# ATTACHMENT 6.3 DIVISIONAL OVERHEAD STRATEGY



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## 1. Introduction

Under the National Electricity Rules, Essential as a distribution network service provider, is required to submit a regulatory proposal to the Australian Energy Regulator (AER) every five years to set appropriate network tariffs. The AER's determination sets forward looking network tariffs, therefore customers pay for the forecast capital and operating expenditures.

This Divisional Overhead Strategy document is intended to provide a summary of the justification and efficiency of Essential Energy's proposed expenditure for the next regulatory period.

# 1.1 Scope

Essential Energy's divisional overhead is allocated across the following categories:

Table 1.1 Divisional Overheads division and branches

Division	Business Groups
<b>Network Operations</b>	<ul> <li>Network operations (Regional operations and Operational Performance)</li> <li>System control</li> <li>Network connections</li> </ul>
Chief Engineer	<ul> <li>&gt; Primary systems</li> <li>&gt; Secondary systems</li> <li>&gt; Metering services ( a sub-group within secondary systems)</li> <li>&gt; Asset and network planning</li> <li>&gt; Network data and performance</li> <li>&gt; Electrical safety and authorisations</li> </ul>
Network Development	<ul> <li>Network Development</li> <li>Meter reading</li> <li>Portfolio Management Office</li> </ul>

# 1.2 Relationship to other strategies and plans

Essential Energy's purpose is encapsulated in the statement:

To be of service to our communities by efficiently distributing electricity to our customers in a way that is safe, reliable and sustainable.

Corporate values are the worthwhile qualities or attributes that support or assist in achieving the defined outcomes consistent with the Business Plan objectives. The values that underpin Essential Energy's operations are:



## Safety excellence

- > Put safety as your number one priority
- > Do not participate in unsafe acts, and challenge unsafe behaviours
- > Think before you act
- > Lead by example
- > Take responsibility for the health and safety of yourself and others



## Respect for people

- > Treat all people with respect, dignity, fairness and equity
- > Demonstrate co-operation, trust and support in the workplace
- > Practise open, two-way communication



# **Customer and community focus**

- > Deliver value and reliable service to our customer and communities
- Use resources responsibly and efficiently
- > Be environmentally and socially responsible



## **Continuous improvement**

- > Look for safer and better ways to do your job
- Improve our financial performance
- > Support innovation to add value to our business



# Act with integrity

- > Act honestly and ethically in everything you do
- > Be accountable and own your actions
- > Follow the rules and speak up

These values are fundamental to the successful operation of the business.

As a State Owned Corporation (SOC), Essential Energy is required to address certain legislative and policy directions. These requirements include:

- > Meet the SOC and Energy Services Act legislative obligations; and
- Implement the policy directions of our shareholders regarding the restructure of the publiclyowned electricity distribution businesses in NSW.

Essential Energy's strategic objectives and priorities are designed to promote the long term interests of our customers by delivering three key outcomes:

- 1. Continuous improvement in safety performance
- 2. Maintaining the reliability and sustainability of the network
- 3. Containing average network tariff increases to CPI for our customers

To ensure these outcomes are delivered, Essential Energy has a number of corporate planning documents that ensure that our capital and operating forecasts meet the primary corporate objectives of safety, affordability and reliability. These strategies are:

- > The Customer Strategic Plan Sets a vision for future engagement with customers to ensure best value for money for the services we provide. The strategy has impacted the development of our proposal in two fundamental ways. It has focused our programs on identifying efficiencies in our costs so as to meet our goal of affordability, and has re-focused the business on engaging with our customers on issues such as levels of reliability and safety.
- > The Safety Strategic Plan The objective is to protect the safety of the public, our employees, our contractors and those who are influenced by our business undertakings. Our long term business success depends on our ability to continually improve the quality of our services while protecting people and the environment. The safety plan is a key influence on our asset replacement programs where we have sought to find efficient ways to maintain the safety of the network despite deterioration in the condition of certain assets.
- Asset Management Strategic Plan Effective asset management is the key to being able to safely and efficiently deliver a reliable and sustainable electricity network, while continuing to promote customer affordability. The plan has focused on ways to prudently defer replacement of assets, through activities such as the prioritisation process.

- The Risk Management Strategic Plan Aims to embed a common Risk Management Framework across the three NSW DNSPs, and accordingly provide a common basis for making decisions such as levels of investment to mitigate risk.
- > Technology Strategic Plan The objective is to leverage technology, enable the business' transition to a more efficient business model, and to facilitate delivery of the new business model's objectives. The plan's scope includes information technology and telecommunications, as well as operational and grid technologies. This plan has enabled us to deliver significant reductions in our forecast technology costs over the 2014-19 regulatory control period.
- > The Human Resources Strategic Plan This sets a blue-print on how to transition to efficient workplace change and structural reform introduced under industry reform, and to promote efficient leadership and performance across the business. This plan has been instrumental in shaping our expected expenditure related to implementing efficiency reforms such as the Network Reform Program and the prioritisation process.
- The Finance Strategic Plan The objective is to manage the financial health of the three NSW DNSPs in a manner that protects financial value and delivers balanced outcomes for both customers and the shareholder. This has influenced our decisions on levels of capex, and on proposing a rate of return that is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk.

This document should be read in conjunction with the individual business plans prepared by the Essential Energy functions described in detail in section 2 below:

- Core Finance Business Plan
- > Governance, Risk and Compliance Business Plan
- > Network Regulation Business Plan
- > Portfolio Management Office and Corporate Planning Business Plan
- > Health, Safety and Environment Business Plan
- Corporate Affairs Business Plan
- > Customer Operations Business Plan
- > Human Resource Operations and Employee Relations Business Plan
- > Organisational Development Business Plan
- > Procurement and Logistics Business Plan
- > Technical Training Business Plan

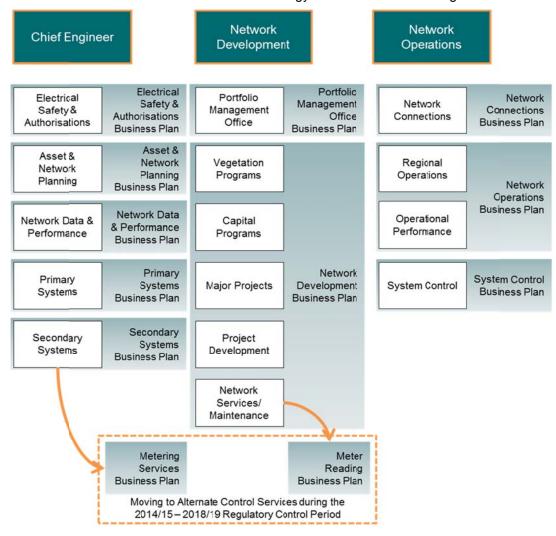
## 1.3 Other relevant documents

This document is one of a number of high level strategic documents prepared by Essential Energy as part of its current regulatory submission, namely:

- Corporate Overhead Strategy
- Divisional Overhead Strategy
- System Operational Expenditure Strategy

## 2. Divisional overhead overview

This section of the document provides an overview of the activities and responsibilities of each of the functions which make up the divisional overhead category. Further details of these activities and responsibilities are outlined in the corresponding business plans. The relationship between these functions and the structure of the Essential Energy business is shown in Figure 1.



**Figure 1 Divisional Organisational Chart** 

As a response to the industry reform instigated by the formation of NNSW, refer to section 1.2, Essential Energy has undergone significant restructures aimed at centralising activities and driving efficiencies across the business. The resultant organisational structures contain permutations of the functions that were present in the previous organisational structures; the mapping of functions and expenditure is not a one-to-one function between the previous and current business groups.

## 2.1 Network operations

The Network Operations division is accountable for the overall management of the network to deliver a safe, reliable and sustainable outcome.

The Network Operations division manage field operations resources to maintain the electricity distribution network to meet license requirements and customer expectations, including works scheduling, program delivery, supply interruptions, emergency response, line safety management and implementation of the metering strategy.

The Network Operations division maintain oversight of the network and all work being conducted on the network, including management of the systems control function.

#### 2.1.1 Network operations

The networks operation function undertakes the operational management of the network described in Table 2.1.

Table 2.1: Network operations functions and responsibilities

Function	Responsibilities
Technical Safety and Training	Providing support for  Training field employees in safety and regulatory requirements  Training selected field employees in technical and management skills  Vocational training of apprentices  Safety testing and repair of tools and equipment  NB: Excludes Training Framework development or delivery of training (refer to Technical Training Business Plan and Electrical Safety and Authorisations Business Plans)
<b>Depot Operations</b>	<ul> <li>Maintenance of light and heavy fleet, including crane borers and elevated work platforms (EWPs)</li> <li>Maintenance and cleaning of depots</li> </ul>
Design	<ul> <li>Updating network design policies, procedures and standards</li> <li>Ensuring consistency in the application of design standards</li> <li>Packaging design requirements for maintenance and capital works</li> </ul>
Work Scheduling	<ul> <li>A centralised function, responsible for programming and allocating field resources to complete work required under Asset Management Plans</li> <li>Coordinating the deployment of field employees, plant and equipment to ensure the use of resources is optimised</li> <li>Prioritising tasks based on network needs, depot capacity and financial constraints</li> </ul>
Reporting and Improvement	<ul> <li>Field operations benchmarking analysis and data</li> <li>Productivity measures development and implementation</li> <li>Budgets and forecasts</li> <li>Board and Executive paper preparation and analysis</li> <li>Cost savings initiatives reporting</li> <li>Initiative management, auditing and work practice reviews</li> <li>Reporting and analysis of field operations</li> <li>Scorecard development</li> </ul>
Regional Management	<ul> <li>Supervision, management and control of field employees, depots, plant and equipment</li> <li>Field employee performance and productivity</li> <li>Fault and emergency response</li> <li>Maintenance and capital works delivery</li> <li>Project management</li> <li>Customer and local stakeholder engagement</li> </ul>
Divisional Management	<ul> <li>Strategic oversight and direction of Network Operations business units</li> <li>Interface between the Essential Energy Board and Executive, and Network Operations business units</li> <li>Providing information and analysis to support decision-making processes, and satisfy corporate governance requirements</li> <li>Develop and implement endorsed programs for employee and asset productivity</li> <li>Overarching supervisory responsibility to ensure that safety performance and safety practices of Network Operations employees, depots, plant and equipment is consistent with all required standards</li> </ul>

	<ul> <li>Overarching responsibility for the design, scheduling and completion of network maintenance and capital works</li> <li>Coordinate the activities of Network Operations business units to ensure that field operations are focused and aligned to network priorities</li> </ul>
Administration	<ul> <li>Centralised data processing and office support services</li> <li>Front office reception services at depots and regional offices</li> <li>Timesheet data entry</li> <li>Processing dispatch requests from retailers e.g. meter check reads, customer connections and disconnections</li> <li>NECF reporting</li> <li>Dial Before You Dig processing</li> <li>Procurement order processing</li> <li>Employee travel bookings and coordination</li> <li>Maintenance of rosters</li> <li>Depot fuel card management</li> <li>Recoverable works processing</li> <li>Metering support</li> <li>Design administration</li> <li>Works scheduling and programming administration</li> <li>Process alignment and development</li> </ul>

# 2.1.2 System control

The System Control function undertakes the management of network planned and emergency activity. It is structured as four discrete but interrelated units which provide the functions shown in Table 2.2.

Table 2.2: System Control functions and responsibilities

Function	Responsibilities
System Operations	<ul> <li>Management of control room personnel</li> <li>Strategy development</li> <li>Technical support specialist training</li> <li>Maintaining network security incident management</li> <li>Support of network events</li> <li>Review and supply reports/findings recommendation of all safety incidents involving Systems Operation</li> <li>Audits of completed switching</li> <li>Operational support for System Operation</li> </ul>
Network Interruptions and Enquiries	<ul> <li>Management of Supply Interruptions personnel &amp; processes</li> <li>Management of Planned Work Group personnel &amp; process</li> <li>Management of Network Contact Centre personnel &amp; processes</li> <li>Management of Technical Enquiries personnel &amp; processes</li> <li>Customer incident liaison specialist training for all four network contact centre teams</li> </ul>
System Control Operational Technology	<ul> <li>Maintenance of specialised OMS &amp; DMS systems</li> <li>Maintenance/enhancement &amp; upgrading of system diagrams</li> <li>OMS &amp; DMS system upgrades</li> <li>Performance and system analysis</li> <li>Systems specialist - review new applications, submit recommendations to enhance existing systems/tools</li> <li>SCADA alarm management of systems</li> </ul>
System Control Engineering	<ul> <li>Analysis &amp; recommendations on loadings and ratings</li> <li>Engineering development and support</li> </ul>

New plant and equipment analysis and approvals
 Technical data maintenance and plans
 Network general and emergency risk subject matter expert
 Audits of completed switching
 Monitor the management of network security

#### 2.1.3 Network connections

The Network Connections function was established to centralise and coordinate Essential's network connections activities. The function ensures the consistent application of processes and procedures which support Essential's Network Connections business. Structural changes have been initiated within the existing framework of the Network Connections function to ensure all aspects of the connections process receive the appropriate assistance and support required.

Table 2.3 Network connections functions and responsibilities

Function	Responsibilities
Contestable Work Design and Certification	<ul> <li>Engineering and design quality assurance for contestable works</li> <li>Manage issue of design information packs</li> <li>Certification processes for construction and environmental plans</li> </ul>
Contestable Network Construction	<ul> <li>Construction quality assurance for contestable works,         <ul> <li>development, review and management of quality compliance of construction to standards and design information,</li> <li>inspections as per the NSW code of practice for contestable work,</li> <li>coordination with regional switching and commissioning groups,</li> <li>managing and arbitrating issues arising from construction processes</li> </ul> </li> <li>Processes for the construction of non-contestable work including quality assurance inspections and reviewing</li> <li>Defect processes for contestable and non-contestable work</li> </ul>
Customer Installations	<ul> <li>Consumer Installation safety plan</li> <li>Level 2 Accredited Service Provision safety audits</li> <li>Manage Level 2 ASP processes</li> <li>Point of contact for electrical consultants with installation enquiries,</li> <li>Inspection and defect management of consumer electrical installations</li> <li>Processes for the investigation of power quality complaints, load survey work, revenue risk monitoring and investigations, and control of meter issue and tracking</li> <li>Internal communication processes for contestable works</li> <li>Systems specific to Network Connections branch</li> </ul>
ASP Relationships	<ul> <li>Processes and systems for the management and effective running of Essential Energy's Contestable Works systems</li> <li>Processes for ASP staff authorisation &amp; familiarisation, systems to manage contestable work, milestones and defects</li> <li>Data quality reviews and process compliance</li> <li>Communications plan, incident investigation</li> <li>Liaison with the Chief Engineer's division for management of authorisation statuses</li> </ul>
<b>Customer Connections</b>	<ul> <li>Negotiated contracts for network connections, with particular emphasis on applications under the National Electricity Rules</li> <li>Development and execution of processes for revision, update and site audit of customer connection contracts,</li> <li>Development of review processes to minimise risk exposure</li> </ul>

Managing connections in accordance with NECF and NER
 Contract renewal & alterations
 Operating agreement protocols
 Subtransmission execution facilitation
 SWF matching & WI initiation
 Solar application processing

# 2.2 Chief Engineer

The Chief Engineer division is accountable for the stewardship of the network including:

- > Policies, standards
- > Growth, renewal and maintenance planning
- > Reliability and compliance management

The Chief Engineer division is accountable for the development of a detailed asset management program within a framework determined by Group Executive Network Strategy.

The Chief Engineer division is accountable for the development of plans to optimally sustain network condition, safety, asset utilisation, supply security and network performance.

The Chief Engineer division is accountable for the direction and management of strategic projects including network technology.

#### 2.2.1 Primary systems

The Primary Systems function forms part of the Division of the Chief Engineer. Its purpose is to manage long term stewardship of the primary network assets, as summarised in Table 2.4. This includes retention of detailed organisational knowledge relating to primary asset parameters, performance expectations, technical compliance and diagnostic analysis. The function is also responsible for the development of key primary asset-related policies and standards, developing primary asset specifications and providing expert input into primary asset maintenance and renewal planning. Primary Systems is responsible for setting the asset management strategy in relation to inspection, maintenance, refurbishment and replacement and as such has significant influence over operational and replacement expenditure.

Table 2.4 Primary Systems functions and responsibilities

Function	Responsibilities
Network Maintenance	<ul><li>Maintenance strategies for all network assets</li><li>Optimised maintenance and inspection strategies</li></ul>
Network Substations	<ul> <li>Engineering, commercial, investment and asset management strategies of parent asset and all primary plant integral to substations</li> <li>Management of Zone and Distribution Substation assets</li> </ul>
Network Mains	<ul> <li>Engineering, commercial, investment and long term asset management strategies for distribution and sub transmission assets and all related primary plant</li> <li>Management of overhead and underground mains assets</li> </ul>
Street Lighting and Joint Use	<ul> <li>Engineering, commercial, investment and long term asset management strategies for street lighting and unmetered supplies</li> <li>Commercial agreements and contract management for joint use arrangements</li> </ul>
Network Earthing	<ul> <li>Management of network earthing systems and insulation coordination for mains and substation assets</li> <li>Engineering, commercial, investment and long term asset</li> </ul>

management strategies

 Engineering management for specialist issues including Electric and Magnetic Fields (EMF) and corrosion studies

# 2.2.2 Secondary systems

The Secondary Systems function forms part of the Chief Engineer's division. The group represents an engineering microcosm of the organisation in many respects with daily interactions pertaining to field work, investigations, strategy, design, project management and fault response. The various functions within it and their responsibilities are summarised in Table 2.5.

Table 2.5 Secondary Systems functions and responsibilities

Function	Responsibilities
Protection Coordination	<ul> <li>All Zone Substation HV protection analysis and setting advices</li> <li>Support to Regional Distribution Protection Officers and Network Control groups</li> <li>HV protection schemes within Essential Energy</li> </ul>
Telecommunications	> All OT telecommunications networks:
Network & Customer Technology	<ul> <li>Metering Services (see section 0 below)</li> <li>Load Control philosophies</li> <li>Management of FI Plant</li> <li>FI relay programming devices and the programming of those devices</li> <li>Programming/ scheduling of the controllers which allow the FI transmitters to communicate with the FI relays used</li> </ul>
SCADA & DSA	<ul> <li>Development, maintenance and commissioning of all SCADA</li> <li>Development and maintenance of the ICCP interface between Essential Energy and AEMO</li> <li>Stewardship of SCADA and DSA devices</li> </ul>
Generation	Development, maintenance and commissioning works associated with regulated and non-regulated generation assets
Secondary Systems Development	<ul> <li>Carriage of all technology pilots and trials</li> <li>Back-office support to all asset owners within Secondary Systems</li> <li>Technical specifications for all Secondary Systems equipment</li> <li>Period contract support and administration to the various Secondary systems groups</li> <li>Technology strategies in conjunction with asset owners within Secondary Systems</li> <li>Involvement in fibre deployment plans and strategies</li> </ul>

## 2.2.3 Metering services

Essential Energy's Metering Services function is a sub-group under the Secondary Systems function. It manages the metering and meter data activities for Essential Energy, including Meter Provision and Meter Data Provision functions as specified within the NER. The various functions within it and their responsibilities are summarised in Table 2.6.

Table 2.6 Metering services functions and responsibilities

Function	Responsibilities
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Meter data provision	<ul> <li>Remote meter reading</li> <li>Collection of basic and interval meter data</li> <li>Validation and substitution of meter data</li> <li>Forwarding meter data to participants</li> </ul>
Metering support	<ul> <li>MDP CATS functions</li> <li>Manage enquiries</li> <li>Standing meter data maintenance</li> <li>EDDIS maintenance and support</li> </ul>
Laboratory services	<ul> <li>Test and refurbish meters</li> <li>Test and calibrate field instruments</li> <li>Metering installation design</li> <li>New technology and equipment testing and procurement support</li> </ul>
Metering provision	<ul> <li>Supply, install and maintain metering equipment</li> <li>Install CT connected meters in distribution area</li> <li>Manage meter maintenance obligations</li> </ul>
Compliance	<ul> <li>LNSP compliance</li> <li>Maintain ISO 9001 quality assurance</li> <li>Facilitation and implementation of business improvement projects</li> <li>Performance reporting</li> </ul>

# 2.2.4 Asset and network planning

Essential's Asset and Network Planning function manages the Strategic Network Investment Program and is responsible for development and coordination of an overall network investment plan to ensure that organisational goals are met for safety, network and business sustainability, customer service and network outcomes. The various functions within it and their responsibilities are summarised in Table 2.7.

Table 2.7 Asset and network planning functions and responsibilities

Function	Responsibilities
Subtransmission planning	<ul> <li>Identification of capacity constraints</li> <li>Strategic planning and area plans</li> <li>Options development and assessment</li> <li>Network augmentation business case preparation</li> <li>Project scope definition</li> <li>New connection planning/options/technical specification</li> <li>Market consultation – RIT-D</li> <li>Network analysis</li> <li>Planning policy development</li> <li>Joint planning – Transgrid, Powerlink, Powercor, ACTEWAGL, Ergon</li> <li>DAPR and ESDR input</li> </ul>
HV Distribution planning	<ul> <li>Identification of capacity constraints</li> <li>Option development and assessment</li> <li>Network augmentation business case preparation</li> <li>New connection planning</li> <li>Market consultation</li> <li>Network analysis</li> <li>Strategic feeder reviews</li> <li>Protection settings</li> <li>Feeder protection studies</li> <li>Large embedded generation</li> <li>Interpret and apply capital contribution policy</li> <li>Fault and failure analysis</li> <li>Poor performing feeder review and rectification plans</li> </ul>

	<ul> <li>HV PQ review and project initiation</li> <li>Design pack specification for ASP</li> <li>Major customer technical contact</li> <li>Land developer liaison</li> <li>Planning policy development</li> <li>Local network engineering support</li> <li>DAPR input</li> </ul>
Investment management	<ul> <li>Consolidate strategic 10 yr. capital expenditure and operational expenditure plan</li> <li>Consolidate strategic 1 yr. capital expenditure and operational expenditure plan</li> <li>Prepare network strategic plan (SAMP)</li> <li>Network investment regulatory submission development</li> <li>Network regulatory reporting – RIN</li> <li>Prioritisation process</li> <li>Top-down network investment modelling and benchmarking</li> <li>Establish and maintain network strategy document structure</li> <li>Consolidate asset management plan</li> <li>Network risk review</li> <li>Planning database management</li> <li>Planning standards</li> <li>Planning manual</li> <li>Capital Contributions Policy and implementation compliance</li> <li>Maintenance planning</li> <li>Replacement planning</li> </ul>
Forecasting/Demand Management/Ratings	<ul> <li>Demand management program development/implementation</li> <li>Demand Management Engagement Plan</li> <li>Regulator incentive schemes for reliability and demand management</li> <li>Develop and improve forecasting methodology</li> <li>Spatial demand forecast development</li> <li>DAPR preparation</li> <li>Development of demand management options/tools for HV planners</li> <li>Review and optimisation of demand management systems (e.g. FI)</li> <li>Regulatory obligation management</li> <li>Develop and maintain ratings data for planners and operations</li> <li>Specific asset ratings review</li> <li>AER regulatory input, reporting and interpretation</li> <li>Application of ratings</li> </ul>
Power Quality and Reliability Planning	<ul> <li>Reliability plan development</li> <li>Reliability business case development</li> <li>STPIS strategy develop, initiate and monitor</li> <li>Power quality plan development</li> <li>PQ business case development</li> <li>Response to PQ and reliability strategic issues</li> <li>Review power quality and reliability performance</li> <li>Advanced engineering support for complex PQ issues</li> <li>Monitor HV power quality</li> <li>Support of PQ technicians</li> <li>Establish and monitor PQ connection standards</li> <li>Participate in regulatory rules review</li> <li>AER regulatory input, reporting and interpretation</li> <li>Reliability forecasting</li> <li>Reliability incident analysis</li> <li>Voltage change structured approach</li> </ul>

#### 2.2.5 Network data and performance

The Network Data and Performance function is a fundamental element to the Essential Energy asset management decision making process. The analysis undertaken by this function, real efficiencies are made as a result of the changes made to the business' inspection and works programs. The function is also responsible for the high level compliance management, regulatory reporting and development of divisional objectives. The various functions within it and their responsibilities are summarised in

Table 2.8.

Table 2.8 Network data and performance functions and responsibilities

Function	Responsibilities
Network and Asset Performance Analysis	<ul> <li>Network performance reporting and reliability analysis:         <ul> <li>reporting of the design, reliability and performance licence conditions</li> <li>defensible reliability and feeder data</li> <li>data on network performance to planners</li> <li>compiles information for alternate data sets and provides detailed analysis and data cleansing and improvement functions</li> </ul> </li> <li>Asset Performance         <ul> <li>development of health indices for major asset categories utilising asset age, condition, probability and consequence of failure and associated risk in terms of network and financial performance</li> <li>creation of the subtransmission feeder availability metric and subtransmission feeder health indices</li> </ul> </li> </ul>
Asset Systems and Data Management	<ul> <li>Network data maintenance:         <ul> <li>new work, system augmentation and maintenance</li> <li>customer – premise to substation relationship data</li> <li>annual aerial patrol download / upload and data processing</li> <li>data quality assurance work</li> <li>geographical and spatial data</li> </ul> </li> <li>Network asset systems support services         <ul> <li>creation of easements and execution of solicitor searches</li> <li>administration of the Shared Asset Reimbursement Scheme</li> <li>Dial Before You Dig (DBYD) requests including AIRS (Asset Information Response system) application version management and low flying aircraft requests</li> </ul> </li> <li>Application configuration and system support for Smallworld Geographical Information System (GIS)</li> <li>Application configuration and system support for the WASP Asset Management System and associated field enabled applications</li> </ul>

## 2.2.6 Electrical safety and authorisations

The Electrical Safety and Authorisations function provides management and oversight of Essential Energy's Electrical Safety Rules and associated policies and procedures. It is responsible for the development and maintenance of the Technical Training Framework, with a particular focus the identification of technical training needs and oversight of related training curriculum and the administration and reporting of Network Authorisations. The various functions within it and their responsibilities are summarised in Table 2.9.

Table 2.9 Electrical safety and authorisations functions and responsibilities

Function	Responsibilities
Technical Training	<ul><li>Technical training framework</li><li>Technical training delivery oversight</li></ul>

	> Technical training outcome testing
<b>Network Authorisations</b>	<ul> <li>Network authorisation framework</li> <li>Network authorisation management</li> <li>Network authorisation compliance</li> </ul>
Electrical Safety	<ul> <li>Electrical safety policy and procedure development</li> <li>Electrical safety subject matter expertise and advice</li> <li>Electrical safety compliance</li> </ul>

# 2.3 Network Development

The Network Development division is accountable for the overall program management and delivery of network capital and maintenance programs

The Network Development division is accountable for the establishment of a Program Management Office to provide end to end project management of all projects (including those undertaken by contract resources as part of an agreed external service provider works program).

The Network Development division is accountable for the delivery of efficient and effective network asset management services particularly in the areas of vegetation management, asset inspection and streetlight management

## 2.3.1 Network Development

The Network Development supports the management of the business' capital and operating programs. The function supports Essential Energy's Network Development effort as summarised in Table 2.10.

Table 2.10 Network Development functions and responsibilities

Function	Responsibilities
Network Management	<ul> <li>Overall management of the Network Development team</li> <li>Drive efficiencies in the delivery of services</li> </ul>
Maintenance	<ul> <li>Program management of inspection and maintenance works as outlined in the AMPs</li> <li>Analysis of asset and performance information to inform the delivery of the program</li> <li>Operational works packaging and scheduling</li> </ul>
Major projects	<ul> <li>Program management of major capital works as outlined in the AMPs</li> <li>Analysis of project performance information</li> <li>Manage and track projects, including milestone tracking, financial tracking and completion forecasting</li> </ul>
Project Development	<ul> <li>Subtransmission major project/program estimating and project definition, including high level route design</li> <li>Acquisition of land and routes/easements for future subtransmission capital projects including environmental assessment, community consultation and managing the legal acquisition process</li> <li>Technical software administration</li> </ul>
Vegetation	<ul> <li>Program management of the works specified in the Vegetation Management Asset Management Plan</li> <li>Program analysis including quality control, assurance and compliance</li> <li>Contractor monitoring and centralised invoice processing</li> </ul>

## 2.3.2 Meter reading

The meter reading team function undertakes Essential Energy's cyclic meter reading activities across the network but does not undertake any activity associated with actioning non-routine meter service

orders which are currently the responsibility of Network Operations. The function's responsibilities also include all workforce management activities for the meter reading function and the on-going improvement of Essential Energy's meter reading management practices.

# 2.3.3 Portfolio Management Office

The Portfolio Management Office (PMO) supports the management and governance of the business' capital and operating programs. The function supports Essential Energy's portfolio, program and project management effort as summarised in Table 2.11.

Table 2.11 PMO functions and responsibilities

Function	Responsibilities
Process & Systems	<ul> <li>Development and implementation of portfolio, program and project management framework</li> <li>Implementation of Project Management Reform Plan</li> <li>Project delivery training and development framework</li> <li>Primavera system administration</li> </ul>
Commercial Management	<ul> <li>Development and implementation of commercial management framework</li> <li>Implementation of Contract Management Reform Plan</li> <li>Provision of contract administration services</li> </ul>
Governance & Reporting	<ul> <li>Development and implementation of governance and reporting framework</li> <li>Accurate and timely program delivery reporting</li> <li>Meeting reporting needs of NNSW Reporting Framework</li> <li>Risk and issues management</li> <li>Post implementation reviews</li> </ul>
Program Control	<ul> <li>Capital expenditure and operational expenditure program delivery strategy and planning</li> <li>Construction and maintenance of 10 Year Master Schedule</li> <li>Network resource demand modelling</li> <li>Annual program development and control</li> <li>Benchmarking</li> <li>NNSW Investment Governance Framework implementation</li> <li>Change control</li> </ul>
Preliminary Phase	<ul> <li>Management of forward capital expenditure and operational expenditure project/program pipeline</li> <li>Planning and reporting (forward pipeline risks and issues)</li> <li>Process review</li> </ul>

# 3. Strategic objectives

Essential Energy's strategic objectives are set in order to enable the business to meet the requirements of a range of stakeholders, and they drive the policies, strategies, plans and processes that govern the business. All the activities undertaken by the business groups that are the subject of this strategic document are in support of these objectives. It should be noted that the categorisation of strategic objectives is the same across asset, non-asset and overhead business plans, but the requirements themselves differ in the manner in which they apply to each category of business activity. The strategies used by the business groups to meet these requirements are shown in section 4

Chapter 5 of the Essential Energy Substantive Proposal outlines a reduction in the forecast capital expenditure for the 2014/15 – 2018/19 regulatory control period. The forecast overhead expenditure addresses efficiency initiatives associated with the lower forecast capital expenditure program. The efficiency initiatives and subsequent productivity savings associated with the reduced capital expenditure spend are detailed in section 6.

#### 3.1 Statutory requirements

Essential Energy's statutory obligations are derived from both Federal and State legislation. The following are the principal categories of statutory compliance relevant to the management of the distribution system and the expenditure of divisional and corporate overheads. The specific criteria against which Essential Energy measures its compliance with these requirements are provided in the individual business plans.

## Health and safety

Essential Energy's operation of the distribution system must comply with Work Health and Safety Act 2011 (NSW), the supporting regulation, the Work Health and Safety Regulation 2011 (NSW) and the Electricity Supply Act 1995.

This set of legislation requires Essential Energy to provide a safe place of work, undertake assessments of the network for risks to health and safety and where necessary implement controls. Essential Energy must provide its employees with adequate instructions, training, tools and protective equipment. Essential Energy is obliged to provide safety reports in line with this set of legislation.

In addition to occupational health and safety laws, there are also federally developed model Codes of Practice which provide support and guidance on different occupational health and safety issues.

#### Regulatory compliance and reporting

Essential Energy, under the Electricity Supply (Safety and Network Management) Regulation 2002, and the Design, reliability and performance – distribution network service provider's licence conditions – 1 December 2007 (Licence Conditions), is required to annually measure and report on its performance.

Essential Energy is also required to report on its annual performance against parameters under the Electricity distribution network service providers Service target performance incentive scheme November 2009.

## **Network safety**

The *Electricity Supply Act 1995* requires Essential Energy to provide a safe and reliable supply of electricity. Essential Energy is also bound by the provisions of the *Electricity Supply (Safety and Network Management) Regulation 2008 (NSW)*, that requires the development and lodgement of a Network Management Plan, which is routinely audited. The Network Management Plan must include a commitment to ensuring the safe operation of the distribution system, and to giving safety the highest priority over all other aspects of network management. This plan must provide safety management strategies, including emergency response and bush fire risk management.

> Require detailed customer installation safety plan

> Ensure all persons who carry out operating work be trained, authorised and can competently complete the work safely

#### **Codes of Practice**

The Minister has directed through the *Electricity Supply (Safety and Network Management)*Regulation 2008 (NSW), Essential Energy must adopt a number of Codes of Practices and Industry standards in the implementation of its Network Management Plan, including:

- > Electricity Transmission and Distribution Asset Management 2009 Code of Practice
- > ENA DOC 001-2008 National Electricity Safety Code
- Service and Installation Rules for NSW
- > ISSC31 Guideline for the Management of Private Lines.
- > Electricity Industry Code by NSW Maritime,
- Code of Practice Contestable works

The Code of Practice Contestable requires Essential Energy to develop and implement policies and standards that apply to the design, construction, maintenance and operation of the distribution system.

## **Network Management**

In accordance with the *National Electricity Rules* (the NER), Essential Energy is required to provide safe access to its network and undertake asset and network planning.

The NER requires Essential Energy to interact with the Australian Energy Market Operator (AEMO) and outlines the requirements to comply with instructions (e.g. dispatch) provided by AEMO.

Each connection point must have a compliant metering installation, as required by the NER and Metering services must comply with the *National Electricity Market Metrology Procedure Part A and B*.

## **Customers**

The National Energy Customer Framework (NECF) regulating the retailing and distribution of electricity and gas began on 1 July 2013. This framework moved the regulation of the sale and supply of energy from a state-based framework to national regulation, utilising:

- National Energy Retail Law (South Australia) Act 2011
- > National Energy Retail Law (Adoption) Regulation 2012
- > National Energy Retail Rules 2012
- National Energy Retail Regulations 2012
- > Electricity Supply (General) Amendment (National Energy Retail Law) Regulation 2012

In accordance with the NER and the NECF, Essential Energy is required to provide notification of planned outages to affected customers, provide telephone answering services and deliver relevant information concerning unplanned supply interruptions to customers and retailers.

Essential Energy must prepare a document (its proposed connection policy) setting out the circumstances in which it may require a retail customer or real estate developer to pay a connection charge, for the provision of a connection service.

Essential Energy manages and coordinates its customer connection process as outlined in Schedule 5 and 5A of the NER.

# **Bushfire protection**

Essential Energy must manage its distribution system in compliance with the *Electricity Supply* (*Safety and Network Management*) Regulation 2008 (NSW) and Planning for Bushfire Protection 2006. This requires Essential Energy to prepare and audit its Bushfire Risk Management Plan, and

ensure its distribution system does not contribute to the development or propagation of bushfires at any time.

Planning for Bushfire Protection (PBP) 2006 was developed by the NSW Rural Fire Service to enable the NSW Government to work jointly with local government and the public and private sectors to link responsible planning and development control with the protection of life, property and the environment.

## **Environmental protection**

Under the Protection of the Environment Operations Act 1997, State Environment Planning Policy (Infrastructure) 2007 and Protection of the Environment Operations (Waste) Regulation 2005, Essential Energy has obligations to appropriately manage its waste, prevent spills and leaks, and ensure it does not pollute and harm the environment.

The Act and the NSW Industrial Noise Policy also requires Essential Energy to manage its noise emissions.

# **State Owned Corporations Act 1989**

Under the *State Owned Corporations Act 1989*, Essential Energy is required to operate at least as efficiently as any comparable business, and maximise the net worth of the State's investment.

# 3.2 Licence requirements

Essential Energy's Licence Conditions pursuant to item 6(1) (b) of Schedule 2 of the Electricity Supply Act 1995 include a requirement to comply with specified reliability and customer service standards.

## Reliability standards

The reliability performance requirements are set out in Schedule 2 of the Licence Conditions. The Reliability Standards require Essential Energy to not exceed specified average SAIDI and SAIFI targets in any financial year (after excluding allowable events as permitted by the NER) for each feeder type. Essential Energy is required to develop asset management systems and processes that underpin the achievement of these targets, which are detailed in the table below:

Table 3.1 Licence service level obligations

Requirement	Criteria	Target			
		Urban	Short Rural	Long Rural	
Comply with the Reliability Standards as set out in Schedule 2 of the	SAIDI – minutes per customer	125	300	700	
Licence Conditions.	SAIFI – number per customer	1.8	3.0	4.5	
Comply with the Customer Service Standards as set out in Schedule 5 of the Licence Conditions.	Interruption duration	Zero interruptions greater than 18 hours			
the Licence Conditions.	Interruption frequency – max number of interruptions of ≥ x hours	4 interruptions ≥ 5 hours			

#### **Customer service**

Essential Energy strives to answer customer calls within the required timeframe as outlined in *Electricity distribution network service providers Service target performance incentive scheme November 2009* (The STPIS).

Under the NSW Public Lighting Code, Local Government Act and IPART Reimbursement Scheme for Connections to Electricity Distribution Networks 2002, Essential Energy must provide street lighting data to support monthly bills invoiced to respective councils, and manage the reimbursement schedule.

# 3.3 Standards requirements

Essential Energy is committed to achieving compliance with specific stakeholder requirements in terms of the overall quality of network services and the delivery of value. This also entails a commitment to public and staff safety as well as the management of environmental impacts while maintaining acceptable levels of corporate risk. In observing these commitments, good electricity industry practice also compels Essential Energy to comply with a range of engineering standards relevant to its network operation of the distribution system, including:

- > AS/NZS 4801 Occupational Health and Safety Management Systems
- > AS/NZS 6008 Standard Voltages
- > AS/NZS 3000 Electrical Installations (the Wiring Rules)
- > AS 3835 EPR Protection of Telecommunications Network Users
- AS 5488 Classification of Subsurface Utility Information
- > AS 1284.1 Electricity metering General purpose induction watt-hour meters
- AS 62052.11 Electricity metering equipment (ac) General requirements, tests and test conditions – Metering equipment
- > AS 62053.21 Electricity metering equipment (ac) Particular requirements Static meters for active energy (classes 1 and 2), for metering services
- Power System Data Communication Standard (AEMO)
- > ISO27001 Information Security Management System
- > Project Management Body of Knowledge for Project Management
- Service and Installation Rules of NSW
- Code of Practice Distribution Risk Management
- Code of Practice Electricity Service Standards
- > WorkCover Guide "Work near Underground Assets"
- > Crossing of NSW Navigable Waters: Electricity Industry Code (NSW Maritime)
- > ENA guidelines
- > ISSC guidelines
- > quality standards outlined by The Australian Skills Quality Authority (ASQA)

#### 3.4 Customer and community requirements

Schedule 5 of the NER requires Essential Energy to provide a negotiated access standard, part of which details the specific obligations imposed on Essential Energy by its Licence Conditions regarding supply reliability.

Essential Energy is committed to delivering high standards of customer service by meeting Guaranteed Service Level (GSL) scheme obligations under the National Energy Retail Rules (NSW) and the Electricity Supply Act 1995 (NSW). GSL requirements relate to the provision of customer connection services as detailed in each customer's Connection Contract with Essential Energy. The Guaranteed Service Levels that apply to Essential Energy cover the following issues:

- Connection on agreed date
- > Time limit for energisation or de-energisation
- Mandatory periods for de-energisation
- Disconnection notices
- > Repair of faulty streetlights

- > Interruption frequency and duration
- SSL payments

As part of Essential Energy's commitment to the communities in which it operates, it also assists community groups, schools and individuals 'at risk' by providing:

- > Electrical safety advice.
- > Electrical awareness educational material including brochures, fact sheets, warning stickers and interactive displays.

In support of the above, Essential Energy publishes a number of customer rights, entitlements and obligations on its website.

The Australian Energy Regulator (AER) has published a series of guidelines under its 'Better Regulation' program of work which is to deliver an improved regulatory framework focused on promoting the long term interests of electricity consumers. The Consumer Engagement Guideline for Network Service Providers provides best practice principles and a framework for electricity and gas NSP to better engage with their consumers. The guideline aims to help these businesses develop strategies to engage systematically, consistently and strategically with consumers on issues that are significant to both parties.

Underpinning the guideline are four best practice principles. They overarch all aspects of consumer engagement, and service providers are expected to use these principles in undertaking each component of the guideline:

- > Provision of **clear**, **accurate and timely communication** recognising the different communication needs and wants of consumers.
- > **Accessible and inclusive** recognise, understand and involve consumers early and throughout the business activity or expenditure process.
- > **Transparent** clearly identify and explain the role of consumers in the engagement process, and consult with consumers on information and feedback processes.
- > **Measurable** measure the success, or otherwise, of engagement activities.

The guideline is structured around four components:

- Priorities service providers are expected to identify consumer cohorts and the current views of those cohorts and outline their engagement objectives; and discuss the processes to best achieve those objectives.
- > **Delivery** service providers are expected to address the identified priorities via robust and thorough consumer engagements.
- Results service providers are expected to articulate the outcomes of their consumer engagement processes and how they measure the success of those processes reporting back to the AER, their business and consumers.
- > **Evaluation and review** service providers are expected to periodically evaluate and review the effectiveness of their consumer engagement processes.

## 3.5 Business requirements

Essential Energy has an established business plan, developed by the business' executive management team which guides business performance and corporate outcomes. All strategies and the business activities which support them must be aligned with the business plan which is approved by the Board of Directors and Essential Energy's shareholders.

The overarching business plan is in turn supported by a number of divisional business plans, each of which outline the specific activities that are to be undertaken by each division in order for it to meet its requirements and objectives:

- > Essential Energy will coordinate with TNSPs to provide safe access to electricity network and manage transmission interconnections and customer load in coordination
- Provide stakeholders up to data metering and relevant construction standards, Protection, SCADA, telecommunications and Load Control philosophy documents, and technical support/advice
- > Ensure technical assessments of offerings are probity and conflict of interest compliant
- > Ensure standards and developed technical specification are up to date and compliant with relevant legislation, acts, regulators and standards
- > Strategic activities provide demonstrable business benefits
- > Delivery of Workforce Plan / Strategic Delivery Plan
- Supply Monthly Capital and Maintenance Program Delivery Performance Reporting
- > Provide meter data, and metering support and instrument calibration services to support other business units
- Respond to enquiries within appropriate timeframes

## 3.6 Key drivers

Essential Energy's divisional overhead strategies are developed to align with the requirements of the strategic objectives detailed above. Underlying these requirements is a range of business drivers which influence the setting of strategies and the manner in which the business responds to the challenges and opportunities presented by them. Details of the drivers specific to each business function can be found in the respective business plans.

A summary of the key drivers is provided below:

- Assets are increasing in both quantity and value as growth and renewal is undertaken across the network
- > An aging asset base requires closer management to mitigate condition issues
- Assets are becoming increasingly 'intelligent' providing opportunity for better asset management practices but requiring increasing levels of data transmission, storage and analysis
- > Network connections and customer numbers are growing
- Customer expectations regarding price and service are rising
- Contractor numbers are increasing as the business seeks to achieve the best balance of inhouse and external resourcing
- > the network is subject to periodic severe weather events and bushfire risks
- Large capital programs are generally decreasing as the backlog of asset renewals lessens over time and the business develops increasing asset management maturity, although a large number of smaller capital projects which require managing in a similar manner will continue
- > The AER, Networks NSW and the State's regulatory and reporting requirements are changing
- > Data and reporting requirements for a number of external bodies are increasing as the industry continues its reform and the benchmarking of the three NSW distributors

- > Governance requirements are increasing with the implementation of the PMO, with almost \$2.5bn of capital expenditure and \$2.2bn of maintenance costs (dollars real 2013/14) expected to be expended over the next regulatory period
- The quantity of small embedded generation connections is growing across the network (generally solar PV, wind and gas) creating challenges in network operation and asset management
- > The number of large scale wind and solar generation sites is also growing, increasing the requirement for subtransmission engineering resources
- > External data demand is growing as ASP's (accredited service providers) and other contract companies increase the need for compilation and delivery of accurate and timely information
- NNSW have proposed a number of joint venture initiatives that are likely to impact on the services provided

# 4. Divisional overhead strategies

Essential Energy's strategic objectives described in section 3 above enable the business to meet the requirements of a range of stakeholders. The strategies employed by the various business functions that make up the divisional overhead function in response to these strategic objectives are summarised below.

The tables below list the strategies of each business function and which strategic objective each strategy relates to. There is a "one-to-many" relationship between most of the strategies and objectives. The business strategies are systematically reviewed, modified, added to and/or discontinued as part of the medium to long term business planning process as requirements and business drivers change and short, medium and long term objectives are satisfied. The underlying business plans for each business function should be read for further details.

# 4.1 Network Operations

#### 4.1.1 Network operations strategies

**Table 4.1 Network operations strategies** 

Strategy	Strategic of	jectives			
	Statutory	Licence	Standards	Customer and community	Business
Develop labour based benchmarks both internally and through Networks NSW and use them to drive efficiencies in the way the network is physically operated.	•	•	•	•	•
Develop cost effective design work packages and centralise work programming to prioritise work for network reliability and optimised resource productivity	•	•		•	•
Participate in continuous development of asset management capability aligned with ISO55000:2014					•
Improve standardisation in network operations through effective analysis of field operations group performance	•	•	•		•
Analyse and learn from safety incidents using a formal review process and implement corrective actions to prevent their reoccurrence	•	٠	•	٠	٠
Engage network operations group employees in the process of continuous improvement	•	•			•
Systematically improve network operations processes and procedures and utilise metrics to monitor progress, analyse and improve	•	٠	•		٠

## 4.1.2 System control strategies

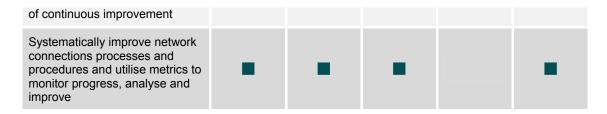
**Table 4.2 System control strategies** 

Strategy	Strategic ob	jectives			
	Statutory	Licence	Standards	Customer and community	Business
Maintain and develop people and systems capability to provide an effective and efficient system control response to supply interruptions and network events	•	•	•	•	•
Plan and implement the roll-out and upgrades of automated systems and processes to deliver system information to stakeholders	•	•	•	•	•
Provide timely and appropriate customer incident liaison specialist training		•		•	•
Maintain systems and processes to systematically record, analyse and store the system performance information necessary to satisfy all stakeholder requirements	•			٠	•
Engage group employees in the process of continuous improvement	•	•			•
Systematically improve secondary systems processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•		•

# 4.1.3 Network connections strategies

**Table 4.3 Network connections strategies** 

Strategy	Strategic objectives				
	Statutory	Licence	Standards	Customer and community	Business
Develop and update Network Connections specific systems to align with the needs of the business e.g. volume and quality of data	•	•	•	•	•
Update and implement connection-related policies, plans and processes to align with legislative requirements	•	•	•	•	•
Develop, review and implement change management and communication plans/activities to align with process changes within the group	•	•	•	•	•
Engage network connections group employees in the process					•



# 4.2 Chief Engineer

# 4.2.1 Primary systems strategies

**Table 4.4 Primary systems strategies** 

Strategy	Strategic of	ojectives			
	Statutory	Licence	Standards	Customer and community	Business
Develop and provide stakeholders with accurate and relevant documentation and information to support the design, construction, maintenance and operation of the network	•	•	•	•	•
Use benchmarking to ensure our services are best-practice	•	•	•	•	•
Undertake a continuous review process to optimise expenditure and maximise group resource utilisation and efficiency	•	•	•	•	•
Take the lead in the continuous development of asset management capability within the business aligned with ISO55000:2014					•
Continue to develop the use of asset management information systems to undertake asset failure modes effects analysis and reduce asset lifecycle cost	•	•			•
Utilise the most appropriate and cost effective measures to improve network reliability within the constraints of our financial capacity and risk appetite	•	•	٠	•	٠
Engage group employees in the process of continuous improvement		•			•
Systematically improve primary systems processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•		•

# 4.2.2 Secondary systems strategies

**Table 4.5 Secondary systems strategies** 

	Strategy	Strategic objectives
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	Statutory	Licence	Standards	Customer and community	Business
Develop, maintain and manage engineering expertise support the management and operation of the secondary system assets	•	•	•	•	•
Maintain systems and processes to systematically store the engineering data, information and knowledge necessary to support the management and operation of the secondary system assets	•	•	•	•	•
Undertake a continuous review process to optimise expenditure and maximise group resource utilisation and efficiency	•	•	•	•	•
Engage group employees in the process of continuous improvement	•	•			•
Systematically improve secondary systems processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•		•

# 4.2.3 Metering services strategies

# **Table 4.6 Metering services strategies**

Strategy	Strategic objectives							
	Statutory	Licence	Standards	Customer and community	Business			
Ensure the accuracy of metering data through effective systems and processes	•	•	•	•	•			
Maintain and support the ongoing development of automated data management systems	•	•	•		•			
Undertake compliance testing on all metering equipment and field instruments within mandates timeframes	•	•	•	•	•			
Engage metering services group employees in the process of continuous improvement					•			
Systematically improve meter reading and data processing procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	٠	•			

# 4.2.4 Asset and network planning strategies

Table 4.7 Asset and network planning strategies

Strategy	Strategic ob	jectives			
	Statutory	Licence	Standards	Customer and community	Business
Review, and effectively manage the implementation of a new group structure					•
Benchmark resources and capability with Endeavour Energy and Ausgrid to identify opportunities to improve service delivery where a performance gap exists	•	•	•	•	•
Systematically identify critical high-value business processes and strategically plan to improve capability to contribute to overall business improvement	•	٠	٠	٠	٠
Develop and implement an asset management model for the business in compliance with the ISO 55000 Asset Management Standard	٠		٠		٠
Using risk to prioritise actions, systematically improve forecasting, demand management, ratings management and outcomes	•	•			
Engage group employees in the process of continuous improvement					•
Systematically improve asset and network planning procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	•	•

# 4.2.5 Network data and performance strategies

Table 4.8 Network data and performance strategies

Strategy	Strategic objectives							
	Statutory	Licence	Standards	Customer and community	Business			
Develop and maintain capability in people and systems to ensure accurate and defensible analysis on the business and network is always available	•	•	•		•			
Ensure the accuracy of asset and network performance data through effective systems and processes	•	•	•	•	•			
Provide asset data integrity and security assurance through the		•						

adoption and use of proven software solutions				
Utilise a formal risk framework to prioritise and manage reviews, special projects and reporting				•
Engage group employees in the process of continuous improvement	•	•		
Systematically improve network data and performance processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	•

# 4.2.6 Electrical safety and authorisation strategies

Table 4.9 Electrical safety and authorisation strategies

Strategy	Strategic ob	jectives			
	Statutory	Licence	Standards	Customer and community	Business
Develop and maintain capability in people and systems to monitor, investigate and effectively respond to electrical safety incidents	•	•	•	•	•
Develop and maintain capability in people and systems to deliver best- practice electrical safety training to all stakeholders	•	•	•	•	•
Utilise recognised industry best- practice exemplars to learn from all electrical safety incidents and improve electrical safety awareness, training, systems and processes	•	•	•	٠	٠
Develop and maintain capability in people and systems to manage the authorisation processes for the network	•	•	•	•	•
Ensure the accuracy and currency of network authorisation data through effective systems and processes	•	•		•	•
Engage group employees in the process of continuous improvement	•			•	
Systematically improve electrical safety and authorisation processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	٠	•

# 4.3 Network Development

# 4.3.1 Network Development strategies

**Table 4.10 Network Development strategies** 

Strategy	Strategic of	ojectives			
	Statutory	Licence	Standards	Customer and community	Business
Drive the implementation of organisational culture, especially the safety culture	•				•
Implement improvement programs to drive productivity and meet new or changed regulatory and safety requirements.	•				•
Provide increased focus on regulatory and technical training to improve technical expertise, deliver further efficiencies and improve the safety of employees	•		٠	٠	•
Optimise and prioritise delivery of operational works, Major projects and Project development				•	•
Centralise analysis functions to increase efficiency					•
Utilise the optimum mix of agency staff, temporary staff and Professional services to achieve continued productivity improvements and recurrent expenditure reductions				•	•
Engage network development group employees in the process of continuous improvement	•			•	•
Systematically improve network development processes and procedures and utilise metrics to monitor progress, analyse and improve	•		•	•	٠

# 4.3.2 Meter reading strategies

# **Table 4.11 Meter reading strategies**

Strategy	Strategic objectives						
	Statutory	Licence	Standards	Customer and community	Business		
Consolidate and optimise the benefits accruing from the Implementation of new meter reading technology	•			•	•		

Provide increased focus on training to deliver further efficiencies and improve the safety of meter readers	•		•	•
Undertake additional work to further optimise meter reader rounds and optimise geographical alignment of workload and resourcing			•	•
Utilise the optimum mix of agency staff, temporary staff and FTE's to achieve continued productivity improvements and recurrent expenditure reductions			•	•
Engage meter reading group employees in the process of continuous improvement	•		•	•
Systematically improve meter reading processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	•

# 4.3.3 Portfolio Management Office strategies

**Table 4.12 Portfolio Management Office strategies** 

Strategy	Strategic obj	ectives			
	Statutory	Licence	Standards	Customer and community	Business
Use industry standards to align and improve project management, contract and contractor management, resource management, and work program delivery capabilities	•	•	•	•	•
Develop a best-practice Governance and Reporting Framework for project, program and portfolio management and contract and contractor management, including the relevant policies, and standardised procedures and templates	•				•
Reform project manager culture and support professional and capability development of Project Managers to provide consistency in project delivery	•	٠	٠	•	٠
Develop a qualification and certification pathway, and provide employees with quality training, including access to training materials and tools	•				•
Review project reporting framework to include more project details (e.g. milestone reporting) and provide reports to internal and external	•	•	•		•

stakeholders				
Self-assess Project Management and Contract Management Maturity using Best Practice guidelines and engage Portfolio Management Office group employees in the process of continuous improvement	•	•	•	•
Systematically improve portfolio management processes and procedures and utilise metrics to monitor progress, analyse and improve	•	•	•	•

# 5. Divisional overhead expenditure forecasts

# 5.1 Divisional overhead expenditure forecast overview

The methodology which Essential Energy uses to allocate divisional overheads is described in detail in the *Approved Cost Allocation Method* (the Approved CAM). In summary, the actual and forecast divisional overhead expenditure, shown in Table 5.1, is allocated across operational and capital expenditure categories in a manner appropriate to the quantum of divisional overhead activity necessary to fulfil the operational or capital project undertaking; this may contrast to other businesses where a higher proportion of overheads are direct costed (e.g. System Control subjected to an allocation, where other business may direct cost this to operational expenditure). Cost forecasting methodologies for divisional overhead expenditure are described in detail in section 6.

Table 5.1 Divisional overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	261.70	204.01	203.93	191.27	191.27	191.27	191.27	191.27
Network Operations	130.68	92.58	83.80	70.28	70.28	70.28	70.28	70.28
System Control	36.60	31.84	32.90	32.14	32.14	32.14	32.14	32.14
Network Connections	3.05	3.52	3.28	5.30	5.30	5.30	5.30	5.30
Primary Systems	8.39	7.13	6.44	5.70	5.70	5.70	5.70	5.70
Secondary Systems	22.66	20.55	20.21	25.06	25.06	25.06	25.06	25.06
Asset and Network Planning	14.60	14.48	14.03	13.77	13.77	13.77	13.77	13.77
Network Data and Performance	6.68	5.35	3.56	3.27	3.27	3.27	3.27	3.27
Electrical Safety and Authorisation	1.05	1.01	1.53	2.10	2.10	2.10	2.10	2.10
Network Development	21.43	12.62	20.58	17.22	17.22	17.22	17.22	17.22
Meter Reading	15.50	13.91	14.99	13.53	13.53	13.53	13.53	13.53
Portfolio Management Office	1.05	1.04	2.61	2.89	2.89	2.89	2.89	2.89

The proposed divisional overheads for the 2014/15 - 2018/19 regulatory period are lower than for the 2009/10 - 2013/14 regulatory period, both at a total level and as a percentage of the total expenditure, as shown in Figure 1.

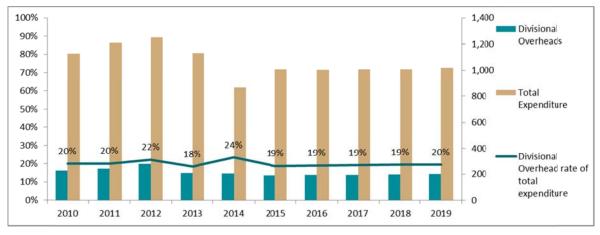


Figure 1 Divisional overheads as a percentage of total expenditure

Similarly, the proposed total overheads (corporate and divisional) for the 2014/15 – 2018/19 regulatory period are lower than for the 2009/10 – 2013/14 regulatory period, both at a total level and as a percentage of the total expenditure, as shown in Figure 2

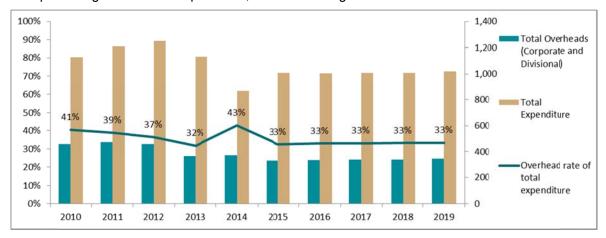


Figure 2 Total overheads as a percentage of total expenditure

# 5.2 Network operations overhead expenditure

Table 5.2 Network Operations overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	130.68	92.58	83.80	70.28	70.28	70.28	70.28	70.28
Regulatory Compliance	26.49	19.65	19.69	16.51	16.51	16.51	16.51	16.51
Depot Operations	13.80	7.60	9.56	8.02	8.02	802	8.02	8.02
Other	4.14	2.20	0.41	0.34	0.34	034	0.34	0.34
Design	3.32	2.05	0.55	0.46	0.46	046	0.46	0.46
Work Scheduling	1.57	1.10	0.60	0.50	0.50	050	0.50	0.50
Reporting and Improvement	2.05	1.89	2.06	1.73	1.73	173	1.73	1.73
Administration	7.70	7.56	6.76	5.67	5.67	567	5.67	5.67
Regional Supervisory & Operating	65.18	45.92	38.84	32.58	32.58	32.58	32.58	32.58
Divisional Supervisory & Operating	6.42	4.62	5.34	4.48	4.48	448	4.48	4.48

Table 5.3 System Control overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	36.60	31.84	32.90	32.14	32.14	32.14	32.14	32.14

Table 5.4 Network Connections overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	3.05	3.52	3.28	5.30	5.30	5.30	5.30	5.30

# 5.3 Chief Engineer overhead expenditure

Table 5.5 Primary Systems overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	8.39	7.13	6.44	5.70	5.70	5.70	5.70	5.70

Table 5.6 Secondary Systems overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	22.66	20.55	20.21	25.06	25.06	25.06	25.06	25.06
Generation	0.49	0.50	0.90	0.49	0.49	0.49	0.49	0.49
Metering Services <sup>1</sup>	8.50	7.96	7.12	7.54	7.54	7.54	7.54	7.54
Technical Services	3.48	2.64	2.64	1.27	1.27	1.27	1.27	1.27
Telecommunications	10.19	9.45	9.54	15.75	15.75	15.75	15.75	15.75

Table 5.7 Asset and Network Planning overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	14.60	14.48	14.03	13.77	13.77	13.77	13.77	13.77

Table 5.8 Network Data and Performance overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	6.68	5.35	3.56	3.27	3.27	3.27	3.27	3.27

Table 5.9 Electrical Safety and Authorisation overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	1.05	1.01	1.53	2.10	2.10	2.10	2.10	2.10

# 5.4 Network Development overhead expenditure

Table 5.10 Network Development overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	21.43	12.62	20.58	17.22	17.22	17.22	17.22	17.22
Network Management	5.71	2.88	1.19	1.04	1.04	1.04	1.04	1.04
Maintenance Management - Asset Inspection	5.69	4.93	7.17	6.82	6.82	6.82	6.82	6.82
Maintenance Management - Maintenance	0.00	0.00	3.54	1.87	1.87	1.87	1.87	1.87
Capital programs Management <sup>2</sup>	0.95	0.93	1.85	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Major Projects Management	1.47	1.25	0.72	1.39	1.39	1.39	1.39	1.39

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<sup>&</sup>lt;sup>1</sup> Metering Services expenditure will be moving to Alternate Control Services during the 2014/15 – 2018/19 Regulatory Control Period and will no longer be treated as an overhead <sup>2</sup> The overhead expenditure allocated to capital programs is a fleet charges allocation, related to the

The overhead expenditure allocated to capital programs is a fleet charges allocation, related to the utilisation of fleet for the capital programs. This expenditure is the result of a financial treatment to the allocation of the costs across the Network Development overheads.

Project Development Management - Design Services	2.76	1.65	1.90	1.53	1.53	1.53	1.53	1.53
Project Development Management - Transmission Routes	1.18	0.94	1.22	0.95	0.95	0.95	0.95	0.95
Vegetation Management	3.69	0.04	2.99	3.84	3.84	3.84	3.84	3.84

# Table 5.11 Meter Reading overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure <sup>3</sup>	15.50	13.91	14.99	13.53	13.53	13.53	13.53	13.53

Table 5.12 Portfolio Management Office overhead expenditure (\$ million, 2013-14)

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Total Expenditure	1.05	1.04	2.61	2.89	2.89	2.89	2.89	2.89

<sup>&</sup>lt;sup>3</sup> Meter Reading expenditure will be moving to Alternate Control Services during the 2014/15 – 2018/19 Regulatory Control Period and will no longer be treated as an overhead

## 6. The basis of forecasts

Essential Energy is proposing \$920 million (\$2013/14) of overhead expenditure to manage divisional branches throughout the next regulatory period.

The overhead costs associated with the lower forecast capital expenditure program (refer to section 3 and chapter 5 of the Essential Energy Substantive Proposal for more information) are not included in the forecast overheads for the 2014 – 2019 regulatory proposal; i.e. Essential Energy is not seeking to recover these stranded costs.

Where efficiency initiatives and subsequent productivity savings have been identified and endorsed, these savings have been incorporated into the forecasts presented in the business cases. This accounts for approximately \$11m. Whilst the time frames for removing these costs from the business range throughout the 2014 – 2019 regulatory period, they are being removed from the forecasts at the start of 2014/15 to ensure that these stranded costs do not form part of the proposed expenditure.

Essential Energy intends to identify further efficiencies and productivity savings to account for the remaining \$21m of stranded costs by August 2014. Whilst the time frames for removing these costs from the business is unknown, these productivity savings are being applied as a high level adjustment to expenditure forecasts at the start of 2014/15 to ensure that these stranded costs do not form part of the proposed expenditure.

This section demonstrates that Essentials forecast methodology ensures overhead expenditure requirements are both prudent and efficient in predicting expenditure requirements and produces a forecast that is credible, convincing and compliant with statutory and regulatory obligations. Full details of the business's cost forecasting methodologies for its overhead expenditure are provided in the Substantive Regulatory Proposal<sup>4</sup>.

# 6.1 Forecasting methodologies

The rules require Essential to provide information on the method/s used for developing the forecast overhead expenditure as well the forecast of key variables and the key assumptions underlying the forecast overhead expenditure. This is detailed in in this section.

In the previous section Essential outlined performance for the current period, the anticipated circumstances for the next period as well our strategies to achieve our overarching objectives in light of these factors. The forecast method/s adopted embodied these factors and translates them into a forecast overhead expenditure that reasonably reflects:

- > The efficient costs of achieving the overhead expenditure objectives.
- > The costs that a prudent operator would require to achieve the overhead expenditure objectives.
- A realistic expectation of the demand forecast and cost inputs required to achieve the overhead expenditure objectives.

Essential have adopted the following approach to forecasting operating expenditure for the forthcoming regulatory control period:

- Disaggregate Essential Energy's total overhead expenditure into various cost categories. These cost categories represent the costs of undertaking a set of related activities to provide support services to standard control services/alternate control services and to achieve the overhead expenditure objectives.
- Assess the nature of each cost category and determine the appropriate forecasting method that would result in a forecast cost that reasonably reflects the efficient cost that a prudent operator would need to achieve the overhead expenditure objectives, based on a realistic expectation of demand forecast and cost inputs for that particular cost category.

Essential Energy consider that this forecasting approach ensures that the nature of each cost category and its relevant underlying drivers are appropriately accounted for, such that the resulting forecast overhead

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<sup>&</sup>lt;sup>4</sup> Essential Energy Substantive Regulatory Proposal 31 May 2014

expenditure is reflective of the efficient costs that a prudent operator would require to achieve the overhead expenditure objectives.

The base year method with variations to account for known changes has been used to forecast each of divisional overhead cost categories. This forecast method is described in Chapter 6 of the Substantive Proposal and summarised below.

#### 6.1.1 Base Year Method

Essential Energy uses this method to forecast the majority of overhead expenditure costs because overhead expenditure is largely a related to organisational functions which continue to deliver outcomes regardless of where the function sits within the organisation.

The future requirements of an overhead cost category are not a direct function of the current base year cost as a result of recent intense organisational change implemented to drive efficiencies. Essential Energy has analysed the actual costs for each function in the base year and has utilised the mapping of functions into the new organisational structure to determine the categorisation of divisional costs. These variations to the base year forecast essentially derive the total forecast overhead expenditure by taking into account all the variations in structure and reallocation of the forecast expenditure.

This budget cost is then adjusted to account for the known productivity efficiencies resulting from the implementation of the strategies outlined in section 4 and shown in Table 6.1 below.

#### 6.1.2 Variations to the Cost

The following variations have been applied to the base year costs to account for the known productivity efficiencies discussed in section 4 and future changes in Essential Energy's circumstances, operating environment, regulatory obligations and changes in demand and cost inputs in arriving at a forecast overhead expenditure.

Table 6.1 Productivity savings and changes applied to the bottom up build

Division	Business Plan	Productivity savings and organisational changes
Network Operations	Network operations	Improvements in work practices and impact of productivity initiatives Efficiencies from changes to regional management structures Efficiencies from implementation of Network Reforms
	System control	
	Network connections	Growth in ASP related work delivery Organisational structure changes
Chief Engineer	Primary systems	
	Secondary systems	From FY15 telephony charges no longer allocated across divisions.
	Metering services	
	Asset and network planning	
	Network data and performance	
	Electrical safety and authorisations	
Network Development	Meter reading	
	Portfolio Management Office	Increased resources to deliver new requirements of Program Management Office i.e. increased portfolio governance and reporting