

Attachment 20.35

SA Power Networks: Information Technology Strategy 2014-2020

October 2014





SA Power Networks

Version 1.1

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Information Technology

Strategy 2014 - 2020

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Foreword

This Strategy summarises our Information Technology (IT) objectives, strategic directions and expected outcomes for the 2014 -2020 period. It provides a consolidated view of our approach to ensuring a reliable, cost effective and secure “keep the lights on” service while enabling and supporting the business through a period of considerable change.



This Strategy leverages and supports the SA Power Networks’ Strategic Framework which lays out the organisation’s Strategic intent, business drivers and core areas of focus.

This Strategy was developed after a significant period of consultation, information technology requirements gathering and planning across all areas of the SA Power Networks’ business. The associated document, “Information Technology Investment Plan 2015-2020”, details the full business investment programs for information technology for the whole of the organisation for 2015-2020 Regulatory period arising out of this consultation process. This document provides the IT Department’s strategic response on how this very large portfolio of work will be managed and supported. Appendix A provides a high level description of the key business programs of work.

On the following pages you will find:

- A summary of the strategy
- The strategic outlook to 2020 which lays out in more detail the key challenges IT is facing over the next 5 years
- The key business programs that are seeking to use technology to deliver improved business capability
- IT’s objectives and strategies in managing the IT services over this period

Chris Ford
Chief Information Officer

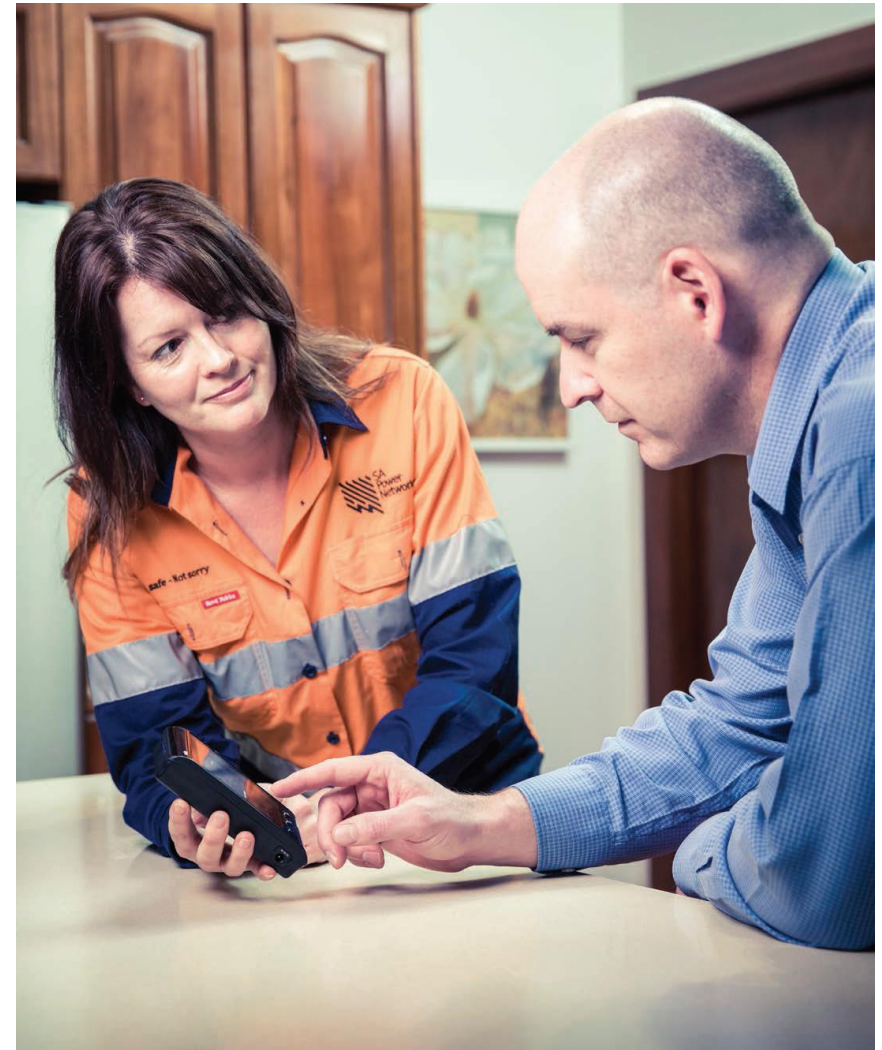
Strategy Summary

Over the 2010-15 regulatory period Information Technology (IT) has focused on providing a highly cost effective service whilst meeting the business needs. This has been very successful. The biennial KPMG survey consistently shows that SA Power Networks' IT is one of the lowest cost, and often the lowest cost, of the Australian Electricity and Gas Network Service Providers (NSPs).

IT systems are now fundamental to how customers interact with SA Power Networks and how the business delivers services to our customers. The SA Power Networks "Future Operating Model" and the "Strategic Plan 2014-2018" recognise a central role for IT systems to enable the organisation to respond effectively and prudently to the sustained period of significant disruptive customer and market changes sweeping through the electricity industry. IT will have an increasing influence in electricity network management - in particular improving capabilities in the core areas of asset and works management to deliver a large portfolio of work and delivering on the increased regulatory reporting requirements to achieve compliance.

In the next regulatory period IT also faces a number of significant cost challenges:

- Our customer and Electronic Resource Planning (ERP) systems are in need of substantial refresh or replacement in the next few years.
- The IT system landscape is complex involving many single focus systems ('point solutions').
- Increasing customer and business service expectations are driving up support and maintenance costs on many of these systems.
- Customers and the business want more integrated and timely information but the costs to link, integrate and manage multiple systems in the current architecture are rising rapidly.
- Systems that are core to our business need to be updated more often to ensure their reliability and security.



Strategy Summary Cont.

The current technology operating environment will be increasingly difficult to manage cost effectively, especially with the business and customers expecting much more from it. A change in our current funding model is needed to manage our environment securely, and a different approach is required to sustainably manage expected growth in the future.

Our strategic response to this has been to develop a large scale program of work to deliver business functionality and to build the IT capability required by the organisation, while simultaneously refreshing and simplifying the technology landscape. Key features are:

- IT will continue to maintain reliable and secure services to the customers and the business and seek appropriate levels of funding to minimize risk.

- IT will ensure our services remain cost effective by transforming IT to create a lean organisation with the required skills mix for the future.
- Replacing smaller legacy point solutions with a few larger systems that are easier to manage, more reliable and more secure - leveraging the core system refreshes and replacements to facilitate this process.
- Enabling the business to achieve regulatory reporting compliance and maximize the returns on expected increases in data.
- Enabling customers and the business to live and work in a mobile world and support the secure delivery of information to and from where it is needed.

The outcome will be an IT service that can more sustainably maintain current levels of service, manage operational risks and costs, and deliver the capability required by customers and the business. We will continue to be one of the most cost effective NSP service providers.



Strategic Intent

In IT we take pride in ensuring SA Power Networks achieves its business objectives by delivering innovative, efficient and reliable Solutions and Services

- We manage the risks and maintain our systems as efficiently and effectively as possible understanding that reliably 'keeping the lights on' is a core service we provide.
- We are agile and innovative, but disciplined, in delivering our services and strive to delight our customers at every opportunity.
- We operate as a trusted partner to the business, collaboratively working as thought leaders to build a future where information technology plays a far greater role in managing our electricity networks and empowering SA Power Networks' customers.
- We seek tried and trusted solutions which are appropriate and prudent for the situation.



Outlook to 2020

Developing this strategy involved extensive consultation with the business as well as developing a deeper understanding of the future marketplace and technology landscapes. As part of this activity a detailed situational analysis was undertaken. It focuses on the most salient challenges that have the greatest potential to affect Information Technology related business performance in the medium to longer term.

Figure 1: Most Significant IT Strategic Challenges (to 2020)

The most significant challenges identified during this analysis are shown in Figure 1. For simplicity purposes only the highest priority challenges are detailed.

This Strategy addresses these challenges in addition to other key opportunities for improvement

Challenges

1. Regulatory submission outcomes determine IT capability that is essential to the achievement of business outcomes.
2. Managing the business risks of a complex IT environment.
3. The imperative of IT productivity and efficiency improvement.
4. Managing the business risks of aging core systems (SAP & CISOV).
5. Mobile communications and data is a

core business requirement that requires new development and management approaches.

6. Dealing with a fragmented and inefficient legacy IT Environment which is driving up support costs.
7. Turning the explosion in digital data streams into customer and business value.
8. SA Power Networks transformation into a customer and process-centric business requires IT alignment.
9. Information Security threats will increase with the advent of a more diverse network and new business operating models.
10. Customers are seeking an improved service experience and requiring more information at their fingertips.
11. The proliferation of new technologies is driving a step change in the number of IT opportunities and risks.

URGENCY	POTENTIAL IMPACT		
	LOW	SIGNIFICANT	MAJOR
LOW (36+ months)			11
SIGNIFICANT (12 - 36 months)		10	8, 9, 4, 6, 7, 5
PRESSING (12 months)			2, 3, 1

Priority is displayed using both their categorisation on the grid and by their colour. The highest priority items have red circles, the next highest yellow.

A brief description of each challenge can be found in Table 1.

Table 1: Description of IT Strategic Challenges to 2020

No.	Title	Description
1.	Regulatory Submission outcomes determine IT capability that is essential to the achievement of business outcomes	IT systems are now essential and ubiquitous - underpinning virtually all SA Power Networks' business services. Achieving a Regulatory Submission outcome that provides appropriate funding for the ongoing management and support of an increasingly complex IT environment is fundamental to ensuring that IT continues to deliver a reliable service to the organisation. In the longer term this includes a transition to more Opex intensive services.
2.	Managing the business risks of a more complex IT environment	Managing key operational risks to ensure IT continues to deliver the required business outcomes and services. This includes the systems and facilities for managing the current and expected growth in the volumes of data and effective management of the increasing number of mobile devices.
3.	The imperative of IT productivity and efficiency improvement	The IT Transformation Program is focused on delivering an efficient and lean department which can operate on a more commercial footing with a better understanding of the costs and the value of IT. The Transformation is also focused on ensuring we have the right skills with the right mix to meet the technology and business challenges of the future.
4.	Managing the business risks of aging core systems (SAP & CISOV)	The organisation's two largest IT systems - the core Enterprise Resource Planning (SAP) and the core customer system (CISOV) - are in need of substantial refresh or replacement in the next few years in order to maintain reliable services. SAP has been in place for almost 20 years and the old system and data structures are unable to meet current new requirements and will present significant issues in the future. CISOV is 15 years old and is reaching the end of its life, with current support only by special contractual arrangement with the supplier until 2021.
5.	Mobile communications and data is a core business requirement that requires new development and management approaches	The rapid increased consumerisation and use of mobile technologies has increased opportunities and the demand from customers, staff, suppliers and contractors to access information on their mobile devices. More timely and comprehensive information for customers, improved field force safety capabilities and improvements in data collection for increased Asset Management and Regulatory Reporting requirements are all dependent on IT capacity to deliver secure and well managed mobile services.
6.	Dealing with a fragmented and inefficient legacy IT Environment which is driving up support costs	The IT environment has grown substantially and organically in response to business need. This is now driving a significant step change in support and maintenance costs. Rationalising the application landscape to focus on a smaller number of core product suites provides a means of delivering the required capability but with lower

No.	Title	Description
		change management costs in the longer term.
7.	Turning the explosion in digital data streams into customer and business value	The amount of data collected, managed and reported on by SA Power Networks is expected to grow significantly as we transition to more intelligent operational networks, a smarter metering environment and greater compliance reporting requirements for Assets and Work. As the quantity of data increases so do the opportunities to leverage it and convert insights into action.
8.	SAPN's transformation into a customer and process-centric business requires IT alignment	The results of the enterprise business process review provide the basis for transformative improvements in key business processes across the organisation. The underlying IT systems need to support these improvements with a focus on their role in the full 'end to end' business process rather than as a 'point solution'.
9.	Information Security threats will increase with the advent of a more diverse network and new business operating models	The convergence of the IT, Operations Technology (OT) and Telecommunications (Tel) capabilities, the advent of smarter meters on homes and many more mobile devices significantly increases the number of access points and hence risk to the information technology and operational networks. The Information Privacy Laws also impose additional obligations on the management of the data that the organisation holds. Improving our information security governance and monitoring capabilities is a significant IT issue.
10.	Customers are seeking an improved service experience	Creating a 'single view' of a customer, an asset or task means integrating diverse information including data, documents, emails, designs, pictures and videos. The capability to associate and manage these often disparate components presents a significant technical challenge but also delivers significant benefits both our external electricity customers and IT's internal staff customers are seeking improved experiences in interacting with our systems and services. They are seeking to access and manage their own information in an easy to use manner and with a 'self service' mindset. Easier to use systems also have a dramatic impact in improving on the quality of information for decision making.
11.	The proliferation of new technologies is driving a step change in the number of IT opportunities and risks	The pace of technology development and proliferation shows little sign of slowing and particularly in the energy market place. These new technologies have the potential to deliver improvements for customers and for businesses. Examples include automated networks, cloud computing and social media. Most are increasingly 'IT centric' – leveraging IT capabilities and processes. The reach of IT is systematically expanding. This brings uncertainty and risk but also new opportunities.

IT Objectives and Strategies

This section provides the high level objectives, strategies and key initiatives for the IT Department through to 2020. Additional details for most of the initiatives and for the business cases associated with them are provided in the IT Investment Plan 2015-2020. The specific references to the business cases and programs within the Investment Plan are provided in brackets and italics within the initiatives below eg. *(BC02)*. A short description of the key programs and initiatives is provides in Appendix A.


Table 2: IT Objectives and Strategies

Objectives	Strategies	Initiatives
<p>1. Maintain reliable and secure services (Maintain reliable and secure services to the customer and the business in line with our agreed service levels)</p>	<p>Secure appropriate funding for IT operational and recurrent capital expenditure</p> <p>Implement the Data Centre Strategy to alleviate our current data centre capacity constraints and risks</p> <p>Refresh the SAP environment to manage the key risk of aging technologies and enable RIN compliance</p> <p>Replace our customer systems to manage the key risks of aging technologies</p>	<p>Develop a strong IT Regulatory Proposal and associated business cases</p> <p>Implement the Data Centre Strategy <i>(BC17)</i></p> <p>Implement the following programs of work:</p> <ul style="list-style-type: none"> • SAP Foundation <i>(BC09)</i> • Enterprise Asset Management <i>(BC03)</i> • Financial Management <i>(BC04)</i> • HR Systems <i>(BC11)</i> • Business Intelligence <i>(BC21)</i> • RIN Reporting <i>(BC32)</i> <p>Implement the following programs of work:</p> <ul style="list-style-type: none"> • CISOV/CRM Replacement <i>(BC01)</i> • Customer Facing Technologies <i>(BC02a)</i> • Customer Contact Management System (Solidus) Replacement <i>(BC02)</i>



Objectives	Strategies	Initiatives
	<p>Build an Enterprise Information Security function , practices and knowledge across IT, OT and Tel to minimise security and technical risks to the enterprise and systems</p> <p>Build capability to adapt to changing customer and external business technologies</p>	<p>Build an information security function across IT,OT and Tel including Implementing technologies and processes and create a security aware workforce. (<i>Enterprise Information Security - BC26</i>)</p> <p>Patch and update applications on a regular cycle (<i>IT Applications – BC28</i>)</p> <p>Refresh the infrastructure and supporting systems on a regular cycle (<i>IT Technical Operations – BC27</i>)</p> <p>Implement a mobile application management platform and associated security capabilities (<i>Enterprise Mobility – BC14</i>)</p>
<p>2. Be an efficient service provider (Ensure our services are cost effective, responsive and aligned to the long term business requirements)</p>	<p>Embed ‘good’ commercial practice across the IT function</p> <p>Simplify our application environment and focus on maximising our core application suites.</p>	<p>Complete embedding the new leaner IT structure and Operating Model as part of the IT Transformation</p> <p>Create the IT Business Engagement and Strategy functions to underpin business alignment</p> <p>Embed the evaluation of cloud services as a standard solution selection option</p> <p>Enable the following business programs of work to rationalise the business processes and systems:</p> <ul style="list-style-type: none"> • Financial Management (<i>BC04</i>) • HR Systems (<i>BC11</i>) • Enterprise Asset Management (<i>BC03</i>) • Risk Compliance and Governance (<i>BC31</i>) • ADMS Implementation • Integrated Design Management System (<i>BC10</i>) • CISOV/CRM Replacement (<i>BC01</i>) • Customer Facing Technologies (<i>BC02a</i>)



Objectives	Strategies	Initiatives
	<p>Continue to improve our delivery efficiency</p>	<p>Implement our vendor ‘partner panel’ for support and project services and implement tools to support the performance management of contracts</p> <p>Standardize the IT project and portfolio management toolset (<i>Project and Program Management- BC05b</i>)</p> <p>Develop an IT,OT and Tel optimization approach</p>
	<p>Develop closer relationships between IT, OT and Tel to leverage shared skill sets, technologies and processes</p>	<p>Fully implement Unified Communications (<i>Unified Communications- BC12a</i>)</p>
	<p>Improve IT’s own use of technology to improve service management and optimizing the use of IT Assets</p>	<p>Implement standard asset management practices (ISO 55000) for all IT Assets to ensure asset lifecycles are optimized and licensing compliance is assured. (<i>IT Management and Operations- BC29</i>)</p> <p>Replace the legacy IT Service Desk and IT Asset Management systems and initiate greater customer self-service capabilities (<i>IT Management and Operations – BC29</i>)</p>
<p>3. Unleashing the power of data (Enable our customers and business to maximize our increased information collection for improved decision making and reporting and enable the development of a ‘single source of truth’)</p>	<p>Develop an Enterprise approach to Information Architecture and Management</p> <p>Build the business intelligence and analytics tools and capabilities to support improved data management, reuse, reporting and interpretation</p>	<p>Implement Enterprise Document and Content Management (<i>BC24</i>)</p> <p>Embed the Enterprise Asset Management Blueprint</p> <p>Develop a Collaborative approach to data and information sharing and decision making</p> <p>Implement the Business Intelligence Strategy including creating a foundational Business Intelligence Centre of Competence (<i>Business Intelligence Enablement – BC21</i>)</p>

Objectives	Strategies	Initiatives
	Implement tools to ensure data and information is governed, quality assured and reliable for decision making	Implement quality tools and processes (Data Management-BC22)
<p>4. Drive the mobile transformation (Enable our customers and business to live and work in a mobile world and support the delivery of the full set of information to and from the devices)</p>	<p>Develop a ‘mobile first’ approach to application management and development</p> <p>Build solutions that are easy to use and support the secure two way flow of information to the right device at any location and time</p>	<p>Implement an improved mobile application development platform and associated support and governance capabilities (Enterprise Mobility– BC14)</p> <p>Implement improved user interface standards</p> <p>Implement the Network Foundations projects</p>
<p>5. Our business and systems - working better, together (Enabling the technology for integrated end to end business processes)</p>	<p>Embed the end-to-end business process approach developed as part of the Enterprise and Asset Management Blueprints</p>	<p>Implement the Enterprise Architecture Toolsets and associated enterprise architecture processes (BC07)</p> <p>Implement Enterprise Integration (BC18)</p> <p>Develop a more comprehensive roadmap for IT based on the outputs of the blueprints</p>



Document Authorisation and History

1.1 Template

This document is based on template **PMM_T_009** issued January 2013.

1.2 Revision History

Date	Version	Author	Description of Change/Revision
25/07/2014	0.1	Peter Chapman	Initial Draft of selected sections.
30/07/2014	0.2	Peter Chapman	Feedback from Chris Ford, Anna Lebedev, Janette Bettcher
1/8/2014	0.3	Peter Chapman	Initial feedback from Wayne Lissner
22/8/2014	0.4	Peter Chapman	Feedback from Anna Lebedev and the IT Leadership Team
9/10/2014	0.5	Peter Chapman	Updated based on final Regulatory Submission Document
15/10/2014	1.0	Peter Chapman	Feedback from IT Leadership Team
22/10/2014	1.1	Peter Chapman	Feedback from Wayne Lissner and Final

1.3 Approvals

Name and Title	Role	Signature and Date
Chris Ford	Chief Information Officer	
Wayne Lissner	Head of Strategic Planning and Communications/Head of Regulation	

1.4 Distribution

Date	Version	Name and Title	Purpose

1.5 References

The following documents were referenced in completion of this document:

Ref	Document Name	Date	Author
1.	SA Power Networks Strategic Plan 2014–2018	November 13	SA Power Networks
2.	SA Power Networks Future Operating Model 2013-2028	January 2014	SA Power Networks
3.	The South Australian Distribution Network: Directions and Priorities 2015 to 2020	May 2014	SA Power Networks
4.	IT Investment Plan 2015-2020	July 2014	SA Power Networks

1.6 Acronyms and Abbreviations

Acronym / Abbreviation	Definition
AER	Australian Energy Regulator
CIS OV	Customer Information System 'Open Vision'
CRM	Customer Relationship Management
ERP	Enterprise Resource Planning
IT	Information Technology
NSP	Network Service Provider
OT	Operations Technology
RIN	Regulatory Information Notice
Tel	Telecommunications

Appendix A - Business Programs of Work

In developing this Strategy significant effort went into understanding the full depth and scope of the short and long term IT requirements across the organisation and the outcomes for the business and the customers. A companion document, the “IT Investment Plan 2015-2020” details the requirements gathering and planning process undertaken, the key business requirements, the drivers, the business programs and the costs resulting from this work. Key business programs with significant IT requirements were identified and developed as part of this work.

Table 3 below provides brief details of each of these programs. This provides the contextual starting point for an understanding of the most significant growth areas for technology across the organisation. All of these programs have associated business cases.

The requirements to implement, maintain and support technology implemented by these programs was a focus in developing the IT Objectives. Inherent in most of these programs is the dual goal of building business capability but also working towards a more manageable IT environment.

Table 3: Business Programs of Work with Significant Information Technology Requirements in the Period 2015- 2020

Business Case Ref.	Name	Objective	Strategic Focus Area
BC01	CIS OV and CRM	Replace legacy billing and legacy customer related systems with a modern flexible billing engine and associated single view of customer system	Energised and Responsive Customer Service
BC02	Customer Contact Management System	Replace the legacy customer contact centre call management system	Energised and Responsive Customer Service
BC02a	Customer Facing Technologies	Improve communication channels and information to customers	Energised and Responsive Customer Service
BC03	Enterprise Asset Management Program	Refresh, consolidate and enhance capabilities into an integrated enterprise approach to asset management, including vegetation management and enabling Regulatory Reporting compliance	Excellence in Asset Management and the Delivery of Services

Business Case Ref.	Name	Objective	Strategic Focus Area
BC04	Financial Management	Upgrade and extend the current financial management systems for compliance and capabilities (i.e. existing General Ledger, Fixed Asset register).	Sound Financial Management and Governance
BC05a	Supply Chain	Enable the visibility and management of inventory across depots and warehouses. Extend our analytics and supplier management capabilities.	Excellence in Asset Management and the Delivery of Services
BC05b	Project, Program and Portfolio Management	Enterprise wide tool to view and manage all components of portfolios, programs and projects (i.e. scheduling, resource planning)	Excellence in Asset Management and the Delivery of Services
BC07	Enterprise Architecture	Enterprise Architecture repository based toolset	Enterprise Enabling Technologies
BC09	SAP Foundations	Refresh and upgrade the SAP hardware platform (inc. Oracle database systems and User Interface for ERP system)	Enterprise Enabling Technologies
BC10	Integrated Design Management System Program	Consolidate design tools and implement a standardised design toolset and processes	Excellence in Asset Management and the Delivery of Services
BC11	HR Systems (People and Culture)	Consolidate and upgrade the existing HR systems to provide a single view of employees and extend to provide additional capabilities required for managing employees and skills	Safe, Skilled and Committed People Innovation and Relentless Improvement

Business Case Ref.	Name	Objective	Strategic Focus Area
BC12a	Unified Communications	Replace the legacy telephony and business communications system and implement new integrated communications channels	Enterprise Enabling Technologies
BC14	Enterprise Mobility	Implement a cohesive, secure and standard IT platform for mobility	Excellence in Asset Management and the Delivery of Services
BC16	Field Force Mobility	Significantly enhance existing field mobility capabilities	Excellence in Delivery of Services
BC17	Data Centre Consolidation	Rationalisation of data centres, increase good practice disaster recovery and governance practices	Enterprise Enabling Technologies
BC18	Enterprise Integration	Implement improved technical foundations for enterprise integration for data and systems	Enterprise Enabling Technologies
BC20	Tariffs and Metering Program (Demand Side Participation)	IT costs associated with the introduction of cost reflective tariff and advance metering capabilities	Energised and Responsive Customer Service

Business Case Ref.	Name	Objective	Strategic Focus Area
BC21	Business Intelligence Enablement	Foundation technical capabilities to enable robust business, customer and regulatory reporting including data, analytics and information management	Enterprise Enabling Technologies
BC22	Data Management	Implement a standard foundation Data Management toolsets (i.e. Enterprise, Quality, Lifecycle)	Enterprise Enabling Technologies
BC24	Enterprise Information Management	Implement a standard foundation to enable efficient management of documents, records and web content	Enterprise Enabling Technologies
BC26	Enterprise Information Security	Foundation enterprise security control capabilities	Investing in our people assets and systems
BC27	IT Infrastructure	Periodical refresh of IT infrastructure to maintain services.	Maintain Reliability and Quality of Service
BC28	Application Upgrades and Refresh	Periodical refresh of core application services and platforms to maintain services	Maintain Reliability and Quality of Service
BC29	IT Management and Operations	Replace our legacy IT Service Desk and asset management system and Implement good practice IT management capabilities (i.e.Application Lifecycle, Configuration)	Investing in our people assets and systems

Business Case Ref.	Name	Objective	Strategic Focus Area
BC31	Risk, Compliance and Governance	Upgrade and consolidate the existing systems to deliver an enterprise wide, integrated solution to manage governance, risk and compliance processes	Excellence in Regulatory Management Safe, Skilled and Committed People
BC32	RIN Reporting (Compliance Program)	Update and implement systems, processes and data to meet the AER RIN requirements reporting	Excellence in Regulatory Management
	ADMS Implementation	Complete the initial implementation of the ADMS and commence rationalisation of other capabilities into ADMS.	Excellence in Asset Management and the Delivery of Services

