

APPENDIX 13

Asset management strategy

Energex

Network Asset Management Strategy

Asset Management Division



positive energy

Version control

Version	Date	Description
1.0	01 October 2014	Final for Regulatory Submission

Energex Limited (Energex) is a Queensland Government Owned Corporation that builds, owns, operates and maintains the electricity distribution network in the growing region of South East Queensland. Energex provides distribution services to almost 1.4 million domestic and business connections, delivering electricity to a population base of around 3.2 million people.

Energex's key focus is distributing safe, reliable and affordable electricity in a commercially balanced way that provides value for its customers, manages risk and builds a sustainable future.

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1 Introduction

1.1 Purpose

This strategy provides the medium to long term direction of network asset management (asset management) within Energex’s strategic objectives and operating environment. This document summarises the translation of the corporate strategic objectives and key drivers of change impacting asset management into strategic objectives for asset management within Energex. A suite of supporting strategies and plans describe the outcomes that result in meeting these key objectives.

1.2 Structure and Scope

The document is set out in the following sections:

- Energex overview and strategic platform
- Key drivers of change impacting asset management
- Network asset management strategic objectives
- Supporting strategic plans
- Document governance.

The scope of this strategy broadly covers asset management whose objective is to meet the required level of service, in the most cost effective manner, through the management of assets for present and future customers. Its physical scope includes the management of Energex’s portfolio of network assets and the associated information systems and processes used in the management of these assets through their life-cycle. The management of Energex non-network assets such as property and fleet are covered by non-system asset management strategies and plans.

1.3 Context

This strategy is a key document that links corporate objectives to asset management strategies and plans to be operationalised within the business (Figure 1). It has been guided in its development by an assessment of business goals and a view of the key drivers of change impacting asset management.

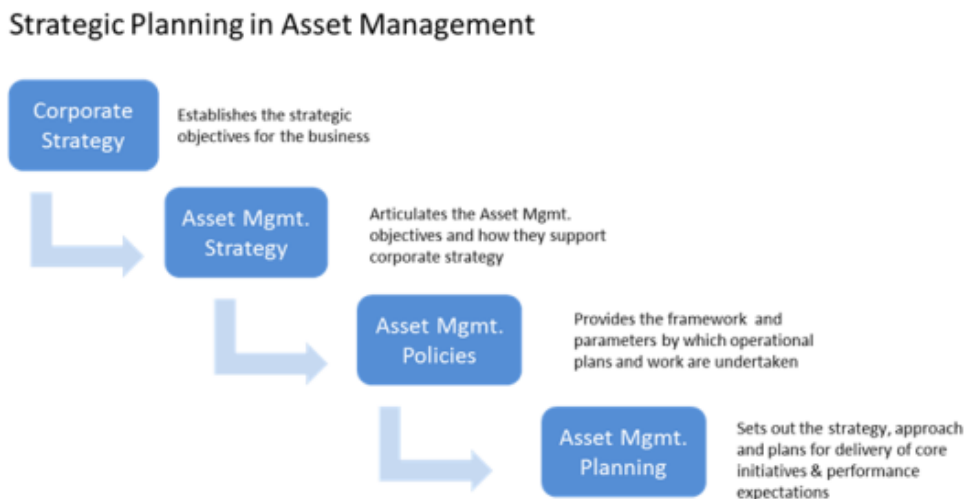


Figure 1: Strategy Planning Process

The Australian electricity market continues to evolve at a rapid pace. Significant increases in the price of electricity in recent times have prompted greater policy and regulatory focus from governments and regulators. Customers are actively identifying ways to reduce their electricity bills. These have included an increased uptake of distributed energy resources such as solar photovoltaic (PV), smart appliances and changes in the way they use energy. This changing landscape will continue to have implications for all energy market participants. The key issues over the next five to ten years include:

- Technology advances - Continued uptake by customers of alternate energy sources is likely as financial viability improves (e.g. cheaper battery storage and PV panels). This will continue to drive reductions in network energy demand and consumption levels. As distributed generation becomes more affordable and adoption increases, the market beyond the meter will undergo major change and growth. More sophisticated energy management systems, aggregated services and development of new markets will be enabled by further development of telecommunications and internet delivered and enabled services.
- Changing customer preferences - As technologies continue to advance, customer behaviours and values are also shifting. Customers are more mobile, more social and more connected which means they are better informed than ever before. Within this context, energy providers are challenged to reinvent service channels and find innovative ways to engage customers. Providers need to tap into social, mobile and local channels to deliver tailored experiences and a more personalised service to customers.
- Regulatory model - Ongoing evolution of the national regulatory environment continues to focus on productivity, economic efficiency, revenue models, customer engagement and service standards. However the regulatory model will need to change to support the transition of regulated distributors business models and operations.

1.4 Future Network Characteristics

Energex considers future networks will be required to:

- Optimise asset utilisation and operate efficiently; delivering energy and managing costs more efficiently
- Operate resiliently against interference and natural disaster; meeting required reliability, security and availability
- Provide power quality for modern needs; minimising disturbances and harmful variation
- Enable new products, services and markets; providing choices to customers in energy use, cost and source, motivating different purchasing patterns and behaviour
- Accommodate distributed energy resources; maximising the benefit of distributed energy resources on the network and facilitating the ease of distributed energy resource connection
- Anticipate and respond to system disturbances (self-healing); automatically identifying, isolating and responding to system disturbances and faults
- Enable active participation by customers.

2 Energex

2.1 Overview

Energex Limited (Energex) is a Queensland Government Owned Corporation that builds, operates, and maintains its electricity distribution network to deliver safe, efficient and reliable quality of supply to the community of south east Queensland (SEQ). Further detail is available in the Corporate Plan or Energex web site.

2.2 Strategic Platform

Energex delivers distribution services through a balanced commercial outcomes framework which considers customers, risk management and financial sustainability. This framework is represented in Figure 2.

Vision: Energex's vision is delivering energy services for a sustainable future. We will achieve balanced commercial outcomes and support the long term sustainability of electricity distribution in South East Queensland.

Objective: Energex's strategic objective is to achieve balanced commercial outcomes by understanding and effectively managing the customer, risk and financial elements of its business.



Figure 2 – Energex Strategic Objective

Satisfied customers: Focuses on maintaining and strengthening Energex's standing with its key customer groups. Energex's sustainable position is to deliver its commitments, obligations and value proposition, while optimising customer relationships.

Managed risk: Focuses on ensuring that Energex maintains its licence to operate. Energex's sustainable position is to deliver network performance acknowledging technical standards, regulatory and legislative obligations, commercial considerations, customer expectations and commitments to staff.

Financial sustainability: Focuses on maintaining Energex's ongoing economic viability. Energex's sustainable position is to deliver shareholder returns and operate the business from a strong commercial platform.

Aspirational Goals: Energex aspirational goals provide direction for asset management in shaping objectives and strategies for the future:

- Consistently be the safest electricity distributor in the world
- Deliver controllable network price increases of CPI (or less) sustainably
- Manage business risks to deliver positive economic value and retain a strong balance sheet
- Be recognised as an employer committed to performance leadership providing a positive and rewarding working environment
- Provide contemporary network capability and service levels that keep pace with customer values, lifestyle and technology choices
- Be a trusted community and business partner delivering valued energy services.

2.3 Corporate plan

Energex's corporate plan guides the business in aligning the short and medium term priorities and initiatives with the long term direction of the business.

Energex's success proposition hinges on customer engagement and targeted services delivery, stable and predictable network prices, achieved through market reform, prudent investment and efficient operations. Energex has identified five key target areas and success measures that form Energex's strategic response over the next five years. Energex's approach to delivering its five-year business objectives is outlined in its corporate plan.

3 Key Drivers of Change Impacting Network Asset Management

3.1 Overview

The external landscape and electricity industry in which Energex operates continues to evolve at a rapid pace. Energex continues to renew and implement strategies and plans to deliver sustainable business and customer outcomes in response to this change. A set of key drivers is influencing the future direction of asset management within Energex. These drivers include:

- Safety, legislative and regulatory obligations
- Customer and stakeholder expectations
- Technology (customer and network)
- Aging asset base (asset renewal)
- Information systems and data requirements
- Asset management practice
- Workforce capability.

3.2 Safety, Legislative and Regulatory Obligations

Compliance with new and existing legislative and regulatory obligations applicable to Energex including safety and environment is a key input into asset management and has a material impact on Energex's expenditure.

Central to Energex's culture is a commitment to the health and safety of employees, contractors, customers and the community. By focusing on safety as the top key business value Energex aims to be an industry leader in safety performance and to achieve its vision of zero injuries. A key aspect of the asset management function is safety in relation to Energex's network assets.

Energex is committed to the environment and aims to deliver a sustainable environmental position through compliance and business practices that minimise harm to the environment. Emergent and more prescriptive environmental policies, environmental schemes (e.g. renewable energy targets, carbon regimes, and solar bonus schemes) and initiatives to respond to climate change will likely have a significant cost implication for Energex.

The changing regulatory framework will bring about outcomes in line with social drivers such as customers concern over rising electricity prices. Security and reliability requirements will require Energex to transition to an economic customer value based approach to reliability (from 1 July 2014) and manage outage risks to customers using new safety net targets as detailed in its Distribution Authority. The transition of services from regulation to market will introduce greater competition and further promote cost competitiveness to the benefit of customers. This changing framework also brings with it increased information requirements (both financial and physical data) from network businesses and regulatory risk from incentive schemes and their interaction.

Broader policy/standards impacts may include:

- Planning decisions resulting in increasing housing density and building standards that reduce energy consumption.
- Effective reduction in carbon emissions
- Move to 230V standard.

3.3 Customer and stakeholder expectations

The significant increase in electricity prices in recent years has prompted increased scrutiny of supply side investment and operating efficiency by State and Federal Governments and regulators. Electricity network businesses are being required to improve their productivity and cost competitiveness to reduce upward pressure on prices whilst delivering on existing and new customer service outcomes.

Customer engagement is a fundamental component of Energex's annual planning process. Incorporating customer views and expectations into asset management processes will ensure operational and capital programs reflect the appropriate level of expenditure in line with the level of services, reliability and price that customers are willing to accept.

Customers are being supported and provided options by government and regulatory policy to manage their electricity consumption and costs. New rules and customer advocacy groups are also being introduced to ensure that the voice of the consumer is better represented in the determination of future network investment and prices.

Securing permission to build infrastructure when and where it is required is an important element in maintaining a sustainable and cost effective supply of electricity to south east Queensland. Engaging with local councils and community groups is an important input to infrastructure design, feeder route selection and the development of more efficient and consistent approval processes and timeframes. Energex also strives for best practice in communications and community relations.

3.4 Technology

3.4.1 Customer Side technology

Traditional distribution networks are facing a number of challenges brought about by the adoption of customer side technology such as changes in demand and energy consumption, power flow and power quality and asset performance.

Trends affecting future network use include increasing energy efficiency of equipment, the introduction of load control devices for home appliances, the adoption of alternative energy supply options or distributed generation (solar PV, micro-wind,), energy storage and electric vehicles as well as the proliferation of internet enabled digital equipment further enabling home automation and optimisation of power use.

The further development of internet delivered and enabled service is expected to allow more sophisticated energy management systems, aggregated services and development of new markets that will further impact the network.

Customer adoption of energy technologies will be linked to the perceived benefits such as the availability and cost of the technology versus the retail price of electricity (and gas), possible incentive schemes, integration with transportation (e.g. EV's), environmental concerns etc.

3.4.2 Network technology

Energex continues to modernise its network to keep pace with its evolving operating environment. Greater adoption of customer side technology, particularly distributed energy will generate increasing and more dynamic two way power flows on networks originally designed for one way flow.

The dynamic nature of network power flow particularly on the low and distribution voltage network will require Energex to implement more complex and intelligent control systems to meet customer service outcomes, its service quality obligations and provision of a safe network.

Modernisation of the network will also help address other issues arising within the businesses operating environment (e.g. operational efficiency, customer side technology adoption, asset life cycle management). Examples of network modernisation include communications enabled remote monitoring and protection devices, sophisticated control systems and software applications and integrated power management devices supported by broadband telecommunications networks.

The integration of these systems will provide the capability to support and manage:

- customer side technology adoption
- the impact on network performance and ability to meet service quality obligations
- supporting greater customer choice in terms of pricing, quality and reliability options
- greater operational efficiency
- efficient management of asset life cycles
- maintaining equipment within operational specification
- minimisation of environmental impacts.

Energex will need to ensure it manages the pace and focus of its future network development activities to maximise the benefits to customers and the community.

3.5 Asset Life Cycle Management

Energex is faced with the challenge of monitoring and maintaining its asset base. Many of Energex's assets were constructed during the 1960s through to the 1980s as a result of growth in south east Queensland. Many of these aging assets are forecast for replacement over the next couple of regulatory control periods (ten plus years). In addition, the 2004 – 2010 investment period introduced more assets including modern assets that typically have shorter life cycles (eg relays) than traditional primary equipment. Many of these modern assets are now becoming obsolete and will also require replacement in the same time frame.

To address this challenge, Energex will need to continue to optimise the investment in its existing assets to maintain them to policies and standards and to maintain a level of network performance that complies with network performance obligations. Further reduction in demand growth and the corresponding reduction in capacity driven projects that would have also addressed aged assets will place greater focus on asset life cycle programs.

Improving business efficiency through greater optimisation of asset life cycle management will be reliant on improved asset information and decision making. The requirement for this information will further drive modernisation of the network, improved monitoring and control and decision support systems. The Condition Based Risk Management (CBRM) methodology will continue to be used to support the decision

to replace, refurbish or maintain an asset. The CBRM method produces a “health Index”, probability of failure and value of risk for assets. The asset refurbishment & replacement program is developed primarily using CBRM, including key asset classes (i.e. transformers, switchboards & circuit breakers).

3.6 Information Systems and Data

Energex will require sophisticated information systems, analysis tools and complementary robust data to deliver future business and customer outcomes.

These information systems will be driven primarily by the need to improve business efficiency, asset life cycle management, manage customer service requirements (including the impact of customer side technology adoption) and remain compliant with legislative and regulatory obligations.

Modernisation of the network through greater monitoring and control will provide significantly more data. Data set examples include power quality data from the low voltage and distribution networks, low voltage connectivity for customer service and safety and increased asset condition data. The implementation of new asset management tools will be required to enable the conversion of vast quantities of network performance and asset related data into relevant information. This information will enable better decision making and in turn lead to better customer and business outcomes.

These information systems will also allow more sophisticated data management and satisfy the information requirements stemming from changes to the regulatory framework.

3.7 Asset Management Practice

Ensuring best practice asset management will assist in delivering better business outcomes. Energex is continuously improving its asset management practice and further development of its asset management framework/system is part of normal business. Guidance in terms of best practice in asset management is provided by the international asset management standard ISO55000.

Given trends in other jurisdictions, it is probable that Energex will be required to be certified to ISO55000 at some point in the future. Energex will therefore need to consider its position on the adoption of the ISO55000 standard.

3.8 Workforce Capability

Energex must continue to enhance its asset management capability to meet the challenges of the future operating environment and achieve its strategic objectives.

The asset management function is transitioning from a capital intensive investment program, a strong compliance and process focus, legacy or home grown information systems and skills primarily related to traditional network assets.

The asset management capability of the future will need to be more adaptive and innovative to respond to an increasingly changing environment. It will have new technical capabilities and a better understanding of other aspects of the business environment (regulation, finance, commercial). Customer and stakeholder relationships will be more important as greater focus is placed on customer service outcomes. It will possess the skills needed to modernise the network and develop the necessary information systems. Management styles and structure will change to fit the evolving asset management function.

Competition for and the ability to attract and retain skilled resources will remain a challenge for Energex. Energex plans for an appropriate level of skills and capability development, workforce engagement and the replacement of an aging workforce.

4 Asset Management Strategic Objectives

4.1 Key Objectives

The following asset management strategic objectives have been identified in response to Energex’s strategic direction and the key drivers of change impacting asset management:

- Compliance with legislative obligations including safety, environment, and regulation and Energex Distribution Authority, policies and standards
- Business outcomes achieved and customer and stakeholder expectations met including acceptable levels of network reliability
- Investment principles and optimised investment plans that balance network risk, cost and performance (service) outcomes
- A focus on asset life cycle management including asset data and Information and Communications Technology (ICT) initiatives
- Modernisation of the network to meet required business and customer outcomes
- Further development of Energex’s asset management system (practice).

Figure 3 shows the alignment of Energex corporate objectives, key drivers impacting asset management and asset management response.

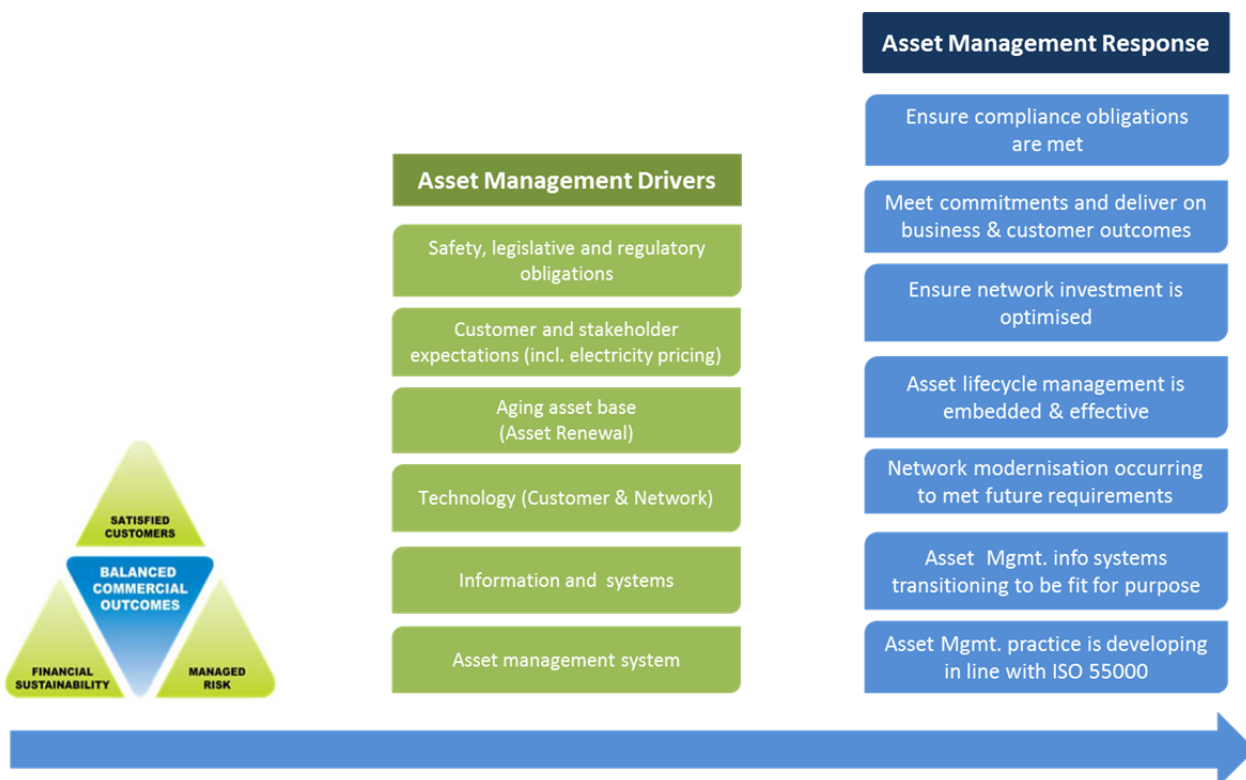


Figure 3 –Energex Strategic Objective, Asset Management Drivers and Response

4.2 Network Asset Management Strategy

The asset manager of the future will optimise investments to meet customers changing energy needs supported by effective decision support systems, excellent data, adoption of appropriate technologies and best practice capability.

The high-level principles guiding investment and deployment of assets and technologies include:

- Assess risks and develop credible cost effective solutions to mitigate risks
- Optimise investment to deliver an appropriate balance of cost, risk and performance (service)
- Adopt advanced components and enable the adoption of evolving asset technologies that integrate into the network with existing assets
- Adopt an integrated, seamless IT and communications infrastructure that supports multiple platforms to deliver reliable, efficient and secure information exchange
- Enhance real-time monitoring and control of the system to appropriately respond to events
- Enhance decision support systems to provide information that can be understood and used for operational and asset management decision making
- Accommodate distributed generation and storage devices within the network infrastructure
- Facilitate customer solutions through technology advances and information exchange.

Energex's investment in its capital and operating programs and their interaction is supported by various policies and procedures including the principles outlined in Energex's Expenditure Forecasting Methodology.

5 Supporting Strategic Plans

5.1 Overview

The asset management strategic objectives link to corporate strategies and plans and are supported by a range of supporting asset management strategic plans.

The following key subordinate strategic plans provide further detail in support of the asset management strategic objectives:

- Augmentation Strategy
- Demand Management Strategy/Plan
- Asset Replacement Strategy
- Reliability Strategy
- Power Quality Strategy
- Network Technology Strategy
- SCADA and Network Automation Strategy
- Telecommunications Strategy
- Metering Strategy
- Asset Management System Plan
- Asset Management Information Systems Plan.

In addition to the corporate strategic direction and plan, other key corporate documents linking to the Network Asset Management Strategy include:

- Safety Strategy and Safety Plans
- Environment Strategy and Operational Plans
- Human Resource Plan
- Information Management Strategy
- Customer engagement strategy and plans.

5.2 Key Network Asset Management Subordinate Strategic Plans

5.2.1 Augmentation Strategy

The future network topology and the ability to drive effective integration of new technology into future asset management investment plans will require Energex to build on its current scenario planning capability. Thirty year network scenario planning is currently part of this strategy. Development planning over a five to ten year horizon is undertaken and informs the Distribution Annual Planning Report.

Energex's planning philosophy ensures that the capacity of the network and its components are capable to supply the electricity demand within acceptable quality of supply limits. It includes requirements that network elements operate within their ratings whilst maintaining voltage within statutory limits. All

proposals are reviewed following the detailed assessment of emerging network limitations,. Network solutions are assessed against non-network options such as demand management to develop credible and cost effective solutions to address prevailing network limitations.

Initiatives are developed to support the Distribution (11kV) and Low Voltage network's future requirements. These initiatives support the prudent and efficient delivery of network capacity along with maintaining statutory requirements and addressing safety related network issues. The low voltage network development considers the changing requirements of this network to accommodate two-way power flows associated with distributed generation and storage.

5.2.2 Demand Management Strategy/Plan

Energex's suite of concurrent, co-ordinated demand management programs aim to implement demand management where it can cost effectively deliver reductions in future peak demand, defer requirements for future network augmentation, provide customer choice and reduce customer costs.

The four core elements of Energex's demand management strategy are:

1. **Business:** Business demand management programs in areas where the Program of Work indicates significant network capital investment is expected within a 1-10 year horizon
2. **Residential:** Residential demand management programs based on analysis of the demand growth deferral benefits that broad penetration and customer adoption can achieve on a localised level
3. **Tariff Reform:** Working with pricing stakeholders to develop an improved tariff structure which sends better signals to customers regarding the impact of their demand on the network
4. **Demand Management Innovation Allowance (DMIA):** Utilisation of DMIA to develop solutions and frameworks to manage emerging drivers of demand and to develop emergent demand management solutions.

Demand management is planned to evolve with a focus on improving network utilisation through tariff reform and new customer focussed products and services. While Energex's initial demand management programs have been successful in achieving load under control, the long term success of demand management in deferring network augmentation, particularly in an environment of more restrained demand growth, relies on Energex evolving and adapting these programs in line with new technology and customer behaviour.

Energex therefore plans to focus on developing an adaptive demand management platform to ensure that its programs remain relevant and cost effective. Energex will continue to work closely with customers, industry and stakeholders and continue to periodically revisit its demand management strategy in light of emerging market changes, to ensure that its programs contribute to the goal of improving utilisation of the network and ultimately reducing customer costs.

5.2.3 Asset Replacement Strategy

Effective asset life-cycle management is fundamental to Energex's response to a changing regulatory environment and the need to demonstrate efficiency and prudence of network investment. Energex has developed asset replacement and planned maintenance programs to reduce the risk of in-service failure where it is cost effective to do so and provide an appropriate balance between capital and operating expenditure. The decision to replace, refurbish or maintain an asset is supported by the comprehensive CBMR methodology.

Asset replacement and maintenance investment forms a significant component of the forecast capital expenditure program for the next decade. Energex uses a combination of asset condition risk based

replacement and run to failure strategies to meet its refurbishment and replacement objectives. Three core maintenance methodologies are applied; Predictive, Preventive, and Reactive. These core methodologies are applied either independently or in combination for a given asset class depending on the nature of the equipment and the failure mode and is optimised using a risk based approach to deliver the lowest whole of life cost. Further gains in asset life-cycle management will be achieved through improved asset data and asset management information systems.

5.2.4 Reliability and Power Quality Strategy

The reliability program is designed to improve network reliability to individual “worst performing feeders” and to ensure compliance with minimum service standard (MSS) obligations.

The power quality program seeks to further expand upon the network monitoring and reporting capability established in the 2010-2015 regulatory period. This will assist the proactive identification of network elements in exceedance of statutory voltages ranges and other network standards. This allows for implementation of a targeted Low Voltage program with prioritised remediation works to reduce identified non-compliances over the 2015-2020 regulatory period. A key focus will be addressing customer complaints and risks of damage to customer equipment from voltage outside statutory limits arising from the impact of high solar PV penetration.

5.2.5 Network Technology Strategy

Energex is pursuing the ongoing modernisation of its network, incorporating technologies and infrastructure to ensure the network is in step with evolving market and technology expectations and will meet future requirements for customers. This modernisation of the network also supports corporate safety, network reliability and power quality, asset renewal, compliance and productivity and efficiency performance. This will be facilitated through a range programs and projects detailed in the network technology roadmap.

5.2.6 SCADA and Network Automation Strategy

Supervisory Control and Data Acquisition and Automation (SCADA and Automation) systems are used to monitor and control the distribution network and are therefore important for the efficient and effective management of Energex’s electrical network assets. The strategy aims to maximise SCADA performance and its contribution to the business and implement replacement programs to manage current Operational Technology environmental factors such as cybersecurity, reliability & quality of supply, fleet legacy and system integration. The program’s key focus areas include following areas, remote monitoring and control; power system automation; enterprise system integration and remote engineering access/management.

5.2.7 Telecommunications Strategy

The role of the Energex telecommunication system is to optimise power system performance and minimise operating costs. The telecommunications strategy aims to enhance telecommunications capability and infrastructure through a suite of program initiatives designed to create improvement in safety, compliance, power quality and productivity. Some key initiatives include data services for a wide range of network asset functions; corporate telecommunications services, asset surveillance and security and voice communication services. The strategy is closely aligned with the Network Technology strategy and many of the initiatives are complementary.

5.2.8 Metering Strategy

The metering strategy is focused on positioning Energex to respond to external regulatory changes, principally the Power of Choice review and recommendations to make all metering contestable and open to full market competition. The strategy also sets out Energex's response to the following influencing factors: Use of advanced meters for emerging customer and market participation, two-way measurement of power flow driven by the increase in solar PV penetration; demand management, pricing strategy and tariff changes that require upgrades to metering, meter replacement programs to manage ageing metering assets and investment aligned with decisions for advanced meter participation.

5.2.9 Asset Management System Plan

Align Asset Management System to ISO 55000

Energex intends transitioning its asset management system to align with the international asset management standard ISO 55000. A transition plan is currently under development that will consider appropriate levels of practice for various areas of activity, the costs and benefits associated with each and proposed timelines for implementation. Further updates to this document will be made when this plan is complete.

Risk Management

Management of risk is an integral part of an effective asset management system. Energex's network risk framework has been developed to provide a consistent approach to the assessment of network risks. It was developed in accordance with the risk management standard ISO 31000, and maintains consistency with the Energex enterprise risk management framework. The network risk framework encapsulates customer centric risk and business wide impacts including risks from a legislated compliance perspective. The framework is consistent with further development of Energex's asset management system and progress towards alignment with ISO 55000.

Projects and programs are considered and addressed on a priority risk basis when optimising the program of work. The capability, understanding and application of the network risk framework will continue to be developed to ensure planning and investment decision making takes consideration of the risks and how these compare against other prevailing investment factors/options.

5.2.10 Asset Management Information Systems Plan

Asset management will require an enhanced analytics capability to help drive efficiency and further optimise asset management investment decisions. Energex has developed an information system roadmap to meet these requirements. Various initiatives within this roadmap are currently being progressed.

A number of major projects are included in the roadmap and include Distribution Monitoring Analytics, Geospatial Information System upgrade and Enterprise Asset Management.

These are business change, ICT enabled programs that will introduce new capabilities that support asset management capability and use Energex's asset information in a way that:

- Provides operational and engineering data that supports optimised lifecycle management of network assets and manages maintenance activities more efficiently
- Improves the efficiency of customer services
- Provides effective management of maintenance performance and costs
- Improves efficiency through delivery of automated regulatory reporting
- Delivers a corporate solution for self-serve advanced analytics
- Provides the focus to enable the necessary process realignment to drive further cost reductions
- Reduces the number of independent, business critical, non-corporate solutions utilised.

These projects will provide a platform to enable more informed asset management investment decisions and position Energex to credibly respond to the challenges of an increasingly complex operating environment.

5.2.11 Asset Management Policies

A range of asset management policies, procedures, standards and protocols exist to guide the implementation of the asset management strategy. The following key asset management policies and procedures complement the asset management strategic plans:

- Network Asset Management Policy
- Network Planning Policy
- Standard for Transmission and Distribution Planning
- Network Maintenance Protocol
- Refurbishment & Replacement Policy.

6 Document Governance

6.1 Ownership

This strategy is owned by the Executive General Manager Asset Management.

6.2 Review

The Energex network asset management strategy is to be reviewed annually as part of Energex's business planning process. Review details can be referenced in the Version Control section at the start of this document.

6.3 Publication

The current version of this Strategy is available on the Energex Intranet and can be accessed via the *Asset Management Division* homepage. All other electronic and printed versions of this document are to be deemed as non-current and uncontrolled unless specifically authorised by the Executive General Manager Asset Management.

6.4 References

Energex Expenditure Forecasting Methodology (Nov 2013)

Energex Corporate Plan 2014/15

Distribution Annual Planning Report