but more particularly it documents and prioritises the opportunities that will be explored and implemented in a structured and coordinated fashion during the term of those arrangements.

Ergon Energy's supplier management approach is not a single process, more a series of related processes and activities. Therefore Ergon Energy's supplier management specialists operate within a framework or toolkit of processes, practices and tools to achieve the best in class outcomes for the business.

Ergon Energy's supplier management approach enables the business to:

- Proactively manage the commercial relationship Ergon Energy has with its suppliers focusing on cost, service, quality, health & safety, sustainability and process improvement;
- Establish a baseline of supplier performance and prioritise the activities that will be conducted to maintain or improve performance;
- Have visibility and a detailed understanding of the entire value chain to enable both organisations to explore opportunities that will be mutually beneficial. i.e. cost, service, health & safety, sustainability, quality or innovation;
- Have a detailed understanding of the market and its respective participants;
- Ensures supply continuity risk is managed and mitigated;
- Strengthens its key supplier relationships and builds trust and co-working across the value chain; and
- Ensure that activities are conducted by appropriate personnel in a structured and coordinated fashion to achieve the desired results.

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Joint Business Practice

Ergon Energy and Energex conduct joint procurement activities to drive improved value for money through joint sourcing, contract life cycle management and improved purchasing of high value commodities. To date Joint Business Practice (“JBP”) procurement has focused on a select range of materials. JBP procurement of materials seeks to realise financial benefits through consolidation and standardisation of products across both businesses and may also result in opportunities to reduce inventory levels and align inventory catalogues. All potential JBP activities need to be reviewed by key internal stakeholders from both organisations to carefully evaluate whether the activity would be considered appropriate from both a business and legislative perspective. Both corporations are currently considering the merits of expanding JBP procurement to encompass services and construction related activities.

Materials management

Ergon Energy sources materials from a range of suppliers that have a proven record of delivering materials at the most effective cost, quality and timeliness in line with Ergon Energy’s requirements.

Ergon Energy’s Inventory Management Team have expertise in Inventory purchasing, expediting and analysis; Warehouse stock level management; Development of supplier relationships; and Material Usage Forecasting

Ergon Energy’s Warehouse Management Team provide regional and centralised storage solutions dependent on the specific project needs. Specialist and general freight services ensure that the most cost effective transport solution is utilised to satisfy project requirements

Period contracts

Ergon Energy utilises period contracts for some of its key outsourced maintenance and inspection services. It is possible to implement a period contract strategy where the associated work programme is stable, and this is case with both vegetation cutting and asset (pole) inspection services. After many years of investment to bring vegetation under control, Ergon Energy achieved a cyclic maintenance state for the first time in 2012. Asset inspection has had a well-established work programme for many years following the AIDM project in 2002, and is fully outsourced as a non-core but essential activity, that contributes to maintaining the working asset in a reliable and safe condition.

Ergon Energy also has a range of preferred supplier arrangements in place for its materials “inventory items” which have undergone competitive tendering processes to ensure sustainable procurement and the achievement of optimum value from supply markets. Ergon Energy purchases the inventory items required for work undertaken by external contractors as well as the internal workforce. The centralised procurement of inventory items (and “free issue” to external contractors) enables Ergon Energy to leverage economies of scale in purchasing, and to ensure quality and compliance of materials with standard designs and specifications. Ergon Energy’s procurement arrangements are consistent with good industry practice, and equip the business to competitively procure all of its supplies in an efficient manner.

Prequalification Panels

Network Deliverability Plan

Ergon Energy has well established pre-qualification design, construction and maintenance contractor panels to streamline and make efficient the contractor engagement / issue of work process. This is necessary to allow the business to respond quickly to changing demands. A recent review led by procurement as commissioned by the contracts strategy committee, has identified further prequalification panel system and process improvement opportunities which will be implemented once the AER determination is known.

Project Contracts

Ergon Energy is mindful that market conditions change regularly and from time to time tests the open market with a public tender, to validate whether value for money is being achieved with contractors. Similarly, Ergon Energy undertakes closed tenders with its prequalification panel contractors from time to time for the same reason.

Outside of market testing, project contracts are used occasionally to address a particular ad hoc need, often driven by a reaction to something that was not understood nor anticipated. In most cases this situation arises where our contractor base is unable support an urgent need due to capacity and/or skill set limitations at a point in time.

Substation Program Agreement

In 2005 Ergon Energy implemented collaborative pain gain sharing contracts with three reputable companies to assist in delivering a significant programme of substation works. Since 2005 one collaborative contract has been terminated due to the reduction in demand for greenfield substation construction. The collaborative contracting strategy was developed to provide as much continuity and certainty of work to a specialised workforce to avoid the expensive costs of mobilising demobilising the contractors workforce. This approach to sub-station construction by contractors has provided the added benefit of reducing expensive tender costs for both Ergon Energy and its collaborative partners. The collaborative contract strategy is being reviewed as part of a broader review of design, construction, maintenance and service contracting by the corporate contracts strategy committee.